

india Youth Development Index and Report 2017



Rajiv Gandhi National Institute of Youth Development

Ministry of Youth Affairs and Sports, Government of India
Sriperumbudur - 602105
Tamil Nadu

India Youth Development Index and Report 2017

RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT

Ministry of Youth Affairs & Sports, Government of India
Sriperumbudur – 602105, Tamil Nadu

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विजय गोयल
Vijay Goel



कार्यक्रम प्रवर्तक

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राज्य मंत्री (स्वतंत्र प्रभार)
युवा कार्यक्रम और खेल

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MINISTER OF STATE FOR

WATER RESOURCES, RIVER DEVELOPMENT

& GANGA REJUVENATION

GOVERNMENT OF INDIA

MESSAGE

19 APR 2017

The National Youth Policy, 2014 defines youth as the persons in the age group of 15-29 years. According to the Census 2011, the youth in the age-group of 15-29 years constitutes 27.5 per cent of the entire population of the country. The population of India is expected to exceed 1.3 billion by 2020 with a median age of 28. The present demographic situation of youth provides India with a favourable demographic dividend. Reaping this demographic dividend requires focused policies and actions, wherein there are no guarantees that the "dividend" will automatically translate to economic growth.

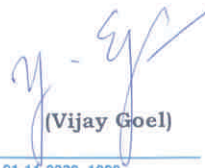
Various programmes for the development of youth are available in various Ministries of the Government of India and the State Governments. These efforts need to be carried out in a coordinated manner under an overall umbrella efforts rather than over in a scattered way. This calls for unification through inter-sectoral and integrated approach. Therefore, it is important to put in place the educational, social and economic policies/programmes and the key players to meaningfully engage the youth in the country. Suitable reforms in the education, employment, health, finance etc., will help in inclusion and mainstreaming the youth so that they contribute productively in the development process of the country to demonstrate that India's young population is truly a talented human capital. But a host of data would be required for this to make the programme realistic.

In this backdrop, Rajiv Gandhi National Institute of Youth Development (RGNIYD) has brought out the "India Youth Development Index - 2017" (YDI-17) that enables to recognize the youth as a population category that requires focused attention and facilitates comparison of the youth development across the Indian States based on the specific priority areas included in the National Youth Policy, 2014 and presents the status of youth development initiatives in the country.

As an effective decision - support tool, the YDI-17 will enable the policy makers track the national and regional progress as well setbacks in youth development policies, planning, priority identification and implementation strategies. Besides providing insights to suggest alternatives and options, it also aids in judicious allocation of resources.

I do hope and trust that, as an "observatory of social change", the YDI-17 will assist the youth functionaries to improve the process and content of the youth developmental programmes.

I wish the RGNIYD success in all its endeavours.


(Vijay Goel)

Dr. A.K. Dubey, IAS
Secretary



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19th April, 2017

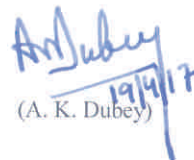
Message

India is in the unique phase of demographic transition with the largest cohort of young populace in the age group of 15-29 years. This huge youth potential has to be transformed into a catalyst force for the growth and development of the nation. Converting this largest segment of youth resource into a well-trained human capital requires right policies, pragmatic programme design and strategic investment. To succeed in these efforts sound database is necessary for statistically valid input.

RGNIYD serves as a national level documentation and information dissemination centre on youth development. As a think-tank, the Institute embarks on youth surveillance which helps in formulating policies and programmes to cater to the current needs and aspirations of the youth. RGNIYD is mandated by the Ministry of Youth Affairs and Sports, to function as a National Youth Resource Centre - a knowledge hub in providing youth related data for the Policy and Programme Development of the Nation besides compiling, updating youth related data on core issues and concerns that impact the life of the young people periodically for use by youth related agencies and organizations in the country.

As a repository of knowledge on youth related information/data, the Institute has prepared the India Youth Development Index (YDI-17) which is a composite measure that helps in the assessment of youth status. It provides data base for policy advocacy and programmatic action for harnessing the youth potential. The document also presents a comprehensive status of the indicators included in the YDI-17.

I am sure that the YDI-17 will be useful for the policy makers, planners and various other stakeholders engaged in planning, programming and implementing the programme for youth development.


(A. K. Dubey)

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19.04.2017

Foreword



Youth form an integral part of any society and are an essential part of the development process. India is witnessing a historic demographic dividend with its young population constituting 40% of the total population. Thus, India is gifted with unrivalled youth bulge with a competitive advantage over China, Japan and other developed countries. This young population of India is a valuable resource that can be channelised towards socio-economic development of the nation.

To strengthen the policies and to design appropriate youth development programmes at various levels, there is a need for scientific database on the youth, cutting across

various sectors, so as to systematically identify the gaps and clearly delineate the needs and suitable interventions. Reliable data will not only facilitate designing programmes and policies but also enable to evolve measurable indicators and serve as benchmarks for assessing the development.

Recognising this need, the Rajiv Gandhi National Institute of Youth Development (RGNIYD) which functions as the apex Information and Resource Centre on Youth Development issues and acts as a think tank on issues related to youth development, has brought out the India Youth Development Index – YDI 2017. In 2010, a similar work was undertaken by the Institute to bring out the first India Youth Development Index.

The prime purpose of the YDI was to study the contemporary status of the youth, their needs and concerns across the country. The YDI 2010 was brought out based on the vital indicators such as education, work, health, amenities and participation. However, with the launch of the National Youth Policy 2014, the definition of youth and its composition has undergone a change. The priority areas for youth development, policies and programmes also have undergone change. With the changes in trends over time, there was a need felt to revise the YDI, taking into account the priority areas articulated in the National Youth Policy 2014.

The YDI 2010 had limited indicators and was not comprehensive besides having methodological issues. Further, the earlier YDI brought out by the Institute was not comparable with the international indices. Therefore, the present YDI – 2017 has been aligned with the methodology and indicators of the Global Youth Development Index – 2016 brought out by the Commonwealth.

The YDI – 2017 provides the policy makers a scientific tool and facts for appropriate intervention through policy formulation and designing appropriate youth development programmes besides serving as a monitoring and evaluation tool for youth development.

I place on record my appreciation to RGNIYD for its efforts in developing the India Youth Development Index - 2017. I congratulate all the members of the Steering Committee, Technical Advisory Committee, Contributors of Status Papers and the Project Coordinators for their valuable contribution in bringing out the India Youth Development Index and Report 2017.


Gaurav Agarwal
Director

Acknowledgments

India Youth Development Index – 2017 has been prepared with the cooperation, guidance and support of experts from different spheres across the country. It is my pleasure to express heartfelt thanks to all for their valuable contribution in making this endeavour a grand success.

To begin with, I wish to place on record my appreciation for the able guidance rendered by members of Steering Committee under the stewardship of Shri. Bhagban Prakash, Senior Advisor, IIIDEM, Election Commission of India.

My special thanks are due to the Steering Committee, Technical Advisory Committee, Contributors of Status Papers and the Project Coordinators for their constant support for the project.

I am thankful to Dr. S. Madheswaran, Professor and Smt. B. P. Vani, Assistant Professor at Centre for Economic Studies and Policy, the consultant team from the Institute for Social and Economic Change (ISEC), Bengaluru who have been greatly responsible for making this endeavour a great success. Their unflagging support for data compilation, technical guidance, index construction and finalisation of the report at all stages of the project deserve a special mention.

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The sincere effort extended by Dr. Vasanthi Rajendran and Shri. David Paul of RGNIYD in coordinating the publication of the report needs to be commended. I acknowledge the contribution of Shri. Surendra Babu, Technical Officer of RGNIYD for the cover page photograph.

The information, data and photographs taken from journals, academic and online sources are also acknowledged.

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Acronyms and Abbreviations

ABVP	Akhila Bharatiya Vidyarthi Parishad
AHS	Annual Health Survey
AIDS	Acquired Immuno Deficiency Syndrome
AIHS	All India Higher Education Survey
AIYF	All India Youth Federation
APY	Apprentice Protsahan Yojana
ASFR	Age specific Fertility Rates
ASMR	Age specific Mortality rates
BE	Budget Estimates
BMI	Body Mass Index
BPL	Below Poverty Line
BRICS	Brazil, Russia, India, China and South Africa
CBSE	Central Board of Secondary Education
CISCE	Council of Indian School Certificate Examinations
CLOs	Community Led Organisations
CPI	Communist Party of India
CSO	Central Statistical Organisation
CSR	Corporate Social Responsibility
CSS	Centrally Sponsored Schemes
CTSA	Central Tibetan Schools Administration
CV	Coefficient of Variation
DAY	Deen Dayal Upadhyaya Antyodaya Yojana
DDU-GKY	Deen Dayal Upadhyaya Gramin Kaushal Yojana
DGE&T	Directorate General of Employment & Training
Di	Dimension
DI	Displaced Ideal
DLHS	District Level Household and Facility Survey
DPEP	District Primary Education Programme
EGS	Education Guarantee Scheme
FLE	Family Life Education
GATS	Global Adult Tobacco Survey
GDI	Gender Development Index

GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GMR	Global Monitoring Report
GNI	Gross National Income
GoI	Government of India
GR	Average Annual Growth Rates
GSDP	Gross State Domestic Product
GYDI	Global Youth Development Index
HDI	Human Development Index
HDRO	Human Development Report Office
HEI	Higher Educational Institutions
HGDI	Health Gender Development Index
HIV	Human Immuno Deficiency Virus
ICPD	International Conference on Population and Development
ICT	Information and Communication Technology
IHDS	Indian Human Development Survey
IIDS	Indian Institute of Dalit Studies
IIM	Indian Institute of Management
IIPS	International Institute for Population Sciences
IISc	Indian Institute of Science
IIT	Indian Institute of Technology
ILO	International Labour Organisation
IT	Information Technology
ITI	Industrial Training Institute
IUD	Intra Uterine Device
IVD	Intravenous Drip
JNVs	Jawahar Navodaya Vidyalayas
KV	Kendriya Vidyalaya
LFPR	Labour Force Participation Rate
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, and Intersex
LMIS	Labour Market Information System
LPG	Liquefied Petroleum Gas
LWE	Left Wing Extremist

MANAS	Maulana Azad National Academy for Skills
MBA	Master of Business Administration
MES	Modular Employable Skill
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MHRD	Ministry of Human Resource Development
MLA	Member of Legislative Assembly
MoYAS	Ministry of Youth Affairs and Sports
MP	Member of Parliament
MPCE	Monthly Per Capita Expenditure
MSIs	Multi-Skilling Institutes
NCC	National Cadet Corps
NCERT	National Council of Educational Research and Training
NCEUS	National Commission for Enterprises in the Unorganised Sector
NCRB	National Crime Records Bureau
NCVT	National Council of Vocational Training
NFHS	National Family Health Survey
NGO	Non Government Organisation
NHP	National Health Policy
NIOS	National Institute of Open Schooling
NPE	National Policy on Education
NPOs	Non Profit Organisations
NPYAD	National Programme for Youth and Adolescent Development
NRLM	National Rural Livelihood Mission
NSDC	National Skill Development Corporation
NSQF	National Skills Qualification Framework
NSS	National Service Scheme
NSSO	National Sample Survey Organisation
NSUI	National Students Union of India
NYKS	Nehru Yuva Kendra Sangathan
NYP	National Youth Policy
OBC	Other Backward Castes
OC	Other Caste
PDS	Public Distribution System
PIAs	Project Implementing Agencies

PMKVY	Pradhan Mantri Kaushal Vikas Yojana
PMO	Prime Minister's Office
PPP	Public-Private Partnership
PTGs	Particularly Vulnerable Groups
PTR	Pupil-Teacher Ratio
PUA Schools	Private Un-Aided Schools
RCH	Reproductive Health Package
RDAT	Regional Directorate of Apprenticeship Training
RE	Revised Estimates
RGNIYD	Rajiv Gandhi National Institute of Youth Development
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RSBY	Rashtriya Swasthya Bima Yojana
RTI	Reproductive Tract Infection
RUSA	Rashtriya Uchchatar Shiksha Abhiyan
SAP	Structural Adjustment Programme
SC	Scheduled Caste
SCSP	Scheduled Caste Sub Plan
SDGs	Sustainable Development Goals
SEA	Social Equity Audit
SECC	Socio Economic Caste Census
SEMIS	Secondary Education Management Information System
SHG	Self Help Group
SAARC	South Asian Association for Regional Co-operation
SRS	Statistical Reporting System
SSA	Sarva Shiksha Abhiyan
SSCs	Sector Skill Councils
ST	Scheduled Tribe
STEM	Science, Technology, Engineering and Mathematics
STI	Sexually Transmitted Infection
TAC	Technical Advisory Committee
TB	Tuberculosis
TFR	Total Fertility Rate
TSP	Tribal Sub Plan
UG	Under Graduation

UGC	University Grants Commission
UK	United Kingdom
UN	United Nations
UNDP	United Nation Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNGA	UN General Assembly
UNV	United Nations Volunteers
UPSS	Usual Principal and Subsidiary Status
USTTAD	Upgrading Skills and Training in Traditional Arts/Crafts for Development
UT	Union Territory
VET	Vocational Education and Training
VIP	Ventilated Improved Pit
WGDI	Work Gender Development Index
WPR	Worker Population Ratio
YACI	Youth Access to Communication Index
YACI _f	Youth Access to Communication Index for female
YACI _m	Youth Access to Communication Index for male
YAEI	Youth Access to Electricity Index
YAEI _f	Youth Access to Electricity Index for female
YAEI _m	Youth Access to Electricity Index for male
YAFR	Youth Adolescent Fertility Rate
YAHl	Youth Access to Housing Index
YAHl _f	Youth Access to Housing Index for female
YAHl _m	Youth Access to Housing Index for male
YAI	Youth Amenities Index
YAI _f	Youth Amenities Index for female
YAII	Youth Access to Information Index
YAII _f	Youth Access to Information Index for female
YAII _m	Youth Access to Information Index for male
YAI _m	Youth Amenities Index for male
YALC	Youth Index of Alcohol Consumption
YATFI	Youth Access to Toilet Facility Index

YATFI _f	Youth Access to Toilet Facility Index for female
YATFI _m	Youth Access to Toilet Facility Index for male
YAWI	Youth Access to Safe Drinking Water
YAWI _f	Youth Access to Safe Drinking Water Index for female
YAWI _m	Youth Access to Safe Drinking Water Index for male
YBAI _f	Youth Basic Amenities Index for female
YBAI _m	Youth Basic Amenities Index for male
YBMI	Youth index of BMI (Youth with Normal BMI)
YCPI	Youth Civic Participation Index
YDI	Youth Development Index
YDI _f	Youth Development Index for female
YDI _m	Youth Development Index for male
YDIS	Youth Disability
YEAi	Youth Education Access Index
YEAi _f	Youth Education Access Index for female
YEAi _m	Youth Education Access Index for male
YEDU-EXP	Education Expenditure
YEDU-LEVEL	Youth Education Level
YEGDI	Youth Education Gender Development Index
YEI	Youth Education Index
YEI	Youth Enrolment Index
YEI _f	Youth Enrolment Index for female
YEI _m	Youth Enrolment Index for male
YEL	Youth Employment Level
YELE	Youth Electors
YEOI	Youth Education Outcome Index
YEOI _f	Youth Education Outcome Index for female
YEOI _m	Youth Education Outcome Index for male
YGAI	Youth Gender Amenities Index
YGAI _{sr}	Youth Gender Amenities Index adjusted for sex ratio
YGDI	Youth Gender Development Index
YGDI _{sr}	Youth Gender Development Index adjusted for sex ratio
YGEAI	Youth Gender Education Access Index

YGEAI _{sr}	Youth Gender Education Access Index adjusted for sex ratio
YGEOI	Youth Gender Education Outcome Index
YGEOI _{sr}	Youth Gender Education Outcome Index adjusted for sex ratio
YGHAI	Youth Gender Health Access Index
YGHAI _{sr}	Youth Gender Health Access Index adjusted for sex ratio
YGHOI	Youth Gender Health Outcome Index
YGHOI _{sr}	Youth Gender Health Outcome Index adjusted for sex ratio
YGPI	Youth Gender Participation Index
YGPI _{sr}	Youth Gender Participation Index adjusted for sex ratio
YGWAI	Youth Gender Work Access Index
YGWAI _{sr}	Youth Gender Work Access Index adjusted for sex ratio
YGWI	Youth Gender Work Index
YGWI _{sr}	Youth Gender Work Index adjusted for sex ratio
YGWOI	Youth Gender Work Outcome Index
YGWOI _{sr}	Youth Gender Work Outcome Index adjusted for sex ratio
YHAI	Youth Health Access Index
YHAI _f	Youth Health Access Index for female
YHAI _m	Youth Health Access Index for male
YHGGDI	Youth Health Gender Development Index
YHI	Youth Health Index
YHOI	Youth Health Outcome Index
YHOI _f	Youth Health Outcome Index for female
YHOI _m	Youth Health Outcome Index for male
YLEI	Youth Life Expectancy Index
YLF	Youth in Labour Force
YLIT-RATE	Literacy Rate
YLOs	Youth-Led Organisations
YMAI	Youth Modern Amenities Index
YMAI _f	Youth Modern Amenities Index for female
YMAI _m	Youth Modern Amenities Index for male
YMOR	Youth Index of Morbidity Rate
YMR	Youth Mortality Rate
YPI	Youth Participation Index

YPI _f	Youth Participation Index for female
YPI _m	Youth Participation Index for male
YPL	Youth Participation in Legislature
YPPI	Youth Political Participation Index
YSII	Youth Social Inclusion Index
YSII	Youth Social Inequality Index
YTOB	Youth Index of Tobacco Consumption
YUR	Percentage of Youth not in School/Work
YUTT	Youth Unemployment in Total
YVI	Youth Voting Index
YVI _f	Youth Voting Index for female
YVI _m	Youth Voting Index for male
YWAI	Youth Work Access Index
YWAI _f	Youth Work Access Index for female
YWAI _m	Youth Work Access Index for male
YWGDI	Youth Work Gender Development Index
YWI	Youth Work Index
YWOI	Youth Work Outcome Index
YWOI _f	Youth Work Outcome Index for female
YWOI _m	Youth Work Outcome Index for male

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Acknowledgments

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Highlights of Youth Development Index - 2017

Youth Development Index

- At the national level, YDI value is 0.569 with wide variation ranging from 0.466 (Bihar) to 0.689 (Himachal Pradesh) among the Major States.
- Among the Minor States, Pondicherry and Goa exceeds the value of Himachal Pradesh.
- YDI score for male is 0.625 and for female is 0.535
- At the national level YDI score belongs to a medium category
- Nearly 50 percent of the States belong to either high or very high category.
- Pondicherry, Goa and Himachal Pradesh belong to Very high category
- Bihar belongs to a Low category.
- Nearly 33 percent (i.e., six Major States and four Minor States) get classified into a high category.

Youth Gender Development Index

- The YGDI is 0.856, indicating 14.4 percent absolute deviation from gender parity showing positive signs concerning gender disparity. (Gender Youth Development Index is based on only three dimensions viz., Education, Health and Work, as gender-wise data was not available with respect to other three dimensions i.e., Political Participation, Civic Participation and Social Inclusion)
- Among the Major States, Punjab and Himachal Pradesh top the list of better performers with even female youth outweighing male YDI.
- Bihar, Jharkhand and Rajasthan score the least, showing the largest gap between male and female YDI.
- Among the Minor States, Pondicherry, Arunachal Pradesh and Meghalaya score the highest, while Nagaland, Tripura and Goa show poor performance.
- Except for Nagaland, Tripura and Goa with respect to all other Minor States, GYDI is greater than one, implying a better YDI for females than males.

Youth Education Index

- The YEI at the national level scores 0.513
- Among the Major States, Kerala, Himachal Pradesh and Tamil Nadu stand out as top performers.
- Bihar, Jharkhand and Rajasthan occupy the least ranks due to their poor performance.
- Among the Minor States, Mizoram tops the list, with Pondicherry in the second place.
- All BIMARU states fare poorly in YEI.
- Chhattisgarh relatively performs better by pushing down Karnataka and Haryana in YEI.
- Among the Minor States, Mizoram tops the list, with Pondicherry in the second place,
- Arunachal Pradesh and Meghalaya occupy the bottom positions.

Youth Health Index

- At the National Level, YHI score is 0.632
- Himachal Pradesh, Kerala and Uttarakhand being the top three performers
- West Bengal, Assam and Chhattisgarh occupy the last positions among the Major States.
- Among the Minor States, Goa, Delhi and Pondicherry are in the top position
- Arunachal Pradesh, Sikkim and Tripura in the bottom of the ladder.
- Excepting for Haryana and Karnataka, the performance of all the other states with regard to female health is better than that of male, thereby showing GDI being more than one.
- Odisha, though its performance was average with respect to both males and females, it has taken the first position in Health GDI.
- Punjab and Tamil Nadu, which had better performance also had high Gender Youth Development Index with gender being biased towards females.

Youth Work Index

- The YWI at the national level stands with the score of 0.572.
- Gujarat, Maharashtra and Karnataka are the top performers among the Major States
- Assam, Kerala and Bihar being the poor performers with respect to work among the youth.
- Kerala's presence among the worst performers is an interesting addition to the debate on Kerala's model of development.

Youth and Civic Participation

- The Youth Civic Participation Index (YCPI) score at the national level is 0.191.
- Among the Major States, Himachal Pradesh, Punjab and Uttarakhand top the list of better performers, while West Bengal, Uttar Pradesh and Bihar scored poorly.
- Among the Minor States, Pondicherry, Sikkim and Mizoram perform better
- Delhi, Tripura and Meghalaya are the poor performers.

Youth and Political Participation

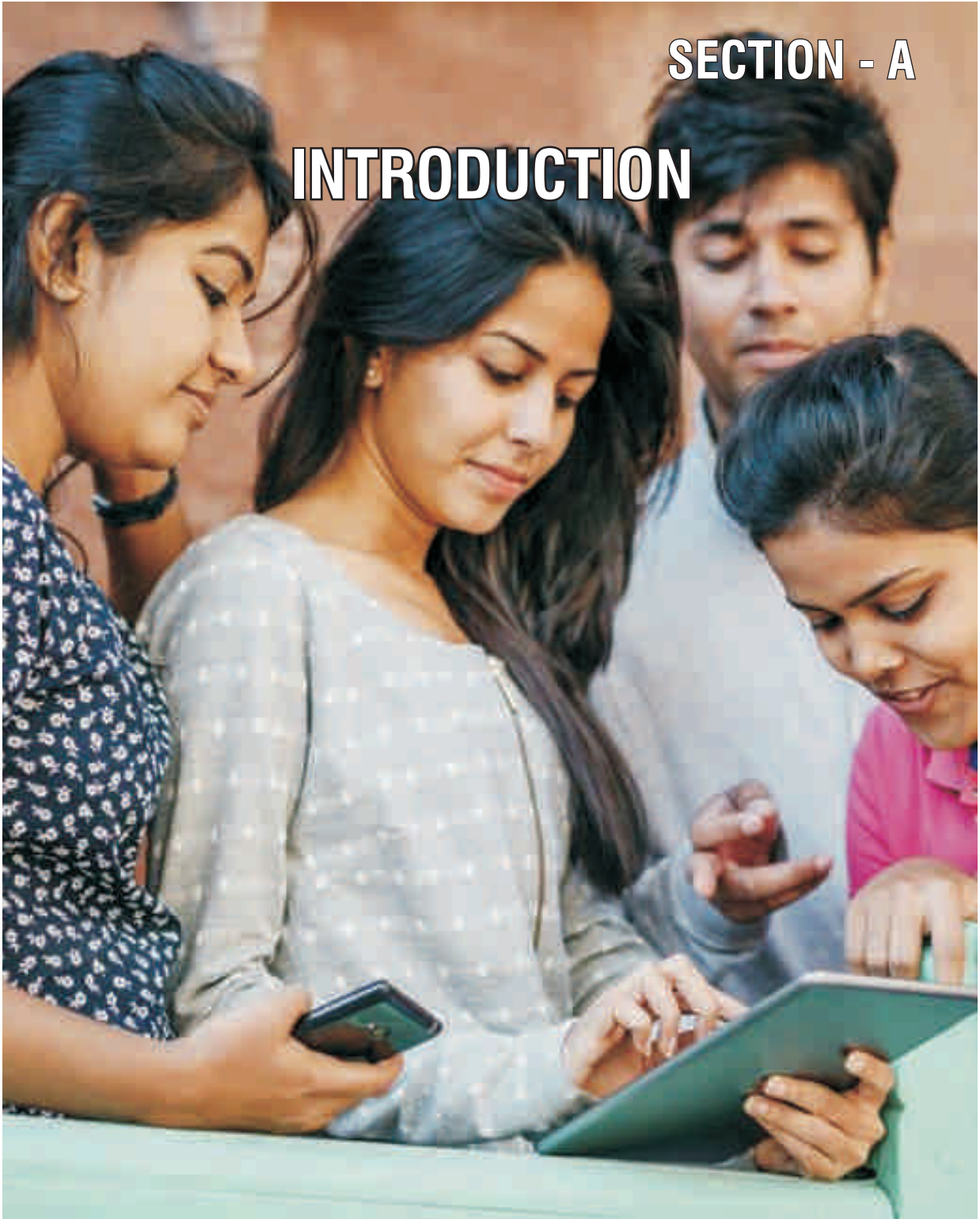
- Youth Political Participation Index (YPPI) at the national level scores 0.436 implying that there is more scope for the youth to be politically active.
- Among the Major States, Rajasthan, Chhattisgarh and Jharkhand top the list
- Kerala, Bihar and Himachal Pradesh at the bottom of the table.
- Among southern states, political participation among youth is relatively lesser.
- Among the Minor States, Arunachal Pradesh, Delhi and Meghalaya perform relatively better
- The least performers in YPPI are Goa, Pondicherry and Nagaland.
- States like Arunachal Pradesh and Jharkhand perform poorly when all the social indicators have an active presence
- Kerala and Goa have the poor presence of youth in polity, despite performing better in development indicators like Health and Education.

Youth and Social Inclusion

- YSII at the national level scores is 0.785.
- This index reflects the extent of social inclusivity of marginalised sections in various social indicators of development.
- Among the Major States, Assam, Himachal Pradesh and Kerala show good performance with respect to social inclusion
- Bihar, Madhya Pradesh and Odisha show poor performance.
- Almost all the Minor States show a relatively better performance than almost all the major states.
- Among the Minor States, Mizoram, Nagaland and Arunachal Pradesh top the list
- Pondicherry, Sikkim and Manipur in the bottom of the ladder concerning social inclusion.

SECTION - A

INTRODUCTION



CHAPTER I

INTRODUCTION

SECTION - A

India: The Young Nation

To build a sustainable nation i.e. both prosperous and equitable, especially in the context of stagnating world economy, the hopes lie on young people. Young population, all over the world have shown that they would grab every opportunity on their way to be champions and agents of all-round development of society. This provides an impetus to lay the foundation for a better future with progressive youth development. Today, the world has about 1.8 billion young people in the age group of 15 to 29 years constituting almost one-quarter of the humanity. The unprecedented share of the young population resides mainly in the countries of South Asia and Africa. India, in particular, is experiencing a youth bulge with world's largest young populace of 356 million in the age group of 10 to 24 years,

followed by China with 269 million young people. Indonesia, United States of America, Nigeria, Brazil and Bangladesh follow India and China for housing large youth cohorts in their population, according to the State of the World Population Report of UNFPA. Between 2001 and 2011, India adds 161 million to the world's population to become the world's largest contributor to the global demographic transition. Census of India 2011 has highlighted that 65% of the total population is less than 35 years of age and 50% under 25 years. India is expected to be the youngest country in the world by 2020 with the median age of 29 years. Capitalising the potential of India's youth bulge is essential for its continuing stable progress in the world economy.

Youth as a capital requires enormous resources that can harness youth potential and create opportunities for development. The major challenge is to make visible the capacity, capabilities and expectations of young people. This is a challenge in itself, as empowering youth requires not the mere provision of education but also quality education that can enhance skill development. Also, the emphasis on health and well-being is required as these factors help to develop the cognitive abilities of young minds and make them innovative thinkers. Capitalising on youth resource is quintessential in the context of stagnating global economy through the creation of employment opportunities that could enhance the growth with quality jobs. This aspect has been recognised in the Sustainable Development Agenda – 2030, where Goal 8 focuses on substantial reduction in the proportion of youth not in employment, training or education by 2020.

Reaping the India's Demographic Dividend

According to Dr. Joseph Muscat (Chair-in-Office of the Commonwealth), *“young people see what is around them in a fresh light and itch to improve what is their inheritance – they are bubbly and full of inspiring ideas and they have a strong voice and the ability to make a huge difference worldwide”*. A projection indicates that roughly such one million vibrant youth will enter the labor market every year and this high proportion of working population will provide a window of opportunity for India to improve labor productivity, increase domestic production, enhance revenue from services and reduce the burden of old age on the working population. Empowered with unique demographic advantages and guided efforts, India has better prospects to become a developed economy in near future.

With huge young populace and possibility of reaping demographic dividend of this magnitude, India has the potential to break the cycle of poverty, seize economic opportunities and catapult India's economy forward. This historic demographic dividend provides a time limited opportunity for economic growth and confers a significant competitive advantage upon India. It is with this unabated optimism, the nation should seize the opportunity of capitalising the youth resource not only for making India a global power but also for building national integration and global consensus. Further, India characterised by disparities across regions, class and gender calls for a comprehensive approach that creates opportunities to the marginalised sections so as to achieve socially inclusive society.

It is important that young people be empowered and given opportunities to reach their full potential. India can achieve such a goal, if the right policies are in place to harness their energy and hone their skills, by providing opportunities to enhance their education and

participation in local and global economy. Otherwise, there can be serious fiscal and economic risks, besides wastage of human resources. The underutilisation of youth potential and neglect of youth development will have dire consequences of misaligned expectations, social upheavals and weakened nation that can dampen the investment climate. Therefore, it is the right time to build the foundation through right policies and programmes that promote progressive youth development. It is absolutely imperative for India to ensure that youth of the nation become vibrant and constructive force that could contribute for economic growth, nation building and good governance. In the light of above situation, the need to assess the status of youth in India through evidence-based studies becomes important and it would help to prioritise the areas for youth empowerment.

Reaping the demographic dividend does not mean merely having the largest segment of young population but converting this huge potential into a well-trained productive human resources. As indicated earlier, harnessing energy and enthusiasm of the young people requires right policies in place with multi-dimensional approach to expand choices, access and opportunities for youth. As young people constitute vital segment of the population and dynamic human resource, the strategic investments made on the development of this human capital will have ever lasting effects and will greatly influence the future of the nation. Hence, at this juncture, it is more appropriate to analyse the situation, identify the issues and concerns of the youth to be addressed, prioritise the areas that need intervention, evolve evidence based policies, plan appropriate development strategies and design effective programmatic interventions.

Challenges of Capitalising Youth Resources

With the advent of democracy and spread of mass education, the rising generation of young people is becoming more visible and stepping forward with talents, aspirations and expectations. Capitalising this largest cohort of invaluable youth resource requires minimising the opportunity gaps and harnessing their potential. The major challenge in realising this goal is that how youth can be utilised as a catalyst force for development gains by building the strong base of human capital and engaging them in policy decisions, planning and implementation.

Another challenge is that India is the country with bewildering inter-regional and intra-regional diversity and youth are placed at different levels of development. Hence, the needs and aspirations of youth vary from place to place, inequality in access to resources is huge and

opportunity gaps are too wide. It is of immense importance to take diversities and complexities into consideration and adopt distinctive approaches to the development of youth of various social segments and sub categories in order to render social justice.

Empowering youth requires not merely education and skill development but they should be endowed with multi-dimensional intelligence *viz.*, cognitive, emotional, social and spiritual. The nation should ensure that youth of India become innovative thinkers, good team players, blend personal aspirations with national goals and have meaningful civic engagement. Aligning this multi-dimensional approach in development agenda, public policies and planning pose yet another challenge.

The ongoing global economic slowdown may hinder young people from entering the labor market. This barrier must be reduced as youth unemployment simply exacerbates this economic slowdown. Goal 8 of the 2030 Sustainable Development Agenda, formally adopted by world leaders in September 2015 also emphasises the need to address the issues relating to education, skill development and employment. It is the right time for the country to lay the foundations of a better future for young people. Government has the obligation to recognise the barriers to youth development, overcome them with policies and programmes that have young people at their heart and promote progressive youth development.

In the light of above situation, it becomes more necessary than ever to review the status of youth and identify the priority areas for youth empowerment. Evidence based studies reveal that policies developed to address the challenges of youth development have not resulted in great deal of success for want of adequate information, which is the basis for sound policy design and development interventions. It is a prime requisite to have a single measure by which status of youth can be reviewed.

Salient Features of Youth Development Index

Youth Development Index: A Composite Measure

Youth development is a multi-dimensional concept which cannot be measured by a single metric alone. It can be better understood by an aggregate of several indicators that capture many dimensions. Youth Development Index (YDI) is a composite measure of the status of youth, designed to enable the users to gain better insights on the subject in a single snapshot. It helps to recognise youth as an important and separate category of population for special

consideration, raise visibility of youth issues in public and draw increased attention to youth development agenda.

The YDI also facilitates the comparison of youth development across the geographic regions over a period of time. It enables all the stakeholders to understand the big picture, measure progress, assess the needs of various social segments, identify the priority areas for development interventions and make policy advocacy. It empowers the policy makers towards policy dialogue and promotes accountability of the state agencies towards programmatic efforts.

Approach

The approach to Youth Development Index is grounded in Asset Based Approach, as youth are perceived as assets for building prosperous, egalitarian and just society. It is anchored in the belief that youth are the essential resource for poverty eradication, human development and social transformation. At the same time, it is guided by the principles of rights based framework, where human dignity is ensured and human rights are protected. It is the responsibility of the state to enable young people to enhance their capabilities and build on their competencies to realise their full potential and citizenry participation.

Guiding values

- ♦ Valuing the dignity of youth as human beings who need to unleash their potential to lead fulfilling lives
- ♦ Valuing diversity of youth and their heterogeneous needs and aspirations
- ♦ Recognising youth as valuable resource for economic growth and prosperity
- ♦ Recognising youth as a catalyst force for social transformation and building just society
- ♦ Recognising youth as responsible citizens with effective civic and political participation

Governing principles

- ♦ Enabling holistic development of youth
- ♦ Providing equal access to resources and services such as education, skill development, health etc.

- ♦ Expansion of choices and opportunities for credible and decent employment
- ♦ Enabling and empowering them for civic and political engagement
- ♦ Enabling active engagement in the decision making process

Uses of Youth Development Index

Youth

With the advent of democracy and spread of mass education, youth have made themselves more visible and are increasingly engaged in local, national and global debates concerning themselves. As active participants in the youth councils, youth parliaments, consultation forums and advisory bodies, youth can use this index to inform their needs and challenges. YDI can empower them to validate their position and advocate youth development agenda even more powerfully.

Policy Makers

Youth Development Index YDI can help the policy makers to review the present status of youth, identify the range of issues to be addressed, prioritise the areas for development intervention and review the current practices. YDI serves as an effective decision support tool for sound policy development, rational resource allocation, improving investment climate and expanding infrastructure. It can also be used as an observatory of social change.

Programme Implementers

It can be used as an effective monitoring and evaluation tool to measure the progress made, evaluate the effectiveness of implementation strategies and service delivery, and identify the institutional gaps and barriers. It can help them to improve the programme content and revise the implementation strategies.

Donor Agencies

The donor agencies at the national and international levels can use this index to identify low performing states and weak domains, on the basis of which they can determine their

priorities, strategies and development framework for investment.

Development Practitioners and Youth Service Organisations

The index can serve as a tool for identifying needed programmatic intervention and develop programmatic indicators. It may provide insights to the development practitioners to identify the success stories, document the lessons learnt and disseminate the best practices.

Academic and Research Institutions

The YDI can be used by the researchers to survey the past trends in youth development and predict future. They can identify the priority areas of seminal research in the sphere of youth development, policy analysis, programme implementation and impact assessment.

Youth Development Index for India

Though there are several Ministries and Government Departments compile and publish data on specific aspects of youth, they do not provide the holistic picture of the youth development. The data available on youth related issues remain fragmented, uncoordinated and inconsistent. Further, there has been a serious deficit of data in certain domains. By putting together data on several relevant indicators into a comprehensive measure, it enables users to have a better understanding of youth development. In view of the relevance of Youth Development Index for India at this juncture, as enunciated earlier, a pioneering attempt was made by the Rajiv Gandhi National Institute of youth Development, under the Ministry of Youth Affairs and Sports, in bringing out Youth Development Report – 2010. Subsequently, keeping in view of the need for updating the approach for the latest period, present endeavour is undertaken. However, the earlier approach had some limitations. In order to overcome these limitations and to have a measure in line with the Global Youth Development Index, an attempt is made to construct India Youth Development Index (YDI) – 2017 with the twin objectives as follows:

(i) Constructing Youth Development Index for the year 2017 using the latest definition of youth as used in National Youth Policy - 2014 and World Youth Development Report of Commonwealth (15 – 29 years) as well as using the Commonwealth Indicators in order to facilitate Global comparison.

(ii) Further, in order to track the trends in Youth Development across the States in a particular period i.e 2010 – 2016, another Youth Development Index for the year 2016 was constructed using the same definition, same set of variables/indicators and same methodology as used in YDI – 2010. The main purpose of this Index is to recognise the high and low performing states, identifying the weak domains and inform policy makers the priority areas for development interventions in respective states.

Structure of India Youth Development Index and Report-2017

The India Youth Development Report comprises of mainly three sections, besides introduction and conclusion. Section - A deals with India Youth Development Index - 2017. While Section - B analyses Youth Development in India 2010 - 16: Tracking the Trends. The Status Papers on Youth in the domains of Health, Education, Employment, Skill Development, Civic and Political Participation and Inclusion and Social Justice are presented in the Section - C."

INDIA YOUTH DEVELOPMENT INDEX—2017





CHAPTER II

INDIA YOUTH DEVELOPMENT INDEX – 2017

SECTION - A

Global Youth Development Index

The Commonwealth is one of the organisations which supports youth participation at all levels of society and is the champion for youth empowerment. Commonwealth theme for 2015 was “A Young Commonwealth”. “A Young Commonwealth recognises the capacity, contribution and potential of young people, who play a vital role at the heart of sustainable development and democracy,” said Commonwealth Secretary-General Kamalesh Sharma. Commonwealth is the pioneer in the work on Youth Development Index and their first report on YDI was published in 2013. This was the first attempt by

commonwealth capturing the multidimensional properties that indicate the progress in youth development across the countries. In 2016, the second report titled “Global Youth Development Report” was released by the Commonwealth. “The Global Youth Development Index and Report 2016” examines the state of youth development in 183 countries, including 49 of the 53 Commonwealth countries. It covers five domains, measuring young people's levels of education, health and well-being, employment and opportunity, as well as civic and political participation. It also provides a snapshot of progress

between 2010 and 2016. These domains have remained same across time points but indicators defining those domains have undergone a slight change. These can be seen from the table in the appendix (A.1) that describes the YDI domains and respective indicators, and weights.

India in Global Context

Within a global context, where the world economy is almost showing no signs of growth, India's growth story is a tremendous achievement. This has been due to the vast young population that contributed to the country's development. But, for the demographic dividend to remain so and not to become a demographic disaster, it is important to prioritise the needs and aspirations of the youth. YDI's rank of India at the global level in 2016 was 133 and it has declined from 98 in 2013 among 161 countries. Its position is 25 among the 51 Commonwealth countries. India's scores and rank indicate that India has been a medium performing country. Its comparison with its neighbors becomes crucial here. A comparison of SAARC members is discussed below.

Position of India among SAARC Countries

South Asian Association for Regional Co-operation (SAARC) is a geopolitical union which comprises of 21 percent of the global population and almost 10 percent of the world's economy as of 2015. Its members include Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. According to United Nations, three South Asian Countries (India, Pakistan and Bangladesh) are among the world's ten countries with largest youth population implying the regional and economic significance of these countries for propelling growth in a stagnating world economy. Thus a comparison of the overall YDI score is undertaken to assess the trend in youth development. The Table 2.1 given below represents the relative performance of SAARC countries.

Table 2.1 Youth Development among SAARC Countries – 2016 and 2010

SAARC Countries	YDI Score (2016)	YDI Global Rank 2016	YDI Score (2010)	YDI Global Rank 2010	HDI Score 2015	HDI Rank 2015
Afghanistan	0.440	167	0.407	171	0.465	171
Bangladesh	0.492	146	0.492	140	0.570	142
Bhutan	0.657	69	0.642	68	0.605	132
India	0.548	133	0.494	138	0.609	130
Maldives	0.665	62	0.669	48	0.706	104
Nepal	0.647	77	0.605	96	0.548	145
Pakistan	0.470	154	0.571	113	0.538	147
Sri Lanka	0.731	31	0.650	60	0.757	73

Table 2.1 shows that Sri Lanka, Nepal, India and Afghanistan have performed better both in terms of YDI scores and YDI global rank. Pakistan has shown a drastic decline both in terms of scores and ranks and other three countries i.e., Maldives, Bhutan and Bangladesh also did not show much change over the period.

Table 2.1 also shows that almost all the countries of the SAARC follow the same pattern with respect to HDI except Bhutan, Maldives, Nepal and Sri Lanka. These countries have performed much better with respect to youth development, whereas the performance of India, Afghanistan, Bangladesh and Pakistan almost remain the same in both the indices. Sri Lanka is the only country with extremely better performance in both YDI and HDI, reflecting the fact that the country is emphasising on overall development of the nation's population. As far as India's position is concerned, the YDI and HDI ranks remain almost the same with HDI rank at 130 and YDI at 133. The scores also imply the need to prioritise the needs and aspirations of youth so as to ensure that youth remain an asset to the country.

Figure 2.1 YDI Scores of SAARC Countries Across Key Domains - 2016

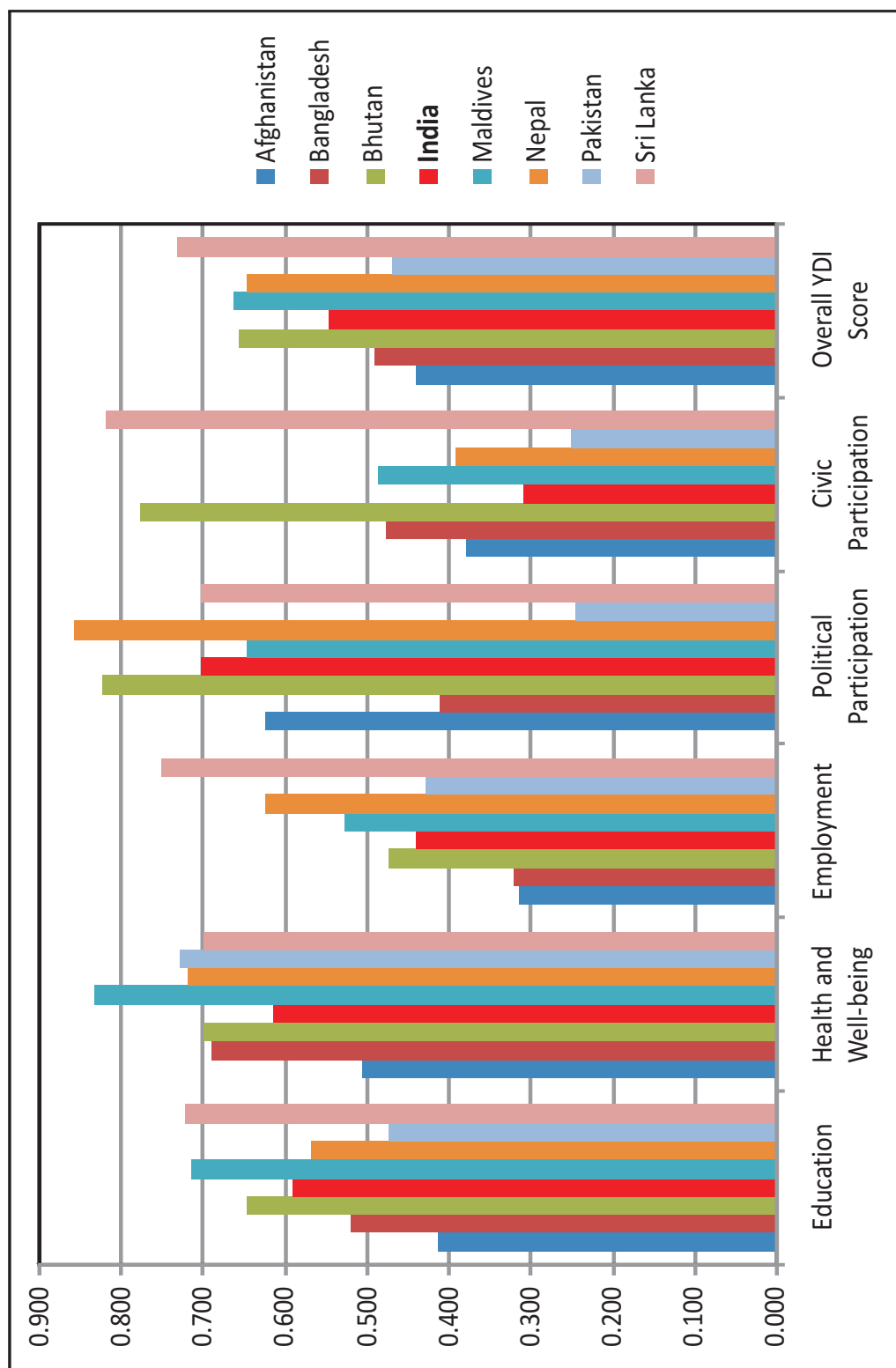


Table 2.2 YDI Scores of SAARC Countries across Key Domains - 2016

Key Domains and Ranks						
SAARC Countries	Edu- cation	Health and Well-being	Emp- loyment	Political Partici- pation	Civic Partici- pation	Overall YDI Score
Afghanistan	0.413 (167)	0.507 (140)	0.314 (178)	0.624 (81)	0.380 (130)	0.440 (167)
Bangladesh	0.520 (145)	0.690 (102)	0.321 (177)	0.412 (140)	0.476 (99)	0.492 (146)
Bhutan	0.647 (122)	0.701 (94)	0.475 (137)	0.825 (27)	0.779 (22)	0.657 (69)
India	0.592 (132)	0.616 (112)	0.439 (152)	0.703 (54)	0.310 (142)	0.548 (133)
Maldives	0.714 (110)	0.834 (17)	0.527 (100)	0.648 (72)	0.487 (95)	0.665 (62)
Nepal	0.570 (135)	0.720 (85)	0.624 (123)	0.859 (11)	0.392 (123)	0.647 (77)
Pakistan	0.474 (156)	0.730 (77)	0.429 (154)	0.246 (165)	0.250 (154)	0.470 (154)
Sri Lanka	0.721 (108)	0.700 (95)	0.751 (24)	0.703 (54)	0.820 (17)	0.731 (31)

Note: Domain ranks in brackets

As far as India's position is concerned, it's overall YDI score is 0.548 in 2016 with the rank of 133 as observed from Table 2.2, India's YDI scores in these key domains show that it does not outperform any other SAARC member in any of the domains. Its performance is relatively better in political participation followed by health and education. It performs poorly on employment and civic participation. India's rank among the SAARC member countries shows that India posits itself at 3rd position in political participation but below Bhutan and Nepal, 4th in education, 5th in employment with just one notch above Pakistan, and ranks 7th in Civic participation and Health with Pakistan and Afghanistan at the last position respectively in the domains mentioned. This reiterates the emphasis on important interventions necessary for India in social sectors that can enhance the multiplier effect.

India Youth Development Index - 2017

A pioneering attempt was already made by RGNIYD in bringing out Youth Development Report -2010. In its present endeavor of constructing India Youth Development Index (YDI) – 2017, RGNIYD has taken serious efforts to overcome the limitations of YDI - 2010 and also to develop a measure in line with Global Youth Development Index. Though the first five dimensions are retained same as that of Global YDI, indicators and weights are modified

based on the availability of data at sub-national level and the importance of the indicators in explaining Youth Development. The aim here is to capture the multidimensional properties that indicate progress in youth development at the sub-national level i.e., state level. The Index offers state-wise comparison of the factors that affect young people aged 15 to 29 years, across six key domains: Education, Health, Work, Political Participation, Civic Participation and Social Inclusion.

Youth Development Index is a composite index of indicators that reflect the socio-economic and political status of youth, besides their health and well-being. It is a multidimensional index that measures youth development in India on the basis of six domains mentioned above that characterise structural features of Indian society. YDI facilitates comparison of youth development across the Indian states for various indicators. It enables the stakeholders to measure the current progress and assess the future needs of youth in varied segments for a better quality of life. YDI construction for India's youth is guided by Global YDI created by the Commonwealth. Global YDI is different from YDI constructed for India in one way; YDI for India adds a new domain i.e., social inclusion to assess the inclusiveness of societal progress as structural inequalities persist in Indian society. This construction helps to identify the gaps that require intensification of policy intervention.

Definition of Youth

'Youth' is a familiar term that has no universal definition. Defining youth is one of the difficult issues faced by policy makers. It refers to a stage of life in transition between adolescence and adulthood. Policy making requires defining youth within an age bracket. National governments and international organisations have used different age ranges to categorise young people.

The Commonwealth defines youth as the population between age 15 and 29 years in the Global YDI. The YDI - 2017 constructed for India in this report is guided by the Commonwealth definition of youth and National Youth Policy of 2014 i.e., people in the age group of 15 to 29 years.

Methodology

As mentioned earlier, six dimensions are identified to represent the youth development and the steps followed in the construction of the Youth Development Index are briefly discussed as follow :

Construction of an index generally involves the following four steps:

- (i) Indicator selection
- (ii) Normalisation
- (iii) Weighting and
- (iv) Aggregation.

Indicator Selection

Several Technical Consultation Meetings were held in RGNYID with experts drawn from different fields and six domains were finalised (see Figure 2.2). The domains are:

Domain 1: Education

Domain 2: Health

Domain 3: Work

Domain 4: Political Participation

Domain 5: Civic Participation and

Domain 6: Social Inclusion

The first five Domains i.e., Education, Health, Work, Political Participation and Civic Participation were in line with Commonwealth's Global Youth Development Index. The last domain i.e., Social Inclusion was felt necessary for a country like India to incorporate its structure in the index and was thus included. Table 2.3 presents the Domains and Indicators used in constructing YDI along with weights. Details regarding the constructing of variables with data sources and years are given in the Table 2.3 (A).

Normalisation

Here, Max-Min procedure is used to normalise the data. Each indicator which is in different units is converted into the index as follows:

$$\text{Indicator Index} = \frac{\text{State Value of the Indicator} - \text{Minimum Cutoff}}{\text{Maximum Cutoff} - \text{Minimum Cutoff}}$$

Choice of goal posts i.e., Minimum cut off and Maximum cut off play a very important role in arriving at the Indicator Index. In order to arrive at Natural Zeros i.e., Minimum and Aspirational goals i.e., Maximum, order based goal posts, Box and Whisker plots are used. Upper inner fence and Lower inner fence are used as goal posts. In few cases, Upper inner fence and Lower inner fence are replaced with natural attainable lower bound and upper bound. Detailed basic statistics with the goal posts are presented in the Table 2.3 (B).

Figure 2.2 Domains of India Youth Development Index – 2017

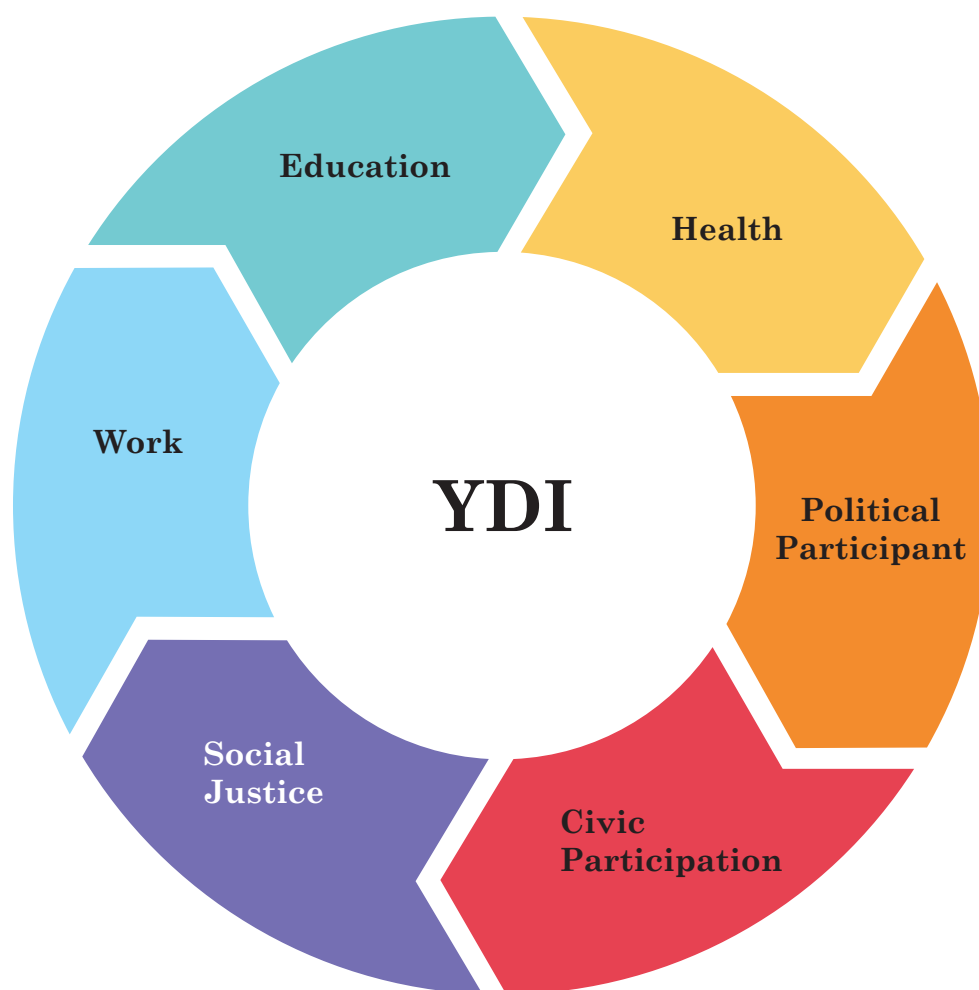


Table 2.3 Domains and Indicators of India Youth Development Index – 2017

Indicator	Indicator Weight	Domain	Domain Weight	Youth Development Index = Weighted sum of six domains
Education expenditure as % of GSDP	5	Education	25	
Youth Literacy Rate	10			
Education Level	10			
Teenage Pregnancy Rate	5	Health and Well Being	25	
Youth Mortality Rate	5			
Youth Morbidity Rate	5			
Physical Fitness of Youth	5			
Alcohol abuse Rate by Youth	2.5			
Tobacco abuse rate by Youth	2.5			
Percentage of youth not in school/work	10	Work	25	
Share of youth unemployment to total unemployment	5			
Labour Force Participation rate	5			
Employment Level	5			
Share of Youth Participating in Legislature	3	Political Participation	6	
Share of youth electors	3			
Share of youth participating in NYKS	3	Civic Participation	6	
Share of college students participating in NSS and NCC	3			
Social Inequality Index	10	Social Justice	13	
Share of youth with disability	3			

Weighting Indicators and Domains

Global Youth Development Report used equal weights for indicators like Education, Health, Employment and Participation (Political and Civic Participation). Here we used same weights as a Global Report for Education, Health and Work dimensions i.e., 25 each and the remaining weight is divided between the remaining three domains i.e., Political Participation, Civic Participation and Social Inclusion based on the relative importance (see Table 2.3). Further, each indicator within the domain is weighted by relative importance.

Aggregation

Each domain index is obtained as the weighted average of the indicators and the final **Youth Development Index** is aggregated as a weighted average of domain Indices.

$$\text{Youth Education Index} = \frac{5 \times YEDU_EXP + 10 \times YLIT_RATE + 10 \times YEDU_LEVEL}{25}$$

$$\begin{aligned} \text{Youth Health Index} \\ = \frac{5 \times YAFR + 5 \times YMR + 5 \times YMOR + 5 \times YBMI + 2.5 \times YALC + 2.5 \times YTOB}{25} \end{aligned}$$

$$\text{Youth Work Index} = \frac{10 \times YUR + 5 \times YUTT + 5 \times YLF + 5 \times YEL}{25}$$

$$\text{Youth Political Participation Index} = \frac{3 \times YPL + 3 \times YELE}{6}$$

$$\text{Youth Civic Participation Index} = \frac{3 \times YNYKS + 3 \times YNCC\&NSS}{6}$$

$$\text{Youth Social Inclusion Index} = \frac{10 \times YSII + 3 \times YDIS}{13}$$

$$YDI = \frac{25 \times YEI + 25 \times YHI + 25 \times YWI + 6 \times YPI + 6 \times YCI + 13 \times YSII}{100}$$

Youth Gender Development Index

Gender Development Index (GDI) is dictated by the indicators for which sex-wise data are available. Thus GDI is based on only three dimensions i.e., Education, Health and Work. While constructing Gender Development Index, for each dimension, gender specific indices are computed separately for Female and Male. Domain specific GDI is simply the ratio of female development index to male development index. Overall GDI is the geometric mean of domain specific GDIs.

Education Domain

$$\text{Female Youth Education Index} = \frac{12.5 \times FYLIT_RATE + 12.5 \times FYEDU_LEVEL}{25}$$

$$\text{Male Youth Education Index} = \frac{12.5 \times MYLIT_RATE + 12.5 \times MYEDU_LEVEL}{25}$$

$$\text{Youth Education Gender Development Index} = \frac{\text{Female Youth Education Index}}{\text{Male Youth Education Index}}$$

Health Domain

Female Youth Health Index

$$= \frac{10 \times YMR_F + 5 \times YMOR_F + 5 \times YBMI_F + 2.5 \times YALC_F + 2.5 \times YTOB_F}{25}$$

Male Youth Health Index

$$= \frac{10 \times YMR_M + 5 \times YMOR_M + 5 \times YBMI_M + 2.5 \times YALC_M + 2.5 \times YTOB_M}{25}$$

$$\text{Youth Health Gender Development Index} = \frac{\text{Female Youth Health Index}}{\text{Male Youth Health Index}}$$

Work Domain

$$\text{Female Youth Work Index} = \frac{10 \times YUR_F + 5 \times YUTT_F + 5 \times YLF_F + 5 \times YEL_F}{25}$$

$$\text{Male Youth Work Index} = \frac{10 \times YUR_M + 5 \times YUTT_M + 5 \times YLF_M + 5 \times YEL_M}{25}$$

$$\text{Youth Work Gender Development Index} = \frac{\text{Female Youth Work Index}}{\text{Male Youth Work Index}}$$

Gender Development Index

$$YOUTH\ GDI = (YEGDI \times YHGDI \times YWGDI)^{1/3}$$

That is Youth Gender Development Index (YGDI) is the geometric mean of Youth Education Gender Development Index (YEGDI), Youth Health Gender Development Index (YHGDI) and Youth Work Gender Development Index (YWGDI).

Table 2.3 (A) Description of the Domains and Indicators

S. No	Indicator	Abbreviation used	Definition of the Indicator	Source	Year	Remarks
INDICATORS FOR EDUCATION DOMAIN						
1	Education expenditure	YEDU-EXP	Education expenditure as % of SDP	RBI and CSO for State domestic products	2011-12	
2	Literacy	YLIT-RATE	Youth Literacy Rate	Census	2011	
3	Education Level	YEDU-LEVEL	Education Level: Computed as $0.25 \times$ proportion of youth just literate+ $0.5 \times$ proportion of youth primary educated+ $0.75 \times$ proportion of youth secondary educated + $1 \times$ proportion of youth tertiary educated + $1 \times$ proportion of youth vocational educated	NSS 68th round	2011-12	
INDICATORS FOR HEALTH AND WELLBEING DOMAIN						
1	Teenage Pregnancy rate	YAFR	Teenage Pregnancy Rate: Adolescent Fertility Rate i.e., number of births to women aged 15- 19 years per 1000 women in that age group.	SRS	2011	Negative Indicator and it is reversed in the construction of Youth Health Index
2	Youth Mortality Rate	YMR	Youth Mortality Rate (Number of deaths per 1000): Mortality rates are available for the age groups 15-19, 20-24 and 25-29. Youth mortality rates are obtained as the weighted average, where weights are population proportion of youth in respective age groups	SRS	2011	Negative Indicator and it is reversed in the construction of Youth Health Index
3	Youth Morbidity rate	YMOR	Youth Morbidity Rate: Share of youth suffering from Communicable and Non-communicable diseases	DLHS 4	2012-13	Negative Indicator and it is reversed in the construction of Youth Health Index
4	Physical Fitness	YBMI	Physical Fitness of Youth: Share of youth in the normal BMI i.e., between 18.5 to 24.9	DLHS 4	2012-13	
5	Alcohol Abuse Rate	YALC	Alcohol abuse Rate by Youth: Share of Youth consuming Alcohol	DLHS 4	2012-13	Negative Indicator and it is reversed in the construction of Youth Health Index
6	Tobacco Abuse Rate	YTOB	Tobacco abuse rate by Youth: Share of youth consuming Tobacco(both chewing and smoking)	DLHS 4	2012-13	Negative Indicator and it is reversed in the construction of YHI

INDICATORS FOR WORK DOMAIN						
1	Percentage of Youth not in school/work	YUR	Percentage of youth not in school/work: Unemployment Rate	NSS 68th Round	2011-12	Negative Indicator and it is reversed in the construction of Youth Work Index
2	Youth Unemployment in total	YUTT	Share of youth unemployment to total unemployment	NSS 68th round	2011-12	Negative Indicator and it is reversed in the construction of Youth Work Index
3	Youth in Labor Force	YLF	Labor Force Participation Rate	NSS 68th round	2011-12	
4	Employment Level	YEL	Employment Level: $0.25 \times$ share of youth in Self-employed + $0.5 \times$ share of youth in Regular/salaried + $0.25 \times$ share of youth in casual labor	NSS 68th round	2011-12	
INDICATORS FOR POLITICAL PARTICIPATION DOMAIN						
1	Youth Participating in Legislature	YPL	Percentage of Youth to total Participating in Legislature	Election commission	2014 or the latest election held	
2	Youth Electors	YELE	Share of youth electors *	Estimated based on Census data	2011	
INDICATORS FOR CIVIC PARTICIPATION DOMAIN						
1	Participation of Youth in NYKS	YNYKS	Share of youth participating in NYKS	NYKS Annual report	2011-12	
2	Participation in NCC and NSS	YNCC&NSS	Share of college students participating in NSS and NCC	Data collected from NSS and NCC websites	2011-12	
INDICATORS FOR SOCIAL INCLUSION DOMAIN						
1	Social Inequality Index	YSII	Social Inequality Index: Is based on the data on education and work: Average of the ratio of youth education and work performance of SC/ST to Non SC/ST.	NSS 68th round	2011-12	Negative Indicator and it is reversed in the construction of Youth Social Inclusion Index
2	Youth Disability	YDIS	Share of youth with disability	Census	2011	Negative Indicator and it is reversed in the construction of Youth Social Inclusion Index

Table 2.3 (B) Basic Statistics and Goal Posts of the Indicators

Indicators	Basic Statistics					Goal Posts		Outlier Existed and Trimmed
	Max	Min	Average	Standard Deviation	CV (%)	Minimum (Natural Zeros)	Maximum (Aspirational Goals)	
Education expenditure as % of GSDP	10.13	1.54	3.81	1.72	45.14	1.00	8.79	YES
Youth Literacy Rate	98.86	68.48	86.58	7.21	8.33	47.52	100.00	NO
Education Level	77.61	44.24	62.65	8.46	13.50	23.97	96.54	NO
HEALTH								
Teenage Pregnancy Rate	55.44	5.69	25.56	13.12	51.32	5.00	78.59	NO
Youth Mortality Rate	2.20	0.33	1.32	0.42	31.57	0.00	3.34	NO
Youth Morbidity Rate	18.81	1.28	8.10	4.65	57.45	1.00	25.79	NO
Physical Fitness of Youth	76.88	52.87	62.01	7.39	11.92	34.78	86.10	NO
Alcohol abuse Rate by Youth	39.18	1.60	9.47	7.79	82.21	0.00	25.04	YES
Tobacco abuse rate by Youth	53.54	2.29	16.36	13.94	85.22	0.00	48.25	YES
WORK								
Percentage of youth not in school/work	482.83	7.38	95.43	96.12	100.72	5.00	256.62	YES
Share of youth unemployment to total unemployment	95.95	26.24	82.95	12.71	15.32	46.79	100.00	YES
Labor Force Participation Rate	56.92	30.83	44.43	6.28	14.12	20.00	83.12	NO
Employment Level	43.56	26.02	30.79	4.44	14.42	18.04	43.12	YES
POLITICAL PARTICIPATION								
Share of Youth Participating in Legislature	10.65	0.53	5.32	2.54	47.84	1.00	14.69	YES
Share of youth electors	40.56	26.10	34.69	3.90	11.24	19.62	51.62	NO
CIVIC PARTICIPATION								
Share of youth participating in NYKS	5.07	0.40	1.47	1.08	73.46	0.00	5.31	NO
Share of college students participating in NSS and NCC	7.56	0.37	2.23	1.85	83.02	0.00	5.17	YES
SOCIAL INCLUSION								
Social Inequality Index	1.21	0.79	0.93	0.08	8.76	1.00	0.79	YES
Share of youth with disability	2.32	1.02	1.76	0.37	21.14	0.58	3.05	NO

Indian Youth Development Index - 2017

Youth Development Index (YDI) is a composite index of 19 indicators which measure the multidimensional progress of youth development in 20 Major states and 10 Minor states (the categorisation of the states as major and minor are based on the categorisation of National Sample Survey Organisation which is based on the size of population) of India. YDI has six domains measuring the levels of education, health and well-being, employment, political participation, civic participation and social inclusion of young people. The key objective of YDI is to examine the current status of progress among the youth of India that can provide an opportunity to foster youth development through the realisation of their needs and capabilities. YDI values range between 0 and 1, while the state with a perfect score of 1 indicates highest youth development attainable and 0 indicates no youth development. Youth Gender Development Index has been calculated separately for each state on various domains as it captures gender inequality among the young population.

Youth Development Index across States

YDI is constructed with the aim of tracking the progress of youth and also it facilitates as a monitoring tool for policy makers to take appropriate and adequate interventions. At the national level, YDI value is 0.569 with wide variation ranging from 0.466 (Bihar) to 0.689 (Himachal Pradesh) among the major states. However, among the minor states, Puducherry and Goa exceeds the value of Himachal Pradesh.

Table 2.4 India Youth Development Index across Indian States - 2017

Major States	Education	Health	Work	Political Participation	Civic Participation	Social Inclusion	Youth Development Index	Rank
Andhra Pradesh	0.560	0.596	0.582	0.427	0.219	0.759	0.572	13
Assam	0.527	0.533	0.372	0.397	0.182	0.938	0.515	19
Bihar	0.353	0.609	0.458	0.249	0.112	0.687	0.466	20
Chhattisgarh	0.575	0.548	0.611	0.572	0.190	0.851	0.590	11
Gujarat	0.545	0.671	0.669	0.431	0.142	0.803	0.610	7
Haryana	0.566	0.655	0.517	0.529	0.296	0.826	0.592	10
Himachal Pradesh	0.716	0.778	0.619	0.275	0.495	0.881	0.689	1
Jammu & Kashmir	0.565	0.683	0.503	0.515	0.330	0.796	0.592	9
Jharkhand	0.396	0.596	0.501	0.565	0.186	0.784	0.520	18
Karnataka	0.572	0.676	0.629	0.354	0.228	0.755	0.602	8

Kerala	0.735	0.759	0.403	0.226	0.358	0.879	0.624	3
Madhya Pradesh	0.470	0.638	0.593	0.407	0.219	0.720	0.557	14
Maharashtra	0.625	0.668	0.630	0.381	0.171	0.766	0.614	6
Odisha	0.519	0.619	0.578	0.300	0.159	0.734	0.552	15
Punjab	0.600	0.719	0.595	0.364	0.394	0.759	0.623	5
Rajasthan	0.439	0.667	0.622	0.585	0.157	0.763	0.576	12
Tamil Nadu	0.651	0.697	0.571	0.369	0.287	0.868	0.632	2
Uttar Pradesh	0.465	0.597	0.562	0.501	0.110	0.799	0.547	16
Uttarakhand	0.621	0.736	0.512	0.393	0.368	0.852	0.624	4
West Bengal	0.521	0.503	0.532	0.381	0.108	0.807	0.524	17
Minor States								
Arunachal Pradesh	0.525	0.487	0.486	0.535	0.395	0.906	0.548	9
Delhi	0.606	0.723	0.536	0.480	0.212	0.900	0.625	6
Goa	0.661	0.809	0.635	0.253	0.744	0.884	0.701	2
Manipur	0.657	0.589	0.471	0.345	0.481	0.863	0.591	7
Meghalaya	0.590	0.591	0.785	0.415	0.349	0.884	0.652	4
Mizoram	0.752	0.622	0.514	0.318	0.778	0.959	0.663	3
Nagaland	0.667	0.669	0.211	0.303	0.355	0.953	0.550	8
Pondicherry	0.724	0.700	0.751	0.272	0.978	0.806	0.724	1
Sikkim	0.648	0.571	0.604	0.329	0.795	0.842	0.633	5
Tripura	0.596	0.579	0.274	0.341	0.337	0.900	0.520	10
Total	0.513	0.632	0.572	0.436	0.191	0.785	0.569	

Global YDI report classifies the countries into Low, Medium, High and Very High categories based on the YDI scores. As per the above classification, India belongs to Medium category ranking 133 out of 179 countries with a score of 0.548. As per the same classification, though at the national level YDI score belongs to a medium category, nearly 50 percent of the states belong to either high or very high category. Pondicherry, Goa and Himachal Pradesh belong to Very high category, whereas Bihar belongs to a Low category. Nearly 33 percent (i.e., six major states and four minor states) get classified into a high category.

Figure 2.3 Youth Development Index - 2017

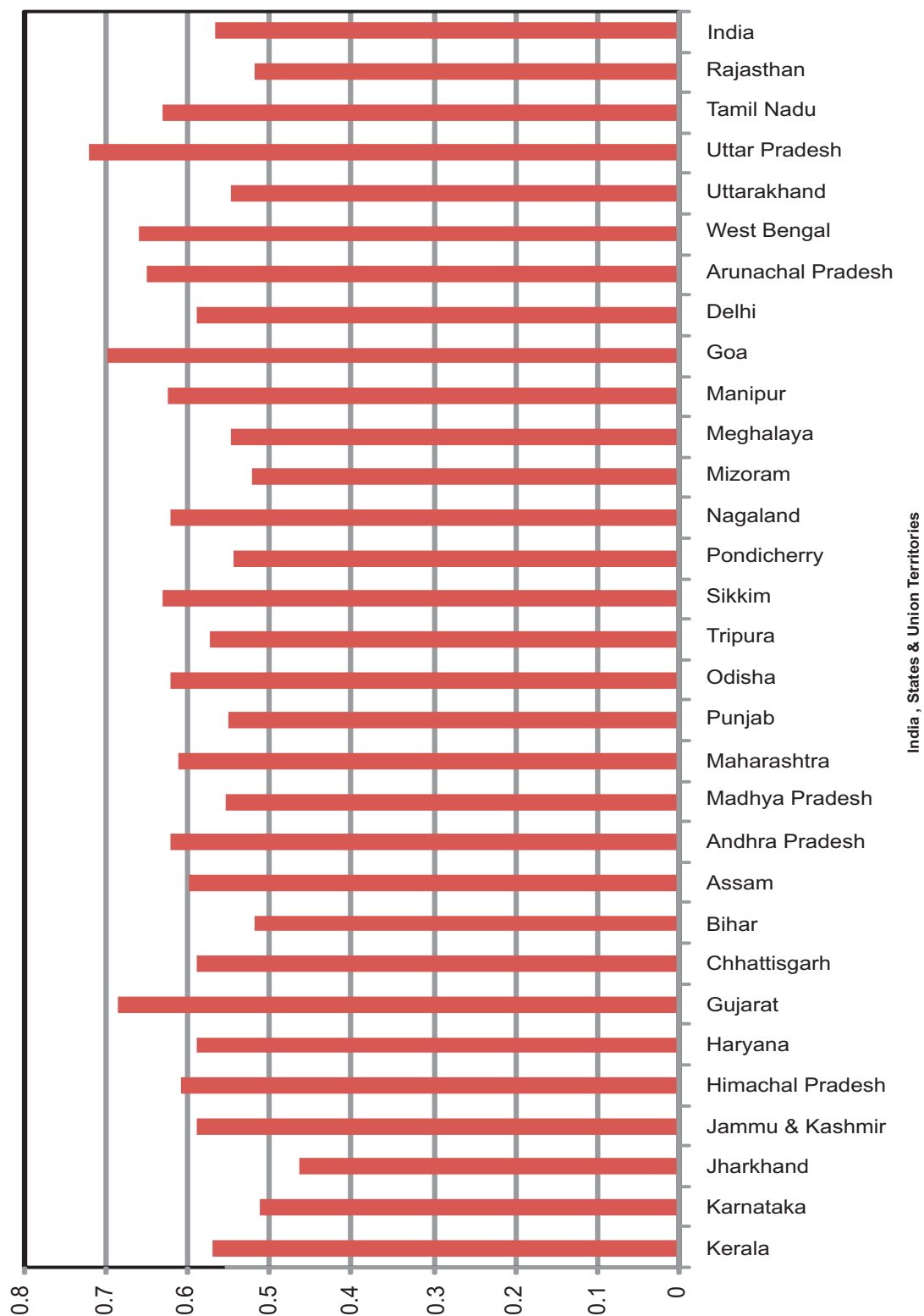
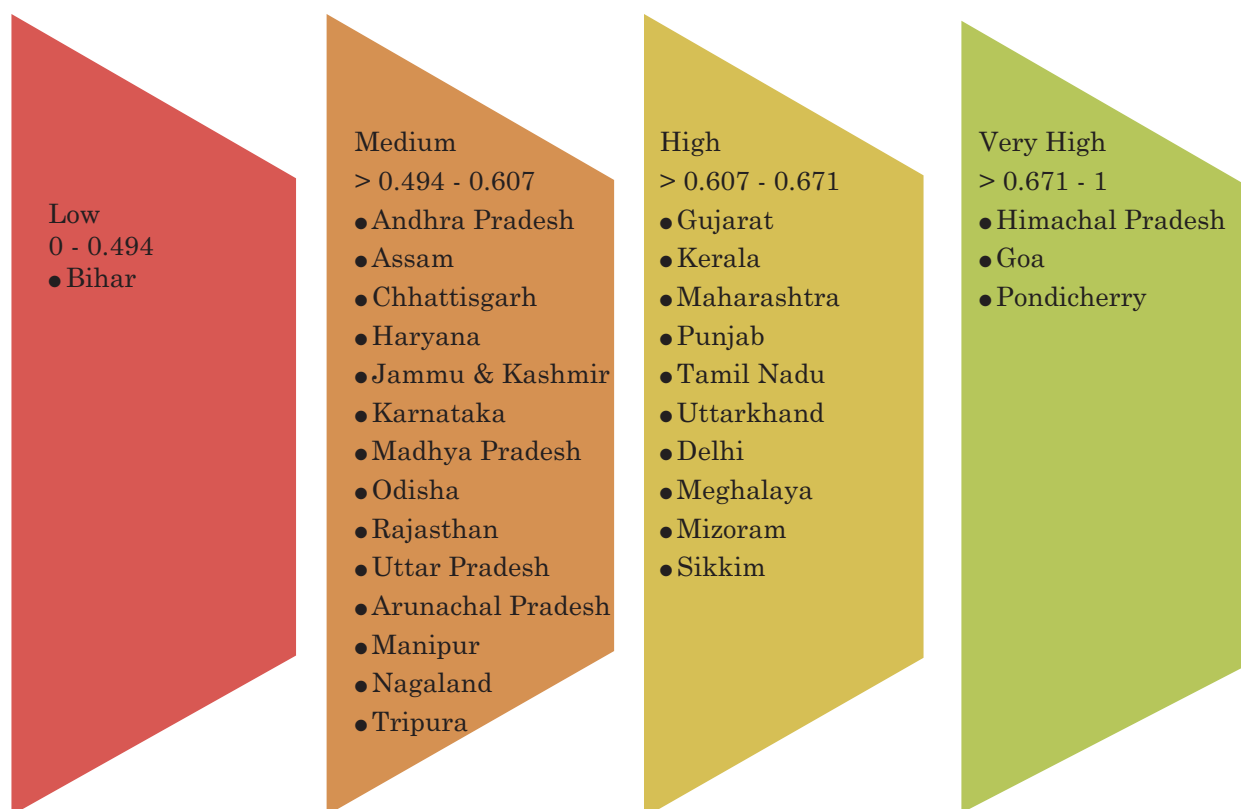
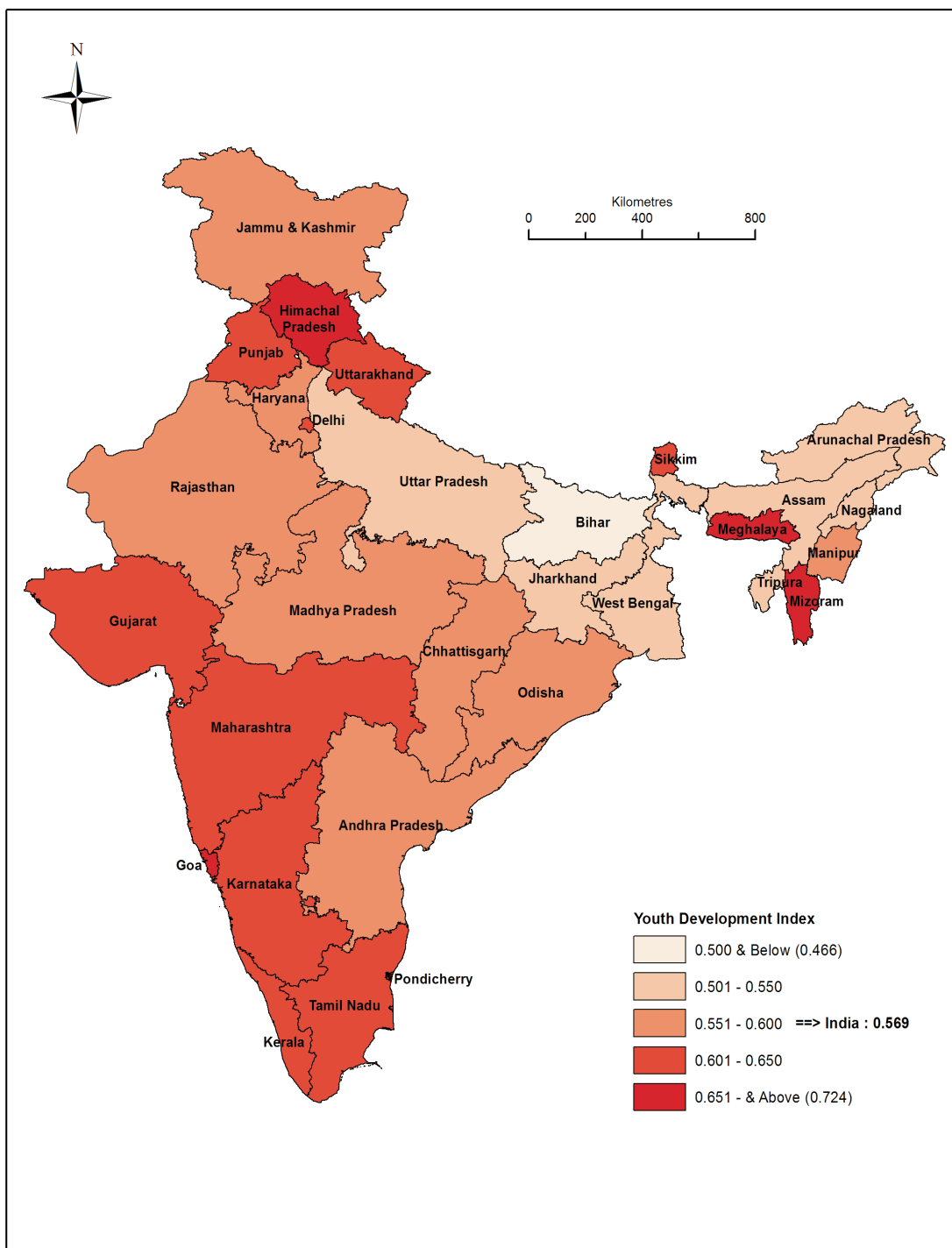


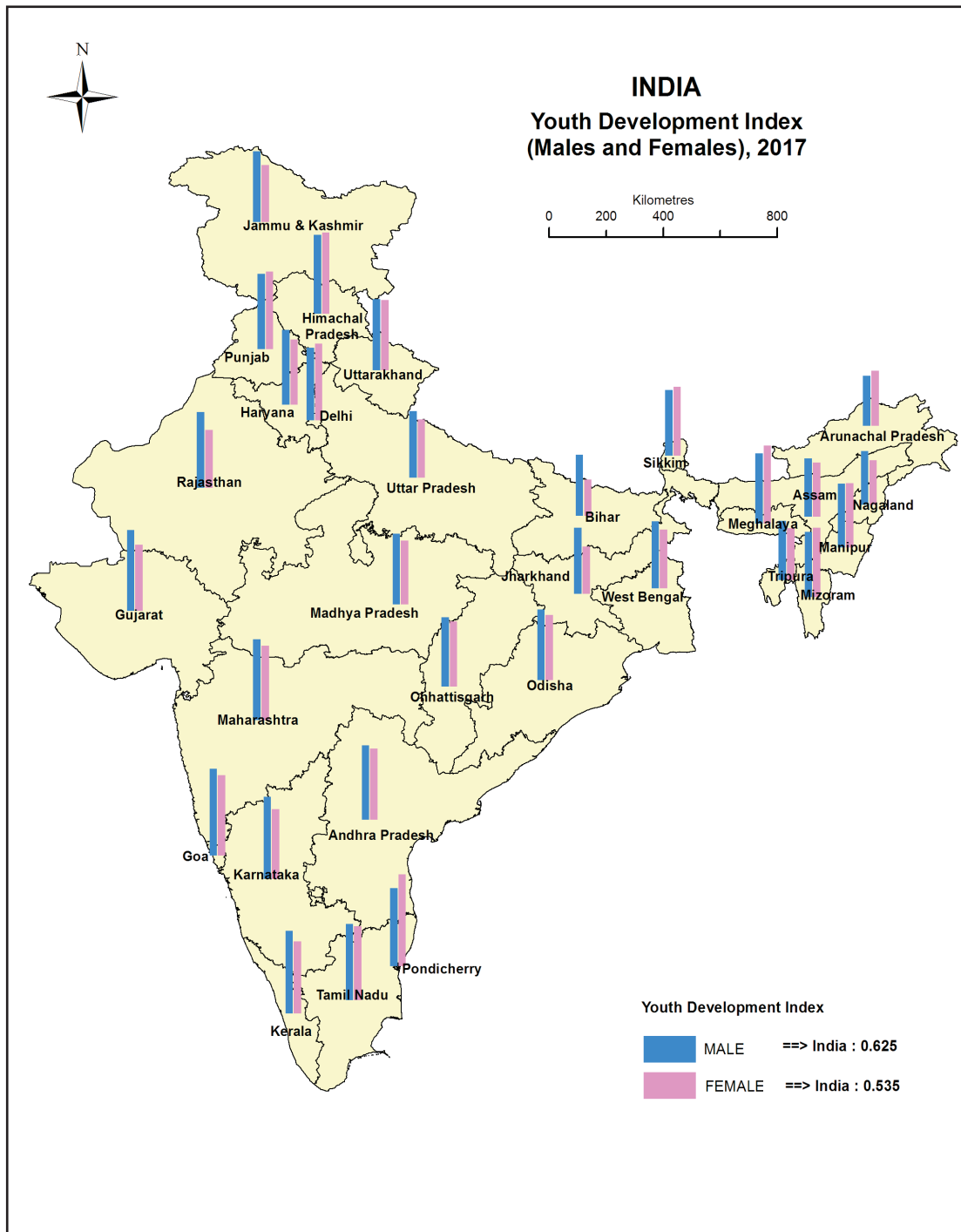
Figure 2.4 Classification of States according to YDI values



Map 2.1 Youth Development Index across Indian States - 2017



**Map 2.2 Youth Development Index (Male and Female)
across Indian States - 2017**



Map 2.3 Youth Gender Development Index across Indian States - 2017

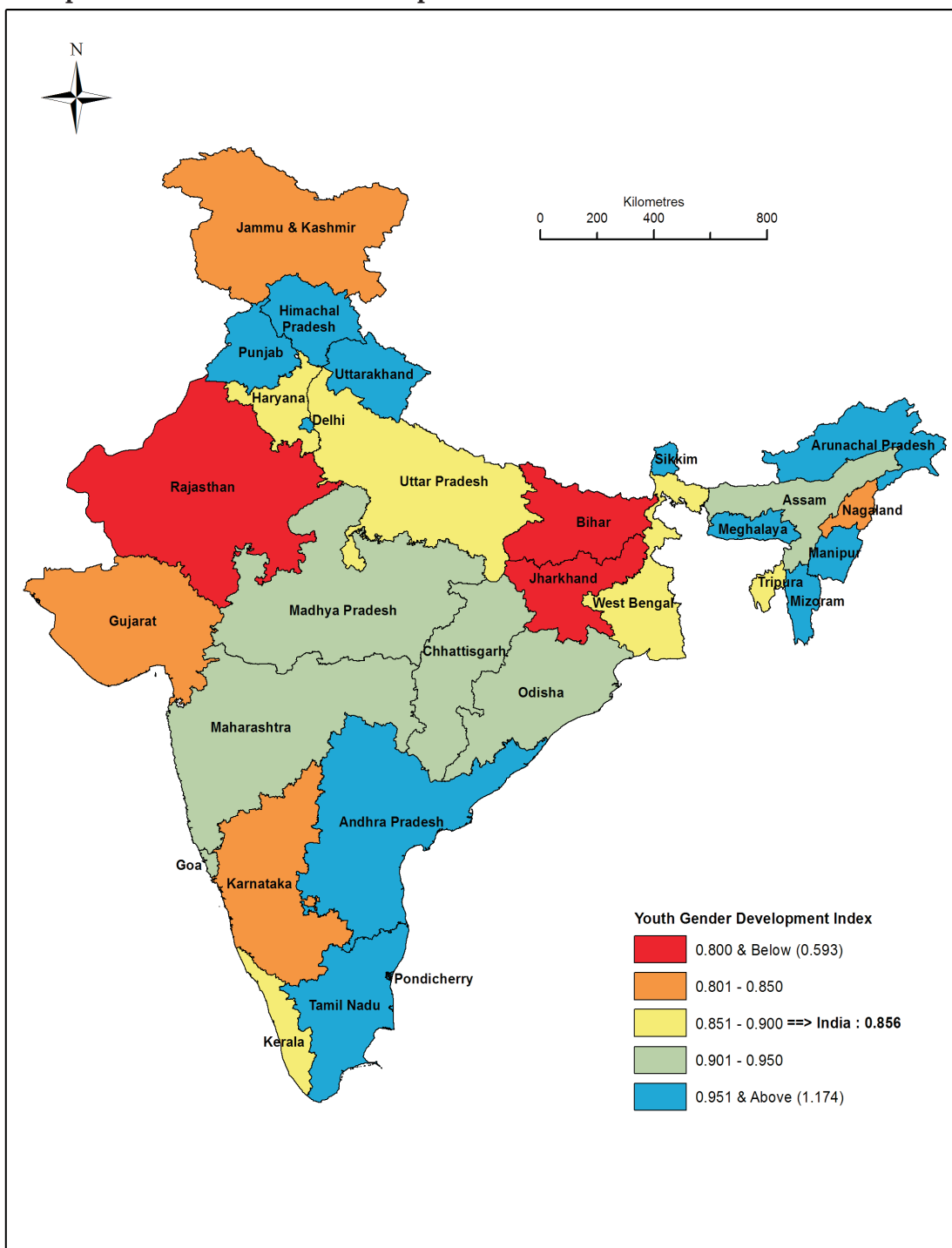


Figure 2.5 Comparison of Youth Development Index and Youth Gender Development Index - 2017

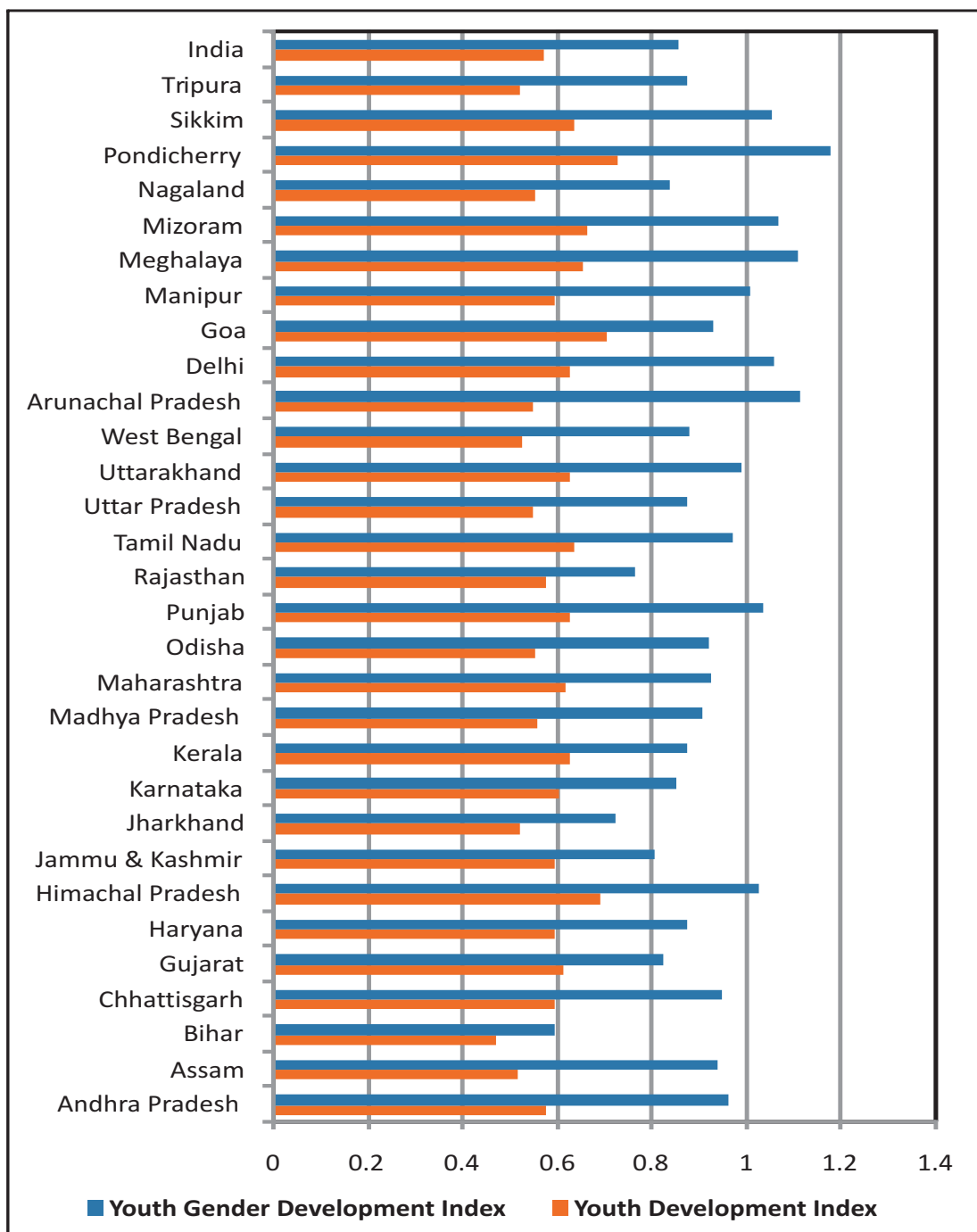


Figure 2.6 Comparison of Youth Development Index and Youth Health Index - 2017

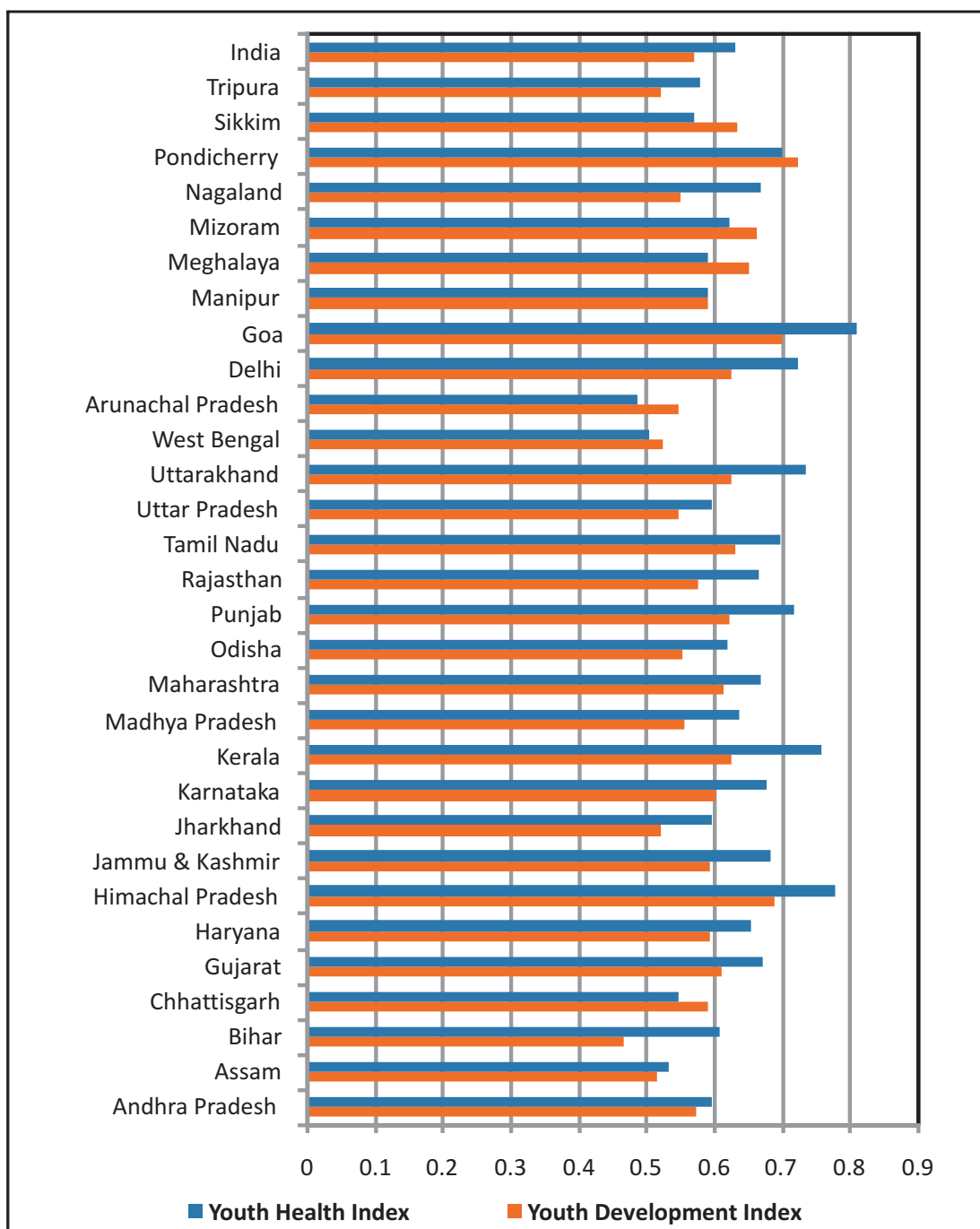


Figure 2.7 Comparison of Youth Development Index and Youth Education Index - 2017

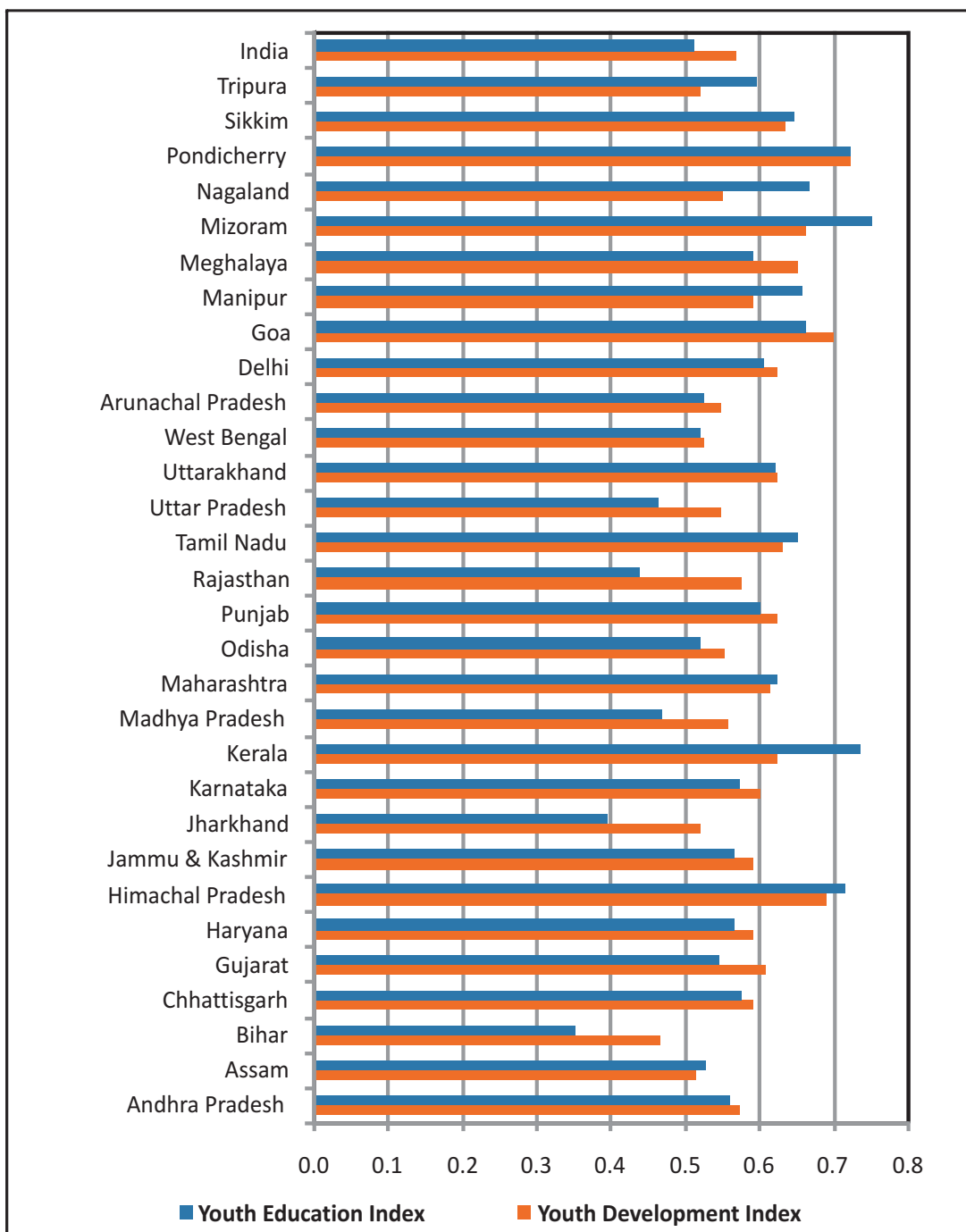


Figure 2.8 Comparison of Youth Development Index and Youth Work Index - 2017

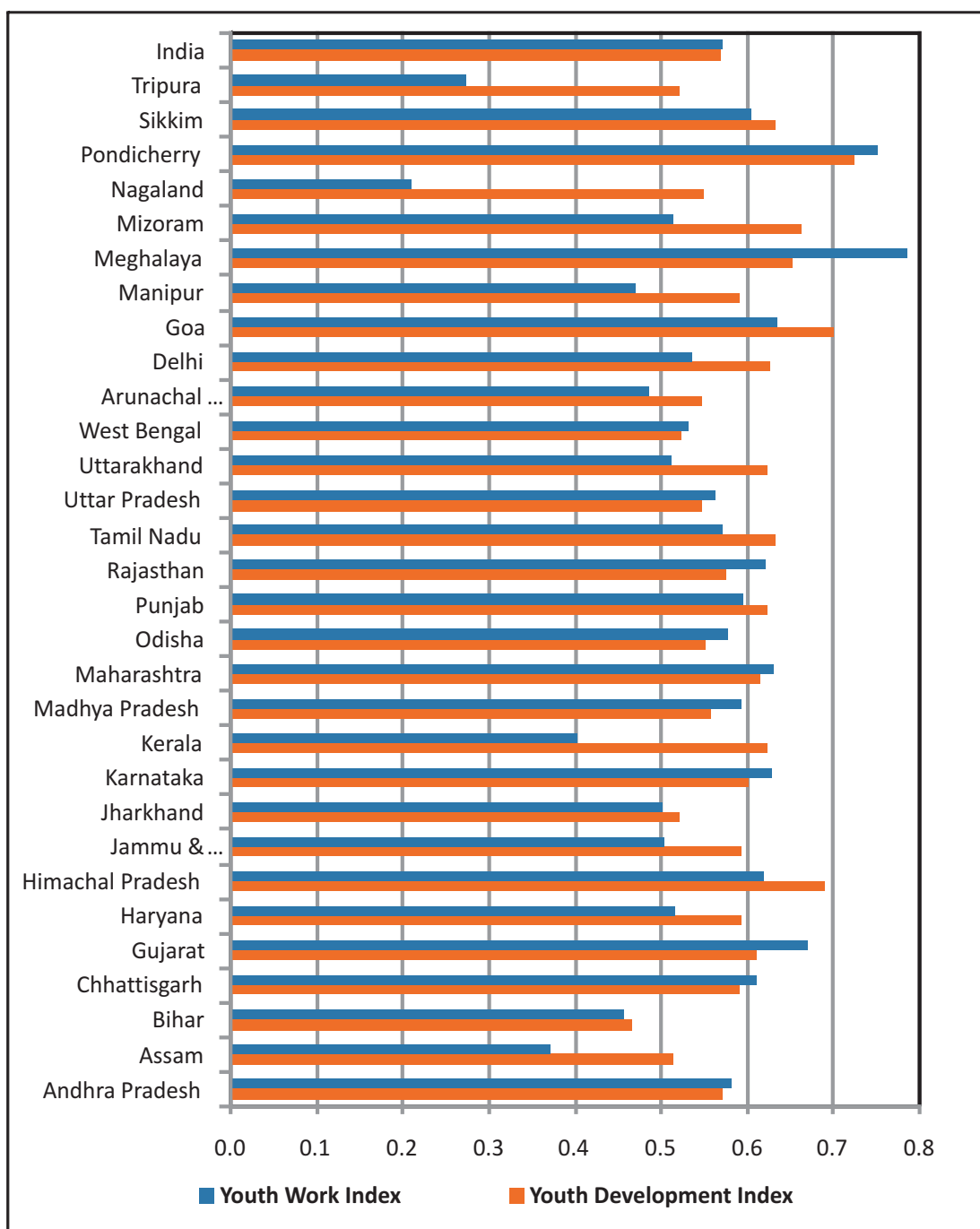


Figure 2.9 Comparison of Youth Development Index and Youth Civic Participation Index - 2017

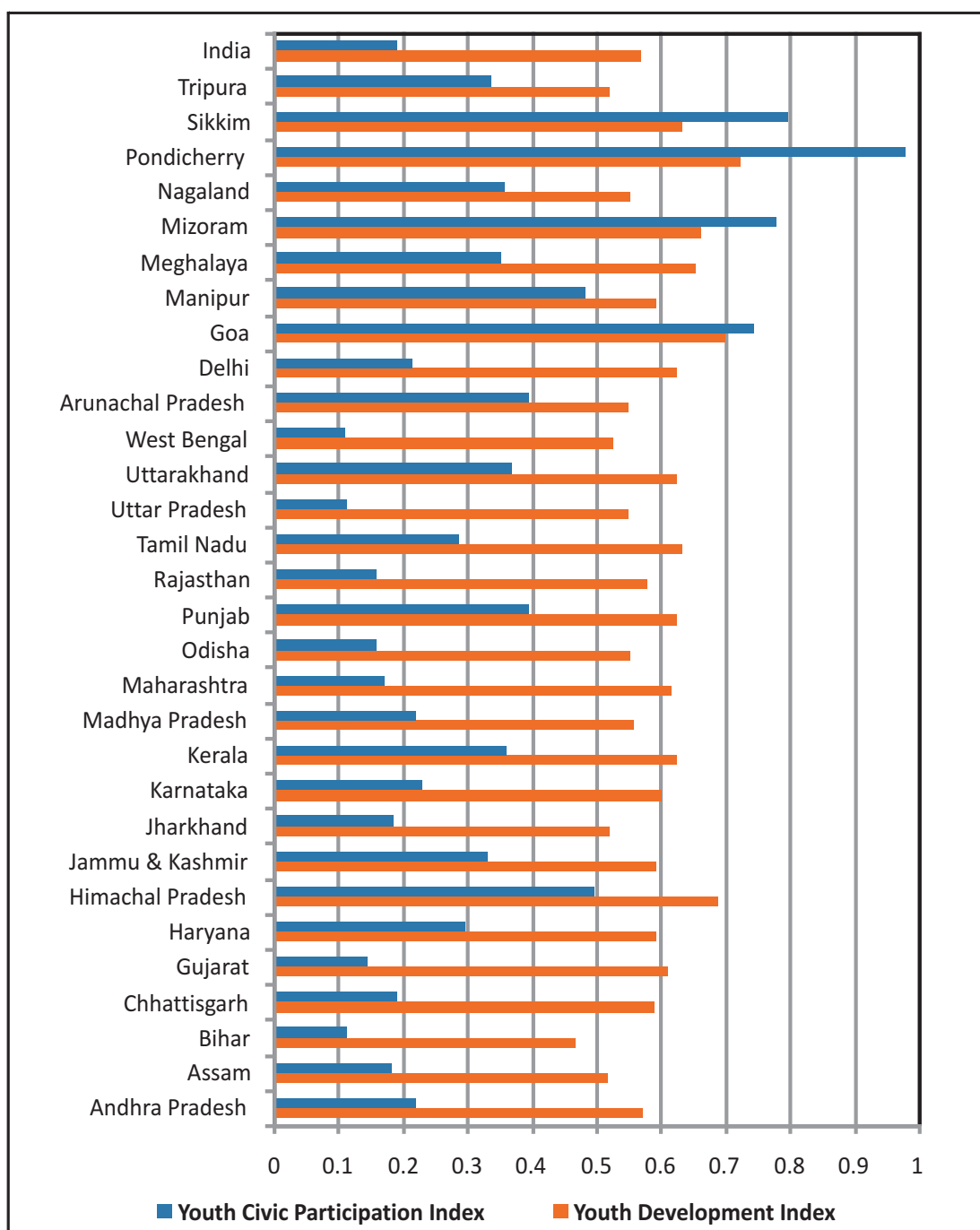


Figure 2.10 Comparison of Youth Development Index and Youth Social Inclusion Index - 2017

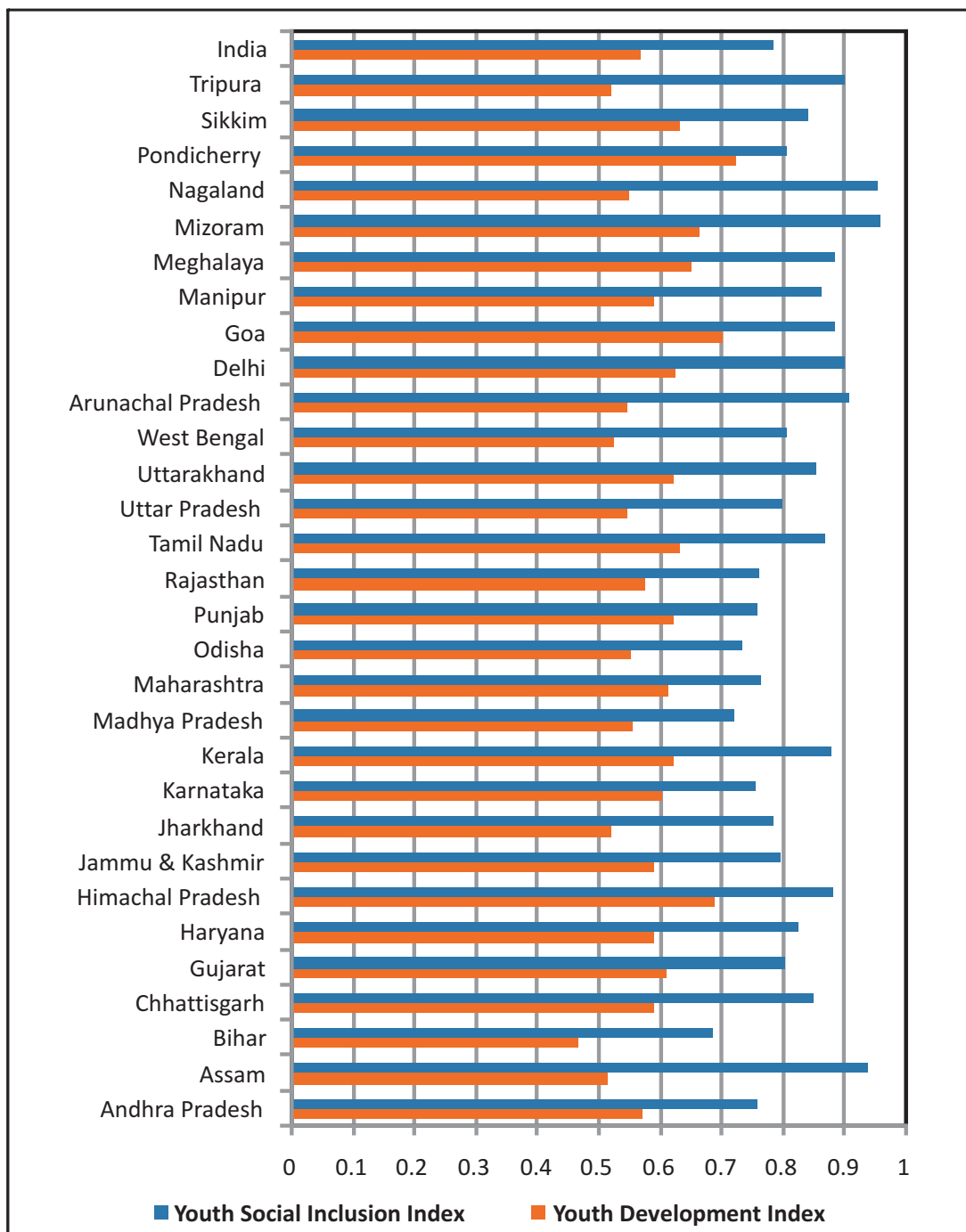


Table 2.5 Classification of States into Low, Medium, High, and Very High category

	Major states	
Low 0–0.494	Bihar	
Medium >0.494–0.607	Andhra Pradesh, Assam, Chhattisgarh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh	Arunachal Pradesh, Manipur, Nagaland, Tripura
High >0.607–0.671	Gujarat, Kerala, Maharashtra, Punjab, Tamil Nadu, Uttarakhand	Delhi, Meghalaya, Mizoram, Sikkim
Very high >0.671–1	Himachal Pradesh	Goa, Pondicherry

Table 2.6 Linking Development (measured in terms of per capita income) with YDI

		YDI	
		<i>Above National level</i>	<i>Below National level</i>
Income	<i>Above National level</i>	Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu and Uttarakhand	
	<i>Below National Level</i>	Chhattisgarh, Jammu & Kashmir and Rajasthan	Assam, Bihar, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh, West Bengal

The above table affirms a link between development measured in terms of per capita income and YDI. This link established a point that among major states, excepting Chhattisgarh, Jammu & Kashmir and Rajasthan, all other states are either in the first quadrant or the last quadrant implying that development and YDI move together.

Youth Gender Development Index

Gender is an important social stratification that guides the social and economic process in India. Despite enormous progress in women's status, gender discrimination is still a significant feature of Indian society and polity. Thus, in order to capture the gender inequality, the Youth Gender Development Index (YGDI) has been calculated. As mentioned in the methodology chapter, Gender Youth Development Index is based on only three dimensions *viz.*, Education, Health and Work, as gender-wise data was not available with respect to other three dimensions i.e., Political Participation, Civic Participation and Social Inclusion. Since Education, Health and Work are all equally important, equal weights were given in the construction of YGDI. Table 2.7 presents the YGDI that reflects gender disparity among youth across the states of India.

Table 2.7 Youth Gender Development Index across Indian States

Major States	Youth Development Indicators for Female				Youth Development Indicators for Male				Youth Gender Development Index	Rank
	Education	Health	Work	YDI-F	Education	Health	Work	YDI-M		
Andhra Pradesh	0.599	0.741	0.528	0.617	0.699	0.635	0.601	0.643	0.959	5
Assam	0.482	0.630	0.343	0.470	0.589	0.513	0.420	0.503	0.936	7
Bihar	0.184	0.622	0.265	0.312	0.476	0.582	0.524	0.526	0.593	20
Chhattisgarh	0.549	0.543	0.603	0.564	0.732	0.477	0.611	0.597	0.944	6
Gujarat	0.549	0.652	0.530	0.574	0.737	0.633	0.732	0.699	0.822	16
Haryana	0.601	0.613	0.481	0.562	0.732	0.633	0.576	0.644	0.872	13
Himachal Pradesh	0.774	0.796	0.556	0.700	0.785	0.629	0.646	0.683	1.024	2
Jammu & Kashmir	0.476	0.639	0.385	0.489	0.681	0.599	0.557	0.610	0.802	17
Jharkhand	0.301	0.604	0.379	0.410	0.556	0.570	0.585	0.570	0.720	19
Karnataka	0.602	0.691	0.524	0.602	0.716	0.720	0.694	0.710	0.848	15

Kerala	0.848	0.854	0.332	0.622	0.862	0.692	0.609	0.714	0.872	14
Madhya Pradesh	0.406	0.686	0.599	0.551	0.616	0.584	0.627	0.609	0.904	10
Maharashtra	0.689	0.668	0.580	0.644	0.767	0.661	0.668	0.697	0.924	8
Odisha	0.480	0.747	0.490	0.560	0.688	0.512	0.642	0.609	0.920	9
Punjab	0.686	0.729	0.603	0.670	0.743	0.575	0.637	0.648	1.034	1
Rajasthan	0.308	0.664	0.601	0.498	0.656	0.663	0.643	0.654	0.761	18
Tamil Nadu	0.736	0.711	0.489	0.635	0.811	0.561	0.617	0.655	0.970	4
Uttar Pradesh	0.375	0.578	0.593	0.504	0.599	0.532	0.607	0.578	0.873	12
Uttarakhand	0.651	0.717	0.484	0.609	0.739	0.609	0.524	0.617	0.986	3
West Bengal	0.530	0.618	0.395	0.506	0.644	0.502	0.597	0.578	0.875	11
Minor States										
Arunachal Pradesh	0.442	0.545	0.451	0.477	0.582	0.276	0.495	0.430	1.109	2
Delhi	0.709	0.763	0.533	0.661	0.766	0.549	0.580	0.625	1.057	5
Goa	0.773	0.812	0.530	0.693	0.801	0.712	0.736	0.749	0.925	8
Manipur	0.621	0.663	0.414	0.554	0.704	0.461	0.517	0.552	1.005	7
Meghalaya	0.577	0.678	0.787	0.675	0.581	0.483	0.807	0.610	1.108	3
Mizoram	0.669	0.729	0.449	0.602	0.711	0.455	0.558	0.565	1.066	4
Nagaland	0.682	0.714	0.118	0.386	0.737	0.549	0.245	0.463	0.835	10
Pondicherry	0.831	0.721	0.833	0.793	0.840	0.536	0.685	0.676	1.174	1
Sikkim	0.641	0.627	0.522	0.594	0.689	0.415	0.632	0.565	1.051	6
Tripura	0.602	0.642	0.233	0.448	0.662	0.551	0.374	0.515	0.870	9
Total	0.502	0.660	0.462	0.535	0.670	0.588	0.618	0.625	0.856	

At the National level, YDI score for male is 0.625 and for female is 0.535. The YGDI is 0.856, indicating 14.4 percent absolute deviation from gender parity showing positive signs concerning gender disparity. Among the Major states, Punjab and Himachal Pradesh top the list of better performers with even female youth outweighing male YDI. Bihar, Jharkhand and Rajasthan score the least, showing the largest gap between male and female YDI. Among the minor states, Pondicherry, Arunachal Pradesh and Meghalaya score the highest, while Nagaland, Tripura and Goa show poor performance. Except for Nagaland, Tripura and Goa with respect to all other minor states, GYDI is greater than one, implying a better YDI for females than males.

YOUTH AND EDUCATION

Education is a fundamental right of every human being as it has the potential for development and social transformation. Education is a right of every individual, according to Article 26 of the 1948 Universal Declaration of Human Rights. Since education acts as a tool for human development, Millennium Development Goals of the United Nations has directed all the countries to take initiatives to educate all regardless of gender or any ethnic background. However, mere access to education is not sufficient and thus all stakeholders have to provide emphasis on quality of education too, as it is estimated by the UN that around 250 million children cannot read, write or count well.

India has persistently made efforts to promote education. It is a constitutional right and also an investment to foster productivity. Being a merit good and considering that investment on education has social returns, India has shown some tremendous improvement in youth literacy. Despite adult literacy rate (15 years and above) in India is 71 percent according to NSSO 71st Round (2014), there is a significant gender disparity across regions, for all age groups. The Youth Education Index represents the current educational status of the youth of India.

Table 2.8 Youth Education Index - 2017

Major States	Indicator Indices			Education Index	Rank
	YEDU_EXP	YLIT_RATE	YEDU_LEVEL		
Andhra Pradesh	0.401	0.669	0.550	0.560	11
Assam	0.497	0.616	0.454	0.527	13
Bihar	0.408	0.399	0.279	0.353	20
Chhattisgarh	0.308	0.707	0.576	0.575	7
Gujarat	0.123	0.759	0.542	0.545	12
Haryana	0.142	0.774	0.571	0.566	9
Himachal Pradesh	0.463	0.912	0.647	0.716	2
Jammu & Kashmir	0.486	0.621	0.547	0.565	10
Jharkhand	0.256	0.540	0.322	0.396	19
Karnataka	0.217	0.776	0.545	0.572	8
Kerala	0.259	0.978	0.731	0.735	1
Madhya Pradesh	0.284	0.624	0.411	0.470	16

Maharashtra	0.199	0.855	0.606	0.625	4
Odisha	0.268	0.694	0.469	0.519	15
Punjab	0.136	0.771	0.661	0.600	6
Rajasthan	0.231	0.583	0.398	0.439	18
Tamil Nadu	0.165	0.887	0.658	0.651	3
Uttar Pradesh	0.358	0.583	0.402	0.465	17
Uttarakhand	0.326	0.810	0.580	0.621	5
West Bengal	0.258	0.715	0.460	0.521	14
Minor States					
Arunachal Pradesh	0.574	0.575	0.450	0.525	10
Delhi	0.069	0.846	0.634	0.606	7
Goa	0.156	0.912	0.664	0.661	4
Manipur	0.631	0.746	0.580	0.657	5
Meghalaya	0.635	0.670	0.489	0.590	9
Mizoram	1.000	0.869	0.512	0.752	1
Nagaland	0.498	0.760	0.660	0.667	3
Pondicherry	0.281	0.932	0.739	0.724	2
Sikkim	0.577	0.866	0.466	0.648	6
Tripura	0.451	0.876	0.388	0.596	8
Total	0.210	0.687	0.492	0.513	

Note: YEDU_EXP - Education expenditure as % of GSDP; YLIT_RATE - Youth Literacy Rate; YEDU_LEVEL – Education Level

Youth Education Index (YEI) is a composite index of indicators like Education Expenditure as a percent of GSDP (with 20 percent weight), Youth Literacy Rate (with 40 percent weight) and Education Level (with 40 percent weight). It provides an estimate pertaining to the performance of youth education in the country. The YEI at the national level scores 0.513. For better evaluation of the performance at the state level. Among the major states, Kerala, Himachal Pradesh and Tamil Nadu stand out as top performers respectively, with Bihar, Jharkhand and Rajasthan occupying the least ranks due to their poor performance. All BIMARU states fare poorly in YEI. An interesting observation is that Chhattisgarh relatively performs better by pushing down Karnataka and Haryana in YEI. Among the minor states, Mizoram tops the list, with Pondicherry in the second place, whereas Arunachal Pradesh and Meghalaya occupy the bottom positions.

Map 2.4 Youth Education Index across Indian States - 2017

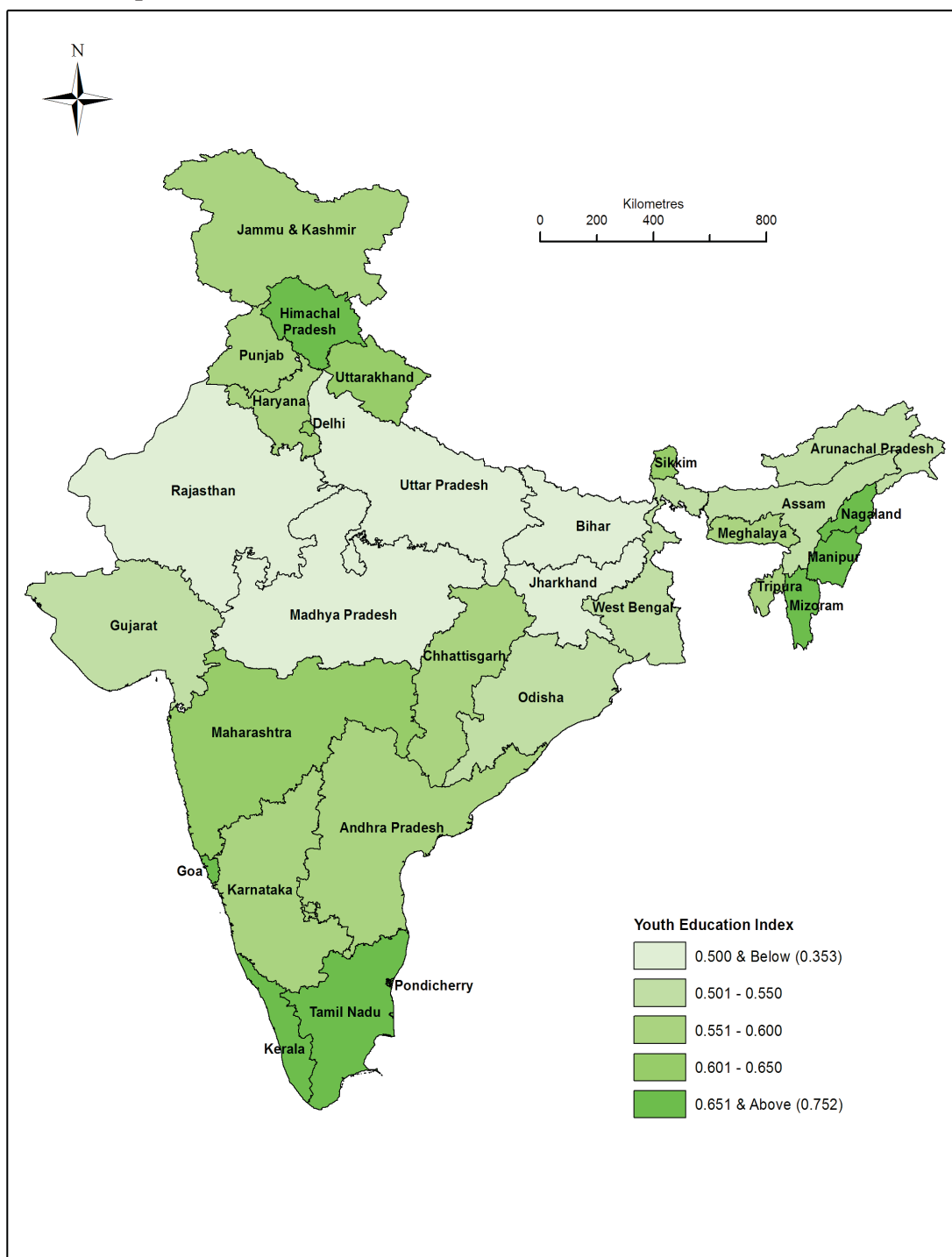


Figure 2.11 Comparison between Education Expenditure, Youth Literacy Rate and Education Level - 2017

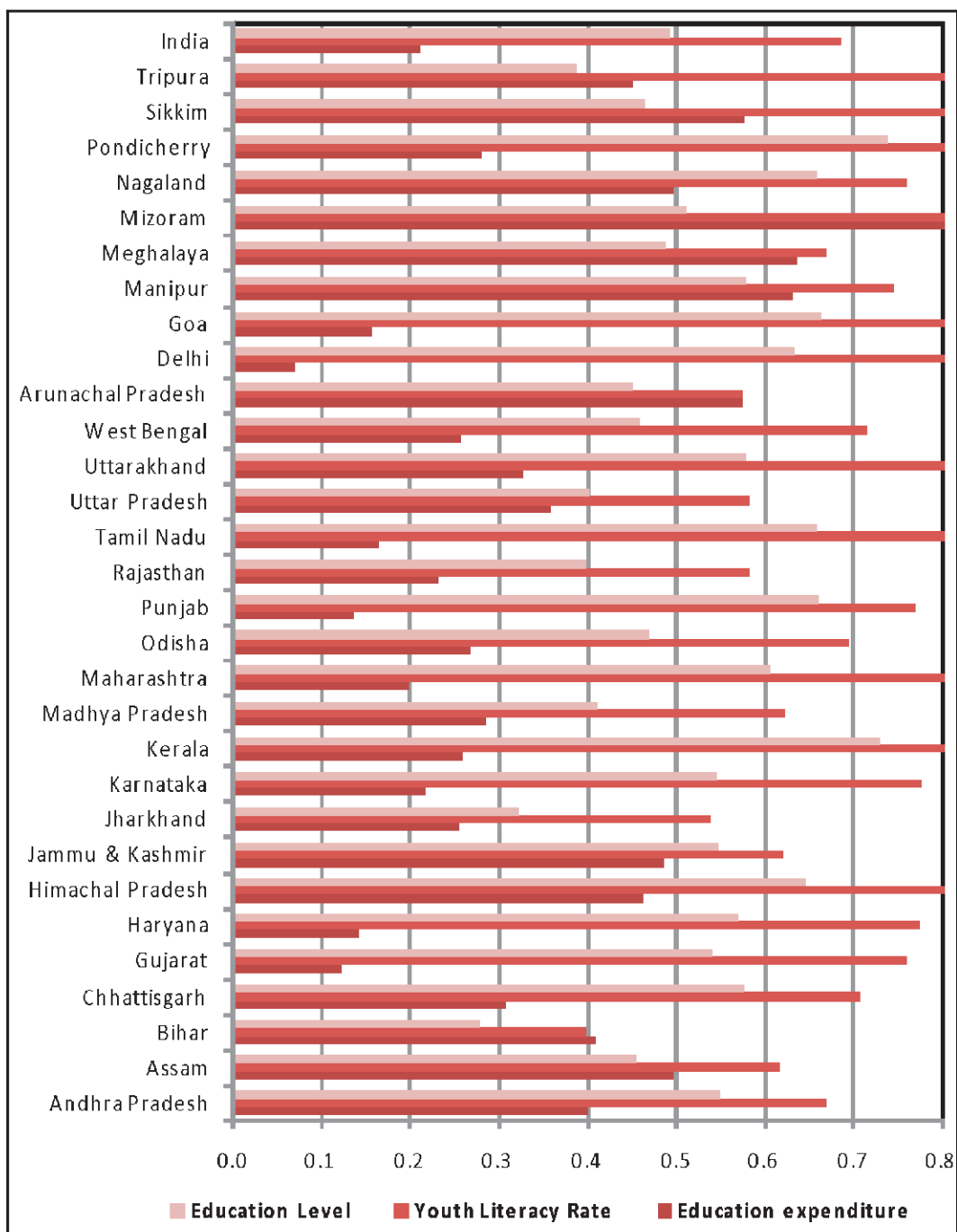
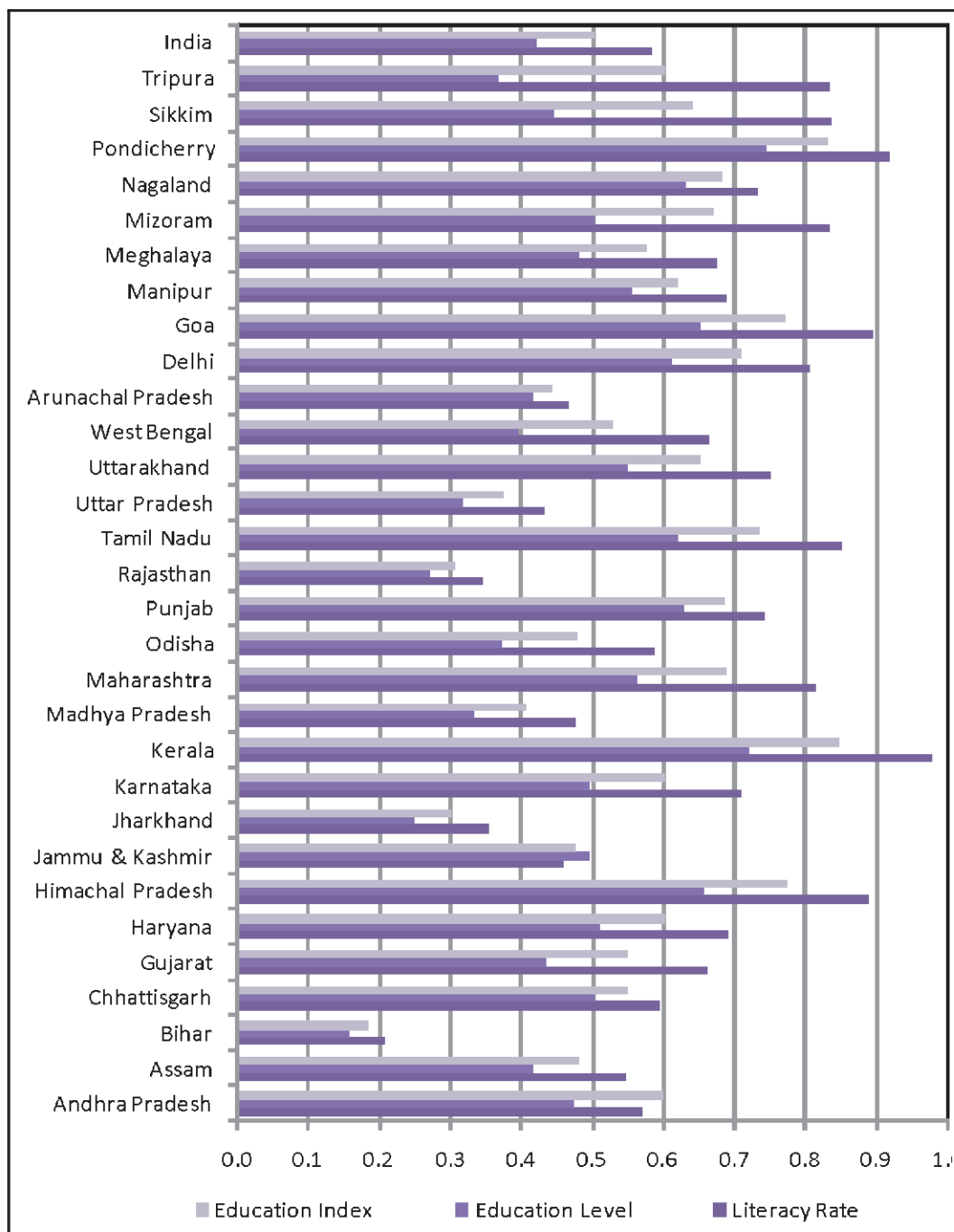


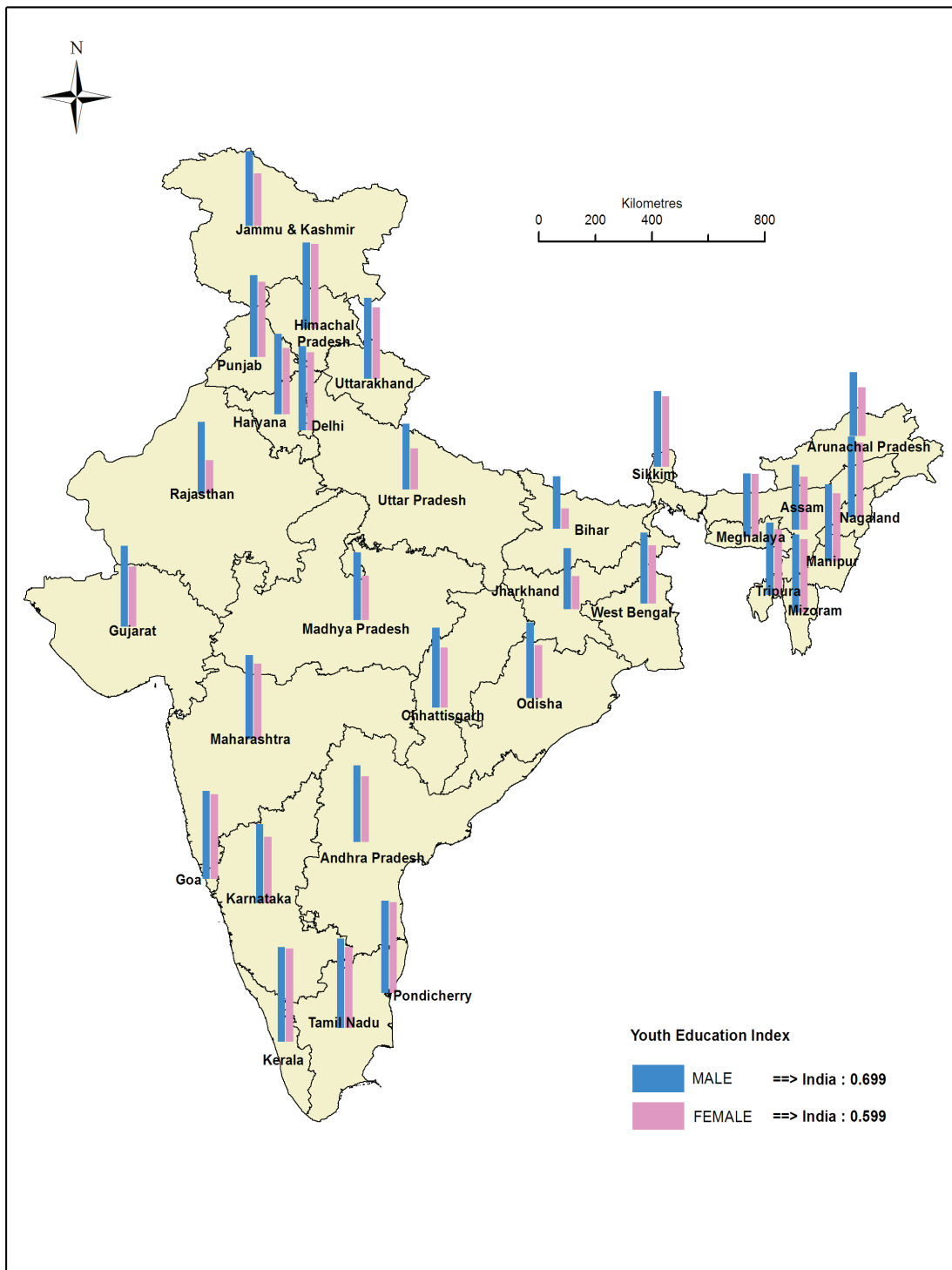
Table 2.9 Youth Education Gender Development Index - 2017

Major States	FEMALE			MALE			EDUCATION GDI	100* (1-EDU GDI)
	YLIT- RATE	YEDU- LEVEL	EDUCATION INDEX	YLIT- RATE	YEDU- LEVEL	EDUCATION INDEX		
Andhra Pradesh	0.5698	0.4751	0.599	0.7682	0.6290	0.699	0.858	14.20
Assam	0.5473	0.4158	0.482	0.6848	0.4936	0.589	0.817	18.28
Bihar	0.2090	0.1588	0.184	0.5692	0.3837	0.476	0.386	61.41
Chhattisgarh	0.5949	0.5030	0.549	0.8167	0.6472	0.732	0.750	25.00
Gujarat	0.6613	0.4359	0.549	0.8462	0.6273	0.737	0.745	25.54
Haryana	0.6909	0.5107	0.601	0.8455	0.6194	0.732	0.820	17.97
Himachal Pradesh	0.8903	0.6574	0.774	0.9339	0.6357	0.785	0.986	1.39
Jammu & Kashmir	0.4577	0.4946	0.476	0.7693	0.5931	0.681	0.699	30.10
Jharkhand	0.3536	0.2493	0.301	0.7140	0.3970	0.556	0.543	45.74
Karnataka	0.7093	0.4939	0.602	0.8397	0.5919	0.716	0.840	15.95
Kerala	0.9779	0.7186	0.848	0.9788	0.7451	0.862	0.984	1.59
Madhya Pradesh	0.4777	0.3341	0.406	0.7544	0.4779	0.616	0.659	34.12
Maharashtra	0.8147	0.5625	0.689	0.8919	0.6429	0.767	0.897	10.27
Odisha	0.5873	0.3725	0.480	0.8016	0.5736	0.688	0.698	30.21
Punjab	0.7420	0.6292	0.686	0.7964	0.6901	0.743	0.922	7.76
Rajasthan	0.3454	0.2715	0.308	0.7982	0.5142	0.656	0.470	52.99
Tamil Nadu	0.8510	0.6207	0.736	0.9242	0.6981	0.811	0.907	9.28
Uttar Pradesh	0.4335	0.3162	0.375	0.7156	0.4819	0.599	0.626	37.40
Uttarakhand	0.7510	0.5511	0.651	0.8684	0.6087	0.739	0.882	11.84
West Bengal	0.6646	0.3947	0.530	0.7633	0.5254	0.644	0.822	17.80
Minor States								
Arunachal Pradesh	0.4674	0.4171	0.442	0.6804	0.4840	0.582	0.760	24.04
Delhi	0.8053	0.6125	0.709	0.8801	0.6519	0.766	0.925	7.46
Goa	0.8950	0.6508	0.773	0.9272	0.6751	0.801	0.965	3.52
Manipur	0.6876	0.5546	0.621	0.8054	0.6023	0.704	0.882	11.76
Meghalaya	0.6740	0.4808	0.577	0.6651	0.4970	0.581	0.994	0.63
Mizoram	0.8342	0.5039	0.669	0.9030	0.5197	0.711	0.941	5.94
Nagaland	0.7330	0.6319	0.682	0.7855	0.6889	0.737	0.926	7.43
Pondicherry	0.9171	0.7453	0.831	0.9475	0.7325	0.840	0.990	1.04
Sikkim	0.8370	0.4448	0.641	0.8932	0.4857	0.689	0.930	7.05
Tripura	0.8351	0.3683	0.602	0.9166	0.4072	0.662	0.909	9.10
Total	0.5831	0.4212	0.502	0.7833	0.5575	0.670	0.749	25.10

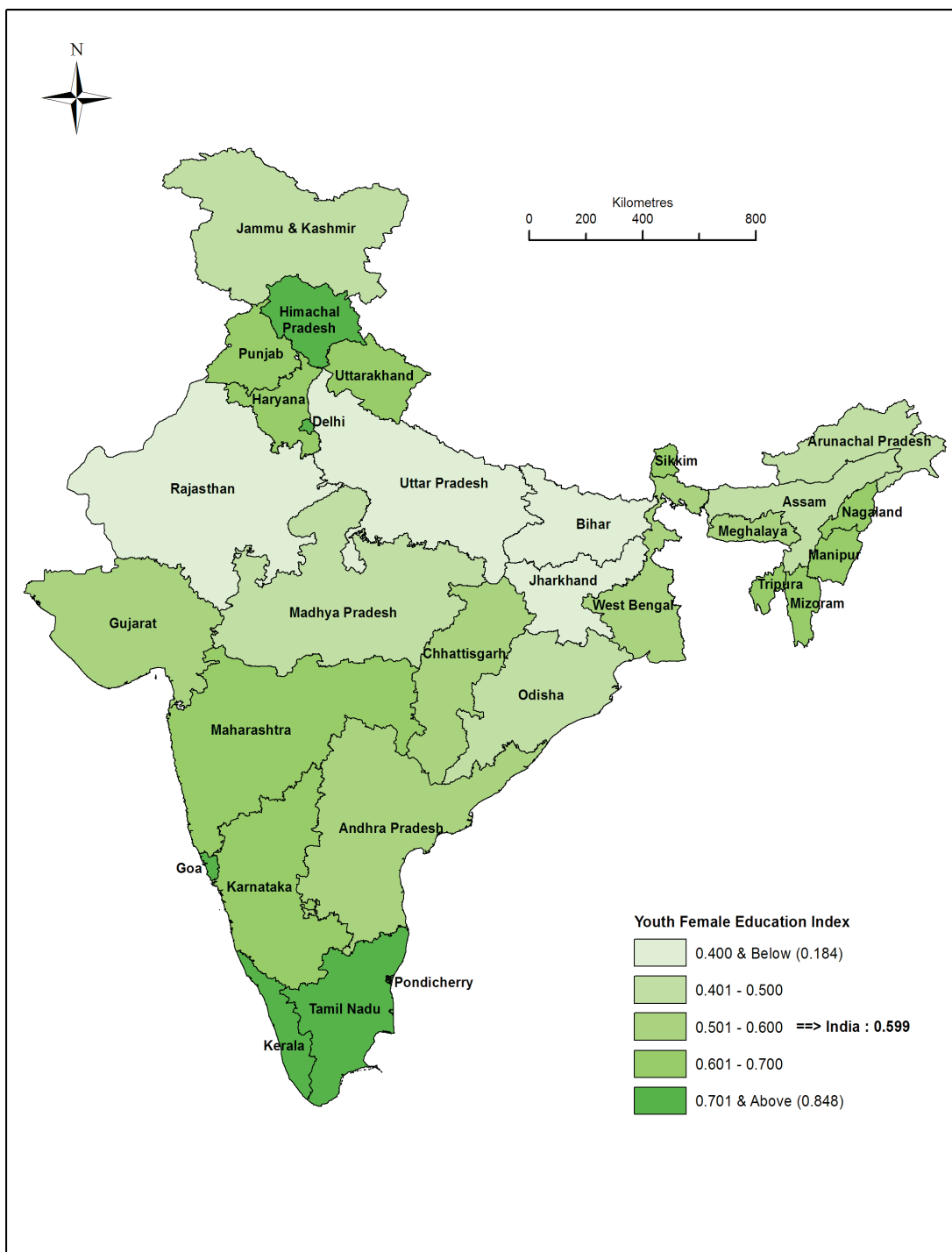
Figure 2.12 Comparison between Female Education Expenditure, Youth Literacy Rate and Education Level - 2017



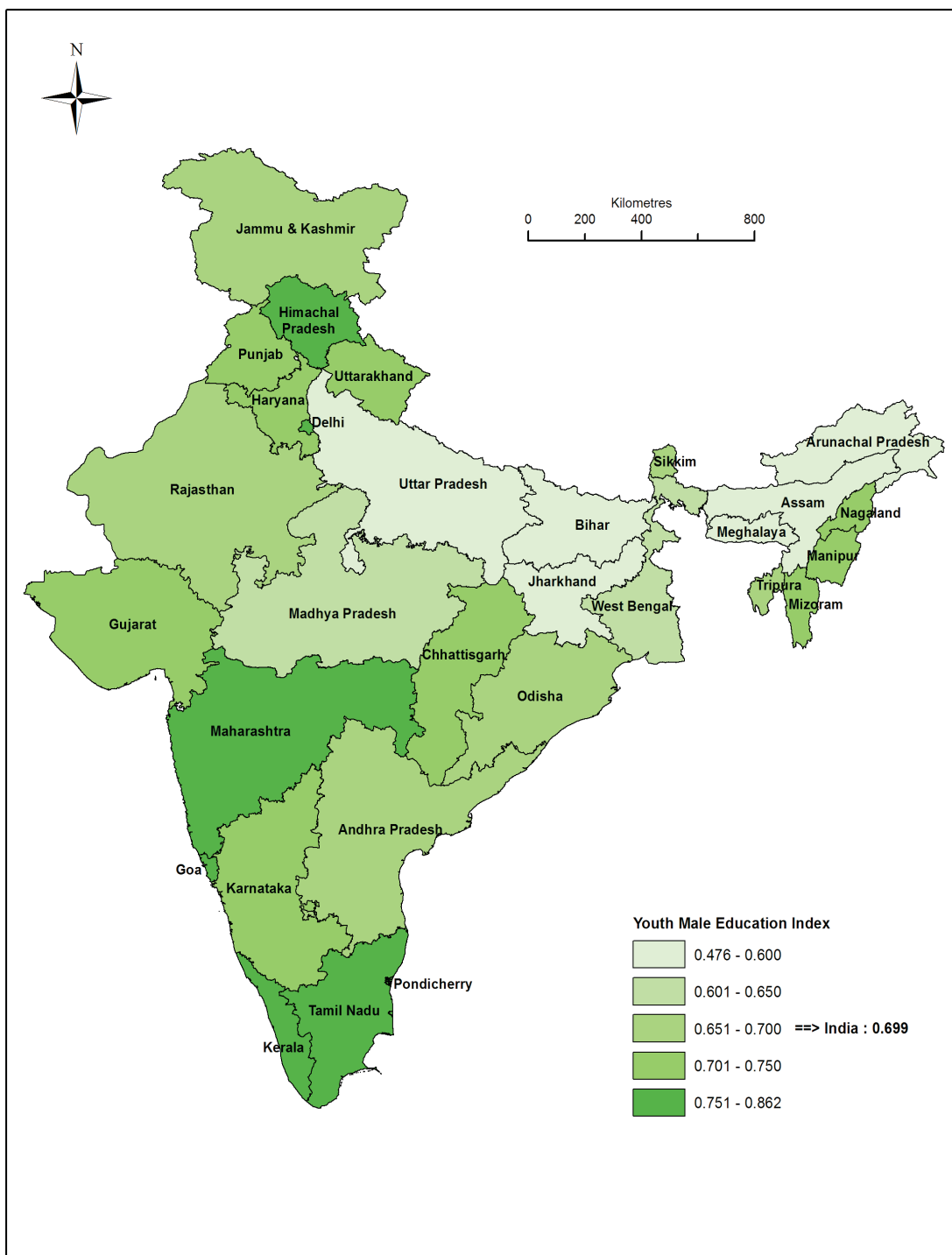
**Map 2.5 Youth Education Index (Male and Female)
across Indian States - 2017**



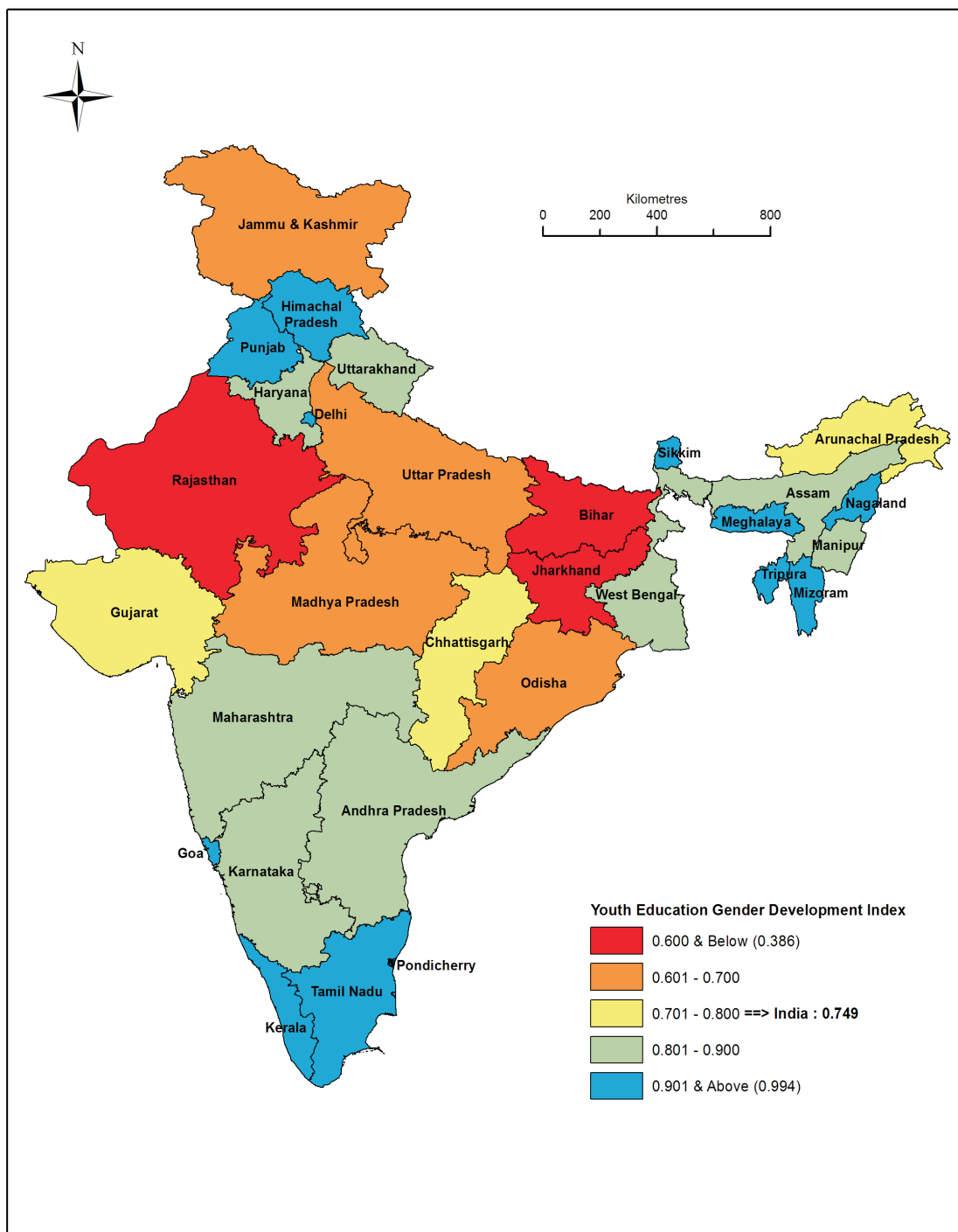
Map 2.6 Youth Female Education Index across Indian States - 2017



Map 2.7 Youth Male Education Index across Indian States - 2017



**Map 2.8 Youth Education Gender Development Index
across Indian States - 2017**



Gender discrimination has been a significant feature of social structure in India. To highlight this, the YEI Gender Development Index has been constructed to provide a picture about the extent of inequality between sexes. For the construction of Education Gender Development Index, only two indicators are considered i.e., literacy rate and education level with equal weights, since sex-wise education expenditure information is not available. The above table shows that YEI for females stands at 0.502 and 0.670 for males implying gender inequality concerning education. Absolute deviation from gender parity is 25.1 at the national level. Among the major states, Himachal Pradesh and Kerala had less than 2.5 implying high equality. Among the minor states, Meghalaya and Pondicherry belong to this category. Overall, only four Major states and eight minor states have an absolute deviation from gender parity being less than 10 percent. Bihar is the poorest performer with the glaring difference between male and female in YEI followed by Rajasthan and Jharkhand. Among the minor states, Arunachal Pradesh scores the least in education GDI.

YOUTH AND HEALTH

Young population is an asset to the country provided they are healthy. Adequate investment in health and education can only assure the human resources of the country become the human capital for the country by being more productive and contributing to country's progress. National Youth Policy 2014 aims to strengthen the healthcare services in all dimensions, covering important aspects such as preventive diseases, promoting medical pluralism, building a knowledge base for better health, financial protection strategies and regulation etc. However, youth specific issues were not given attention by the policy makers. Nevertheless, National Youth Policy - 2014 stressed that there is a need for the special attention to be given to maternal health issues of young women, to create awareness among the youth about ill-effects of drug/substance abuse and targeting the disease control programmes with respect to HIV/AIDS and TB, where youth are at more risk.

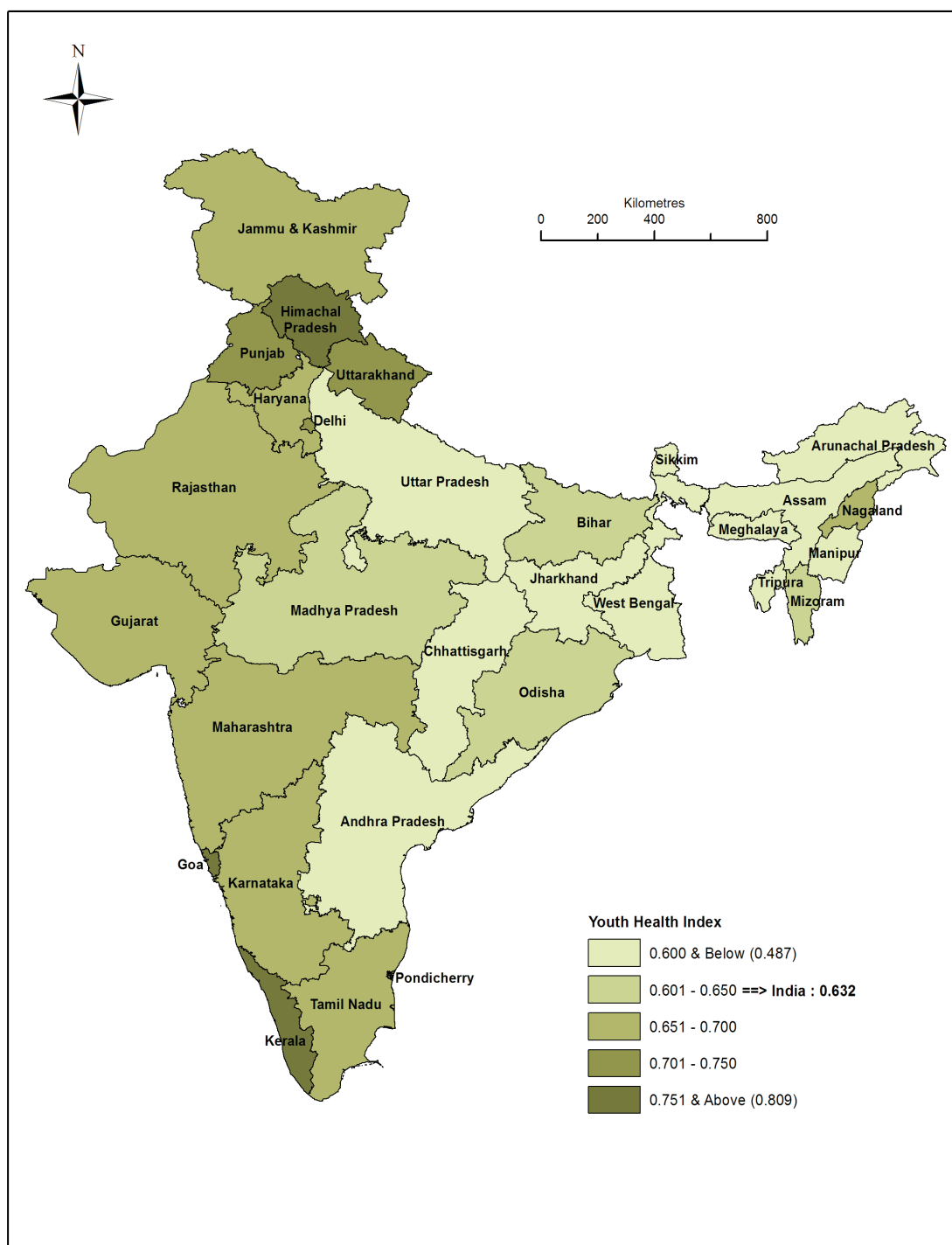
Table 2.10 Youth Health Index - 2017

Major States	YAFR	YMR	YTOB	YALC	YBMI	YMOR	Youth Health Index	Rank
Andhra Pradesh	0.540	0.782	0.821	0.608	0.440	0.744	0.596	16
Assam	0.446	0.638	0.455	0.533	0.609	0.480	0.533	19
Bihar	0.619	0.574	0.758	0.784	0.534	0.548	0.609	14
Chhattisgarh	0.527	0.343	0.565	0.577	0.715	0.584	0.548	18
Gujarat	0.749	0.619	0.799	0.873	0.403	0.747	0.671	8

Haryana	0.836	0.680	0.847	0.764	0.510	0.443	0.655	11
Himachal Pradesh	0.900	0.618	0.858	0.713	0.605	0.980	0.778	1
Jammu & Kashmir	0.991	0.665	0.847	0.764	0.510	0.443	0.683	6
Jharkhand	0.554	0.511	0.747	0.669	0.439	0.766	0.596	17
Karnataka	0.581	0.755	0.779	0.840	0.366	0.866	0.676	7
Kerala	0.793	0.901	0.885	0.727	0.506	0.792	0.759	2
Madhya Pradesh	0.627	0.598	0.708	0.848	0.503	0.685	0.638	12
Maharashtra	0.680	0.675	0.799	0.873	0.403	0.747	0.668	9
Odisha	0.663	0.720	0.596	0.709	0.396	0.661	0.619	13
Punjab	0.926	0.584	0.904	0.595	0.504	0.830	0.719	4
Rajasthan	0.624	0.595	0.859	0.936	0.353	0.867	0.667	10
Tamil Nadu	0.804	0.527	0.899	0.784	0.356	0.958	0.697	5
Uttar Pradesh	0.713	0.499	0.753	0.896	0.364	0.584	0.597	15
Uttarakhand	0.927	0.548	0.913	0.876	0.502	0.806	0.736	3
West Bengal	0.315	0.654	0.613	0.671	0.462	0.443	0.503	20
Minor States								
Arunachal Pradesh	0.614	0.339	0.496	0.000	0.820	0.415	0.487	10
Delhi	0.942	0.590	0.904	0.595	0.504	0.830	0.723	2
Goa	0.980	0.752	0.952	0.806	0.444	0.992	0.809	1
Manipur	0.919	0.732	0.140	0.295	0.795	0.282	0.589	7
Meghalaya	0.520	0.469	0.095	0.526	0.756	0.898	0.591	6
Mizoram	0.808	0.604	0.000	0.324	0.726	0.810	0.622	5
Nagaland	0.949	0.627	0.161	0.165	0.784	0.824	0.669	4
Pondicherry	0.829	0.492	0.939	0.844	0.357	0.932	0.700	3
Sikkim	0.707	0.414	0.629	0.079	0.629	0.749	0.571	9
Tripura	0.534	0.646	0.219	0.547	0.622	0.709	0.579	8
Total	0.651	0.617	0.758	0.778	0.439	0.686	0.632	

Note: YAFR - Youth Adolescent Fertility Rate; YMR - Youth Mortality Rates; YTOB - Youth Index of Tobacco Consumption; YALC - Youth Index of Alcohol consumption; YBMI - Youth index of BMI (i.e., Youth with Normal BMI); YMOR - Youth Index of Morbidity rate.

Map 2.9 Youth Health Index across Indian States - 2017



Youth Health Index is a composite index of Teenage Pregnancy Rate (with 20 percent weight), Youth Mortality Rate (20 percent weight), Youth Morbidity Rate (20 percent weight), Physical Fitness of Youth (20 percent weight), Alcohol abuse Rate by youth (10 percent weight) and Tobacco Abuse Rate by Youth (10 percent weight). Except for physical fitness of youth, which is measured as a percentage of youth with normal BMI, all other indicators are negative indicators i.e., lower the number better the performance and thus converted into their positive form, thereby leading to a development index. The table above ranks the states on the basis of the current status of youth health through YHI. At the national level, YHI score is 0.632 with Himachal Pradesh, Kerala and Uttarakhand being the top three performers, while West Bengal, Assam and Chhattisgarh occupying the last positions among the major states. Among the Minor states, Goa, Delhi and Pondicherry are in the top position, with Arunachal Pradesh, Sikkim and Tripura in the bottom of the ladder.

Table 2.11 Youth Health Index for Female - 2017

Major States	YMR-F	YTOB-F	YALC-F	YBMI-F	YMOR-F	Female Youth Health Index
Andhra Pradesh	0.827	0.940	0.935	0.392	0.723	0.741
Assam	0.721	0.658	0.732	0.593	0.419	0.630
Bihar	0.543	0.969	0.980	0.553	0.496	0.622
Chhattisgarh	0.347	0.697	0.820	0.686	0.576	0.543
Gujarat	0.604	0.948	0.986	0.358	0.727	0.652
Haryana	0.611	0.987	0.986	0.453	0.402	0.613
Himachal Pradesh	0.720	0.982	0.965	0.588	0.978	0.796
Jammu & Kashmir	0.677	0.987	0.986	0.453	0.402	0.639
Jharkhand	0.485	0.917	0.856	0.426	0.738	0.604
Karnataka	0.663	0.922	0.981	0.328	0.850	0.691
Kerala	1.000	0.985	0.982	0.488	0.797	0.854
Madhya Pradesh	0.658	0.911	0.968	0.515	0.661	0.686
Maharashtra	0.644	0.948	0.986	0.358	0.727	0.668
Odisha	0.943	0.755	0.900	0.391	0.629	0.747

Punjab	0.698	0.991	0.978	0.457	0.808	0.729
Rajasthan	0.576	0.959	0.988	0.349	0.847	0.664
Tamil Nadu	0.644	0.980	0.987	0.327	0.955	0.711
Uttar Pradesh	0.495	0.946	0.988	0.399	0.532	0.578
Uttarakhand	0.669	0.990	0.988	0.491	0.766	0.717
West Bengal	0.669	0.858	0.940	0.420	0.432	0.618
Minor States						
Arunachal Pradesh	0.584	0.797	0.000	0.812	0.348	0.545
Delhi	0.783	0.991	0.978	0.457	0.808	0.763
Goa	0.861	0.975	0.928	0.409	0.977	0.812
Manipur	0.872	0.349	0.756	0.793	0.224	0.663
Meghalaya	0.590	0.297	0.918	0.717	0.884	0.678
Mizoram	0.814	0.072	0.930	0.701	0.813	0.729
Nagaland	0.695	0.423	0.754	0.777	0.815	0.714
Pondicherry	0.669	0.988	0.986	0.344	0.938	0.721
Sikkim	0.589	0.861	0.407	0.620	0.705	0.627
Tripura	0.681	0.291	0.855	0.583	0.693	0.642
Total	0.640	0.916	0.956	0.424	0.659	0.660

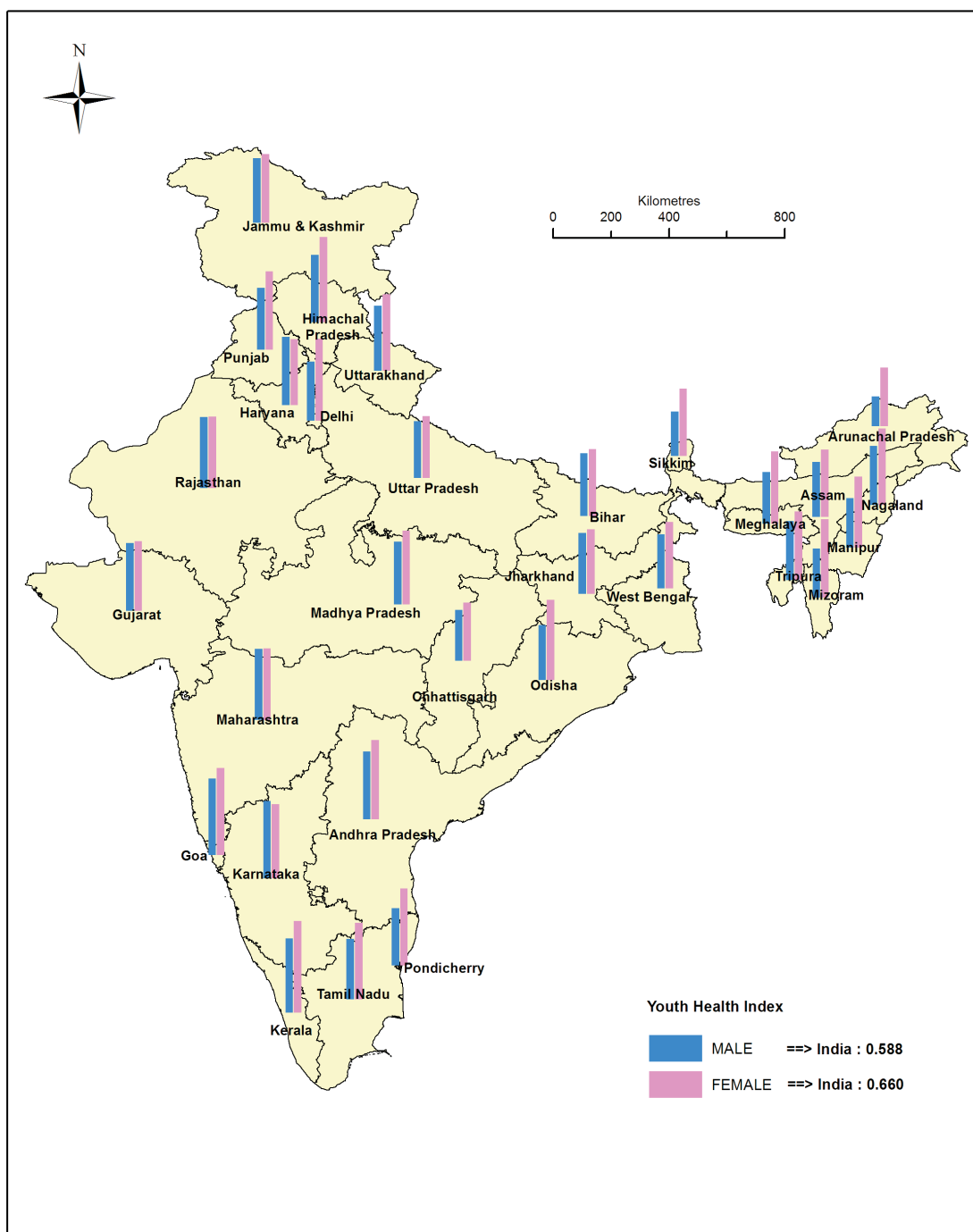
Table 2.12 Youth Health Index for Male and Health Gender Development Index - 2017

Major States	YMR-M	YTOB-M	YALC-M	YBMI-M	YMOR-M	Male Youth Health Index	Health GDI	Rank
Andhra Pradesh	0.732	0.677	0.213	0.497	0.766	0.635	1.168	10
Assam	0.551	0.246	0.333	0.627	0.548	0.513	1.228	7
Bihar	0.612	0.548	0.589	0.514	0.601	0.582	1.069	13
Chhattisgarh	0.325	0.438	0.345	0.744	0.597	0.477	1.140	11
Gujarat	0.633	0.618	0.734	0.457	0.766	0.633	1.030	16
Haryana	0.743	0.712	0.548	0.568	0.483	0.633	0.967	19
Himachal Pradesh	0.507	0.683	0.359	0.630	0.982	0.629	1.264	4
Jammu & Kashmir	0.656	0.712	0.548	0.568	0.483	0.599	1.068	14
Jharkhand	0.532	0.586	0.489	0.457	0.790	0.570	1.060	15
Karnataka	0.842	0.587	0.652	0.415	0.883	0.720	0.960	20
Kerala	0.793	0.742	0.364	0.531	0.787	0.692	1.234	5

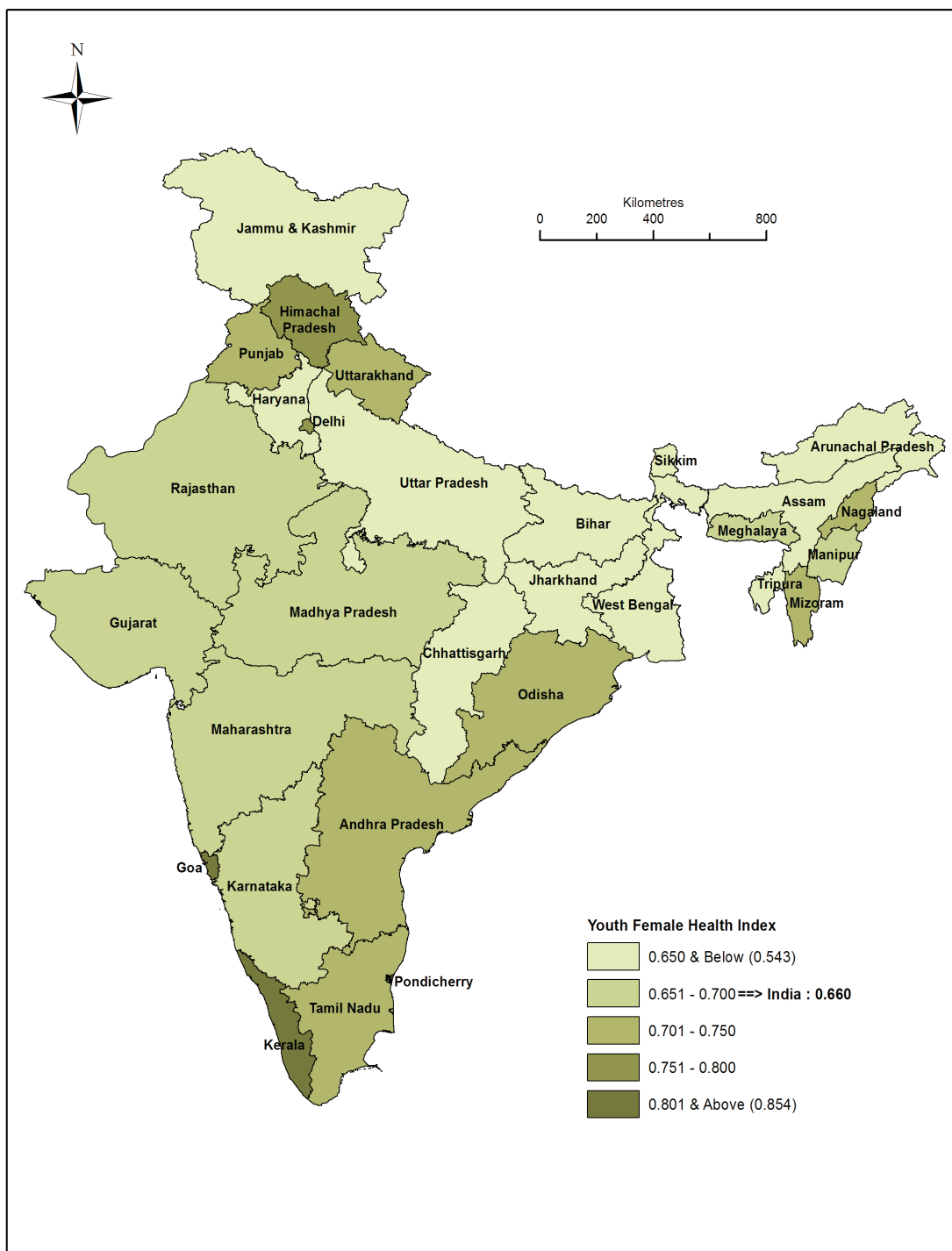
Madhya Pradesh	0.541	0.532	0.744	0.492	0.710	0.584	1.175	9
Maharashtra	0.703	0.618	0.734	0.457	0.766	0.661	1.010	17
Odisha	0.496	0.438	0.501	0.404	0.693	0.512	1.458	1
Punjab	0.486	0.812	0.196	0.551	0.850	0.575	1.267	2
Rajasthan	0.623	0.768	0.888	0.356	0.883	0.663	1.002	18
Tamil Nadu	0.398	0.794	0.520	0.391	0.961	0.561	1.267	3
Uttar Pradesh	0.499	0.575	0.812	0.326	0.641	0.532	1.086	12
Uttarakhand	0.442	0.826	0.752	0.516	0.855	0.609	1.178	8
West Bengal	0.642	0.235	0.256	0.524	0.459	0.502	1.229	6
Minor States								
Arunachal Pradesh	0.000	0.113	0.000	0.831	0.493	0.276	1.975	1
Delhi	0.421	0.812	0.196	0.551	0.850	0.549	1.389	6
Goa	0.641	0.925	0.659	0.484	1.000	0.712	1.141	10
Manipur	0.581	0.000	0.000	0.798	0.347	0.461	1.437	4
Meghalaya	0.343	0.000	0.000	0.814	0.915	0.483	1.404	5
Mizoram	0.358	0.000	0.000	0.752	0.807	0.455	1.601	2
Nagaland	0.561	0.000	0.000	0.791	0.832	0.549	1.300	8
Pondicherry	0.306	0.876	0.664	0.373	0.924	0.536	1.346	7
Sikkim	0.233	0.320	0.000	0.641	0.805	0.415	1.513	3
Tripura	0.607	0.130	0.171	0.666	0.726	0.551	1.165	9
Total	0.595	0.581	0.574	0.458	0.715	0.588	1.122	

Gender-wise health youth development index is based on only five indicators viz., Youth Mortality Rate (40 percent weight), Youth Morbidity Rate (20 percent weight), Physical Fitness of Youth (20 percent weight), Alcohol abuse Rate by youth (10 percent weight) and Tobacco Abuse Rate by youth (10 percent weight). Excepting for Haryana and Karnataka, the performance of all the other states with regard to female health is better than that of male, thereby showing GDI being more than one. The Health GDI highlights an interesting observation with respect to Odisha, though its performance was average with respect to both males and females, it has taken the first position in Health GDI. Punjab and Tamil Nadu, which had better performance also had high Gender Youth Development Index with gender being biased towards females. Females have an advantage over males with respect to the performance of mortality rate, Tobacco abuse and Alcohol abuse. Among the minor states, though the performance of Arunachal Pradesh was least, female health YDI is almost double that of males.

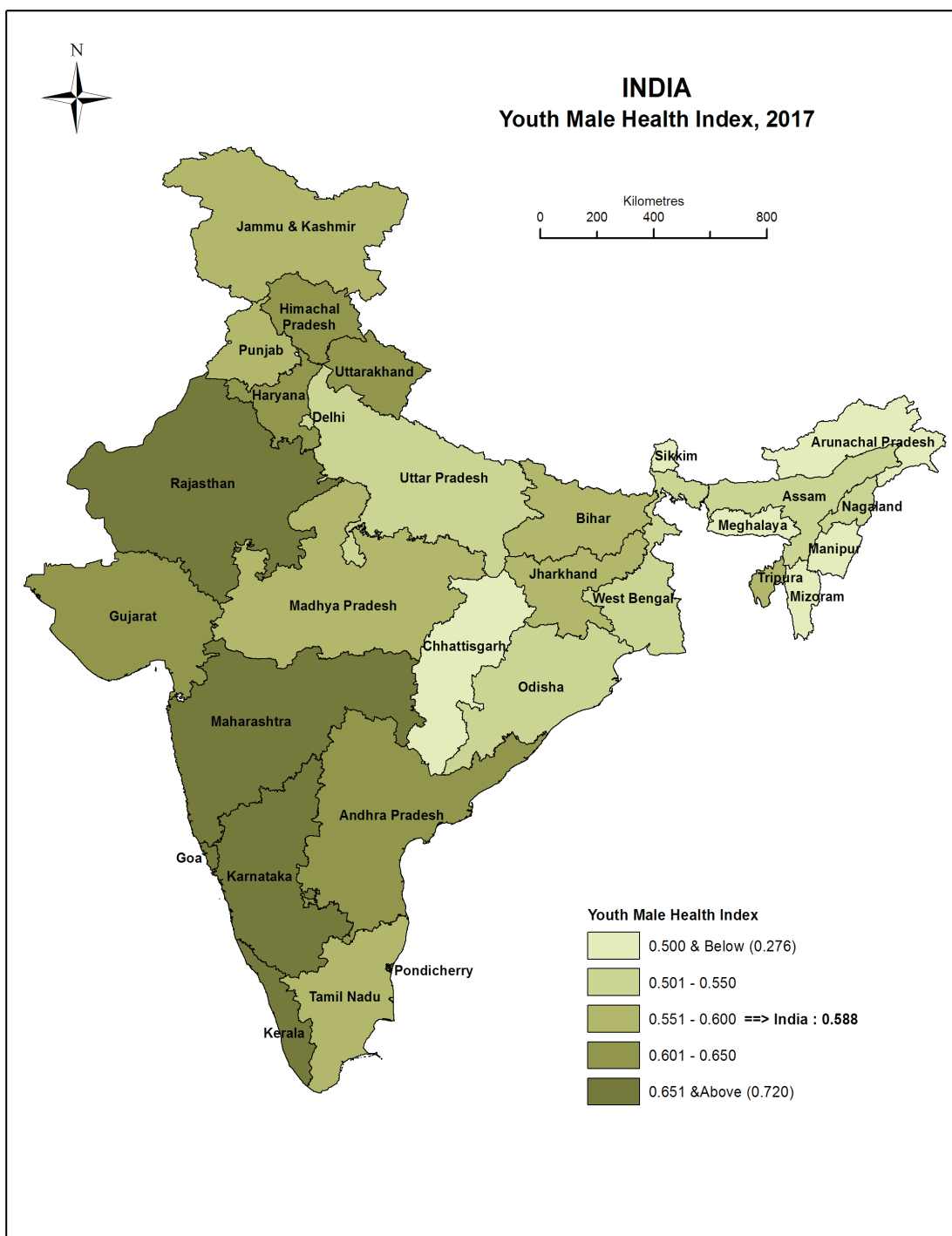
**Map 2.10 Youth Health Index (Male and Female)
across Indian States - 2017**



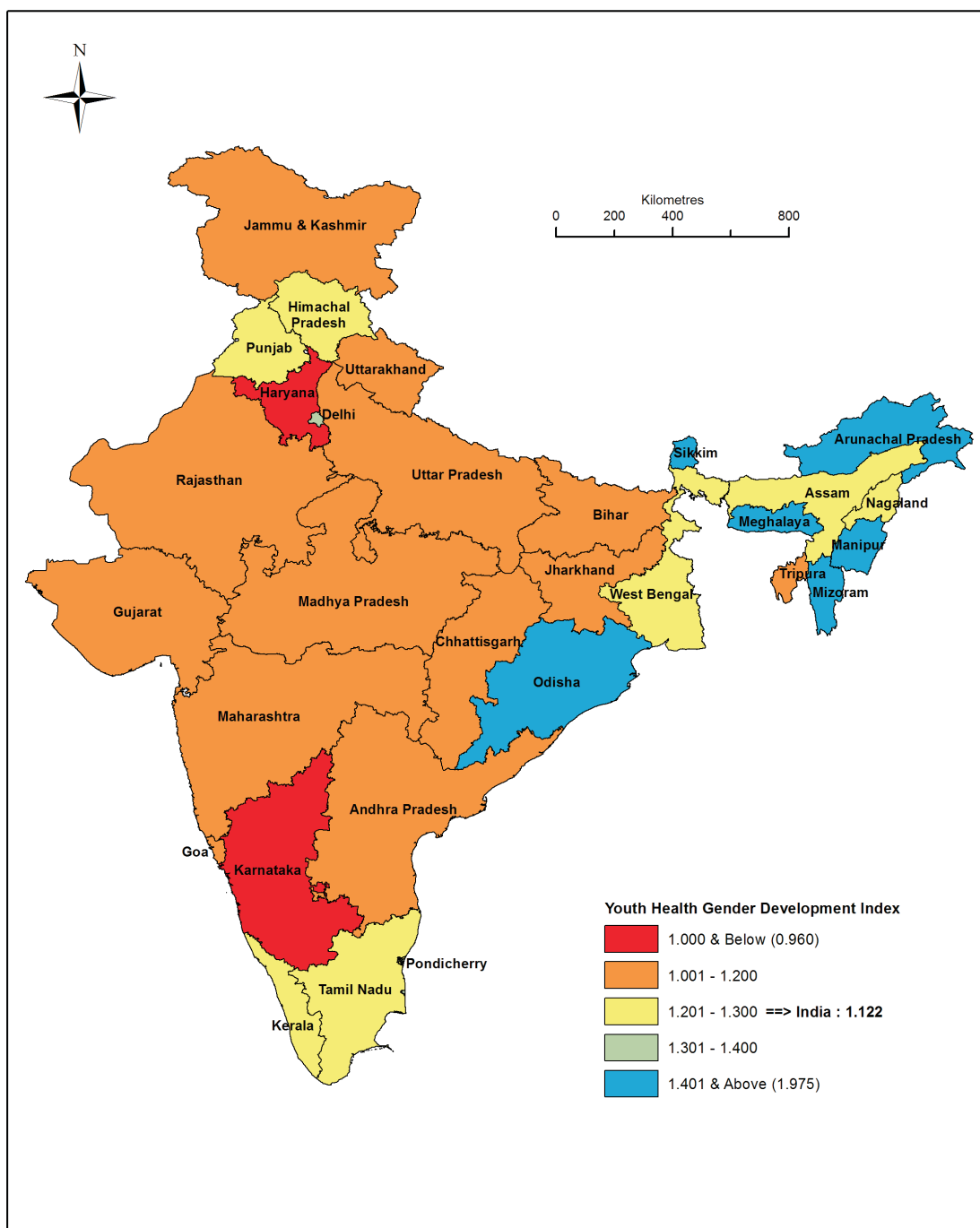
Map 2.11 Youth Female Health Index across Indian States - 2017



Map 2.12 Youth Male Health Index across Indian States - 2017



**Map 2.13 Youth Health Gender Development Index
across Indian States - 2017**



YOUTH AND WORK

Work is a wider term that means not just job or something that ensures economic security. Work is a social role that acts as an instrument for an individual to be considered as a key agent for development. India's demographic profile, which largely signals at the overwhelming proportion of young people in the total population, has the ability to reach heights in the world economy, if there is an adequate creation of employment opportunities that use their capabilities in value creation.

Youth Work Index (YWI) is a composite index of Percentage of Youth not in School/Work (with 40 percent weight), share of youth unemployment to total unemployment (with 20 percent weight), Labor Force Participation Rate (with 20 percent weight) and Employment level (20 percent weight). YWI tries to reflect upon the quantity and quality of employment among youth. The YWI at the national level stands with the score of 0.572. Gujarat, Maharashtra and Karnataka are the top performers among the major states and Assam, Kerala and Bihar being the poor performers with respect to work among the youth. Kerala's presence among the worst performers is an interesting addition to the debate on Kerala's model of development. Youth unemployment problem is the major contributor to the lower performance of Kerala. Among the minor states Meghalaya, Pondicherry and Goa perform better, while Nagaland, Tripura and Manipur being the worst performers.

Table 2.13 Youth Work Index - 2017

Major States	YUR	YUTT	YEL	YLF	Youth Work Index	Rank
Andhra Pradesh	0.784	0.248	0.498	0.594	0.582	9
Assam	0.423	0.152	0.391	0.470	0.372	20
Bihar	0.629	0.320	0.318	0.392	0.458	18
Chhattisgarh	0.857	0.329	0.376	0.636	0.611	6
Gujarat	0.966	0.174	0.611	0.629	0.669	1
Haryana	0.699	0.139	0.584	0.465	0.517	14
Himachal Pradesh	0.860	0.312	0.462	0.600	0.619	5
Jammu & Kashmir	0.643	0.240	0.464	0.526	0.503	16
Jharkhand	0.715	0.223	0.350	0.500	0.501	17

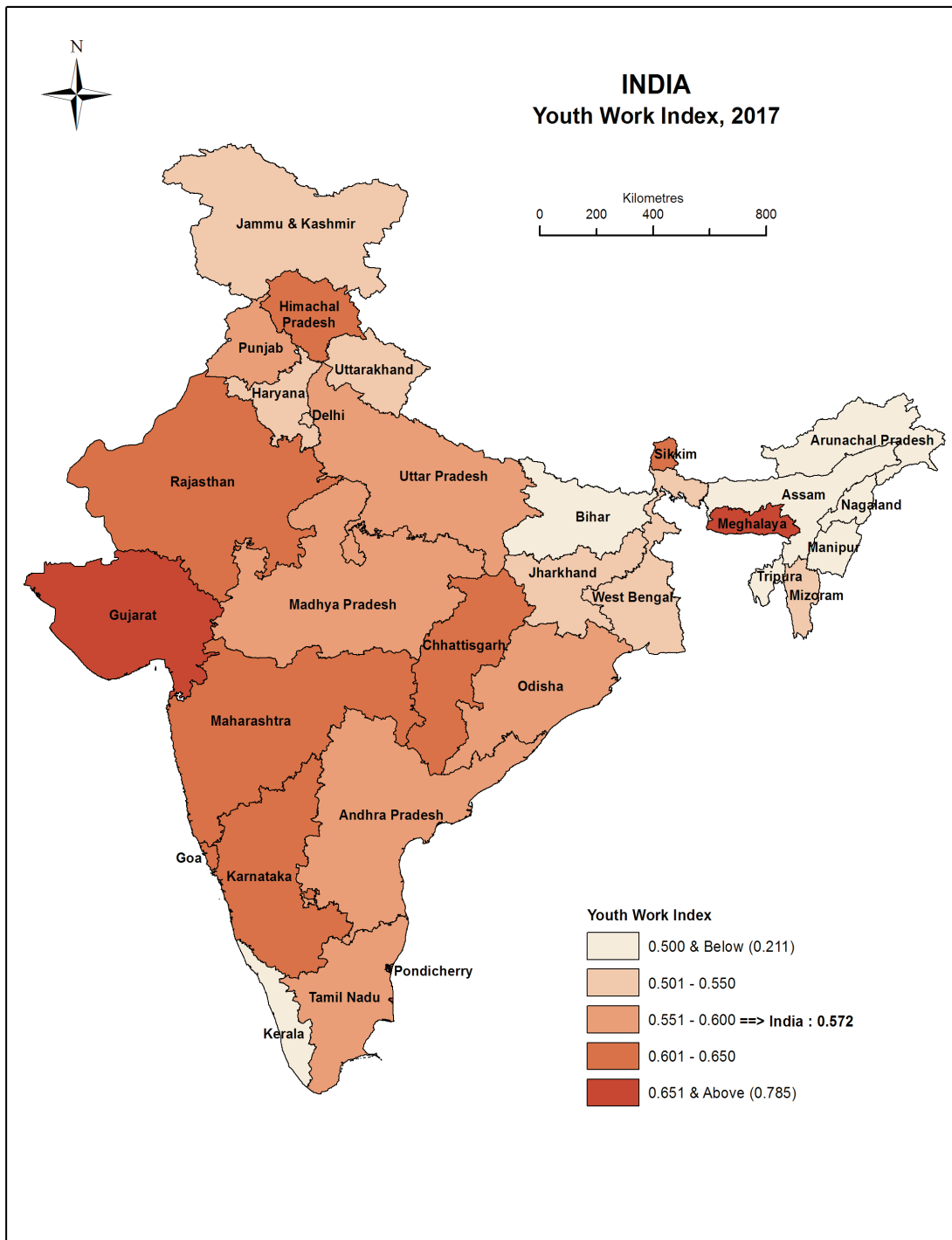
Karnataka	0.846	0.337	0.574	0.541	0.629	3
Kerala	0.202	0.529	0.583	0.502	0.403	19
Madhya Pradesh	0.918	0.200	0.376	0.554	0.593	8
Maharashtra	0.871	0.247	0.602	0.561	0.630	2
Odisha	0.763	0.372	0.384	0.609	0.578	10
Punjab	0.791	0.243	0.601	0.552	0.595	7
Rajasthan	0.905	0.316	0.419	0.568	0.622	4
Tamil Nadu	0.710	0.234	0.646	0.556	0.571	11
Uttar Pradesh	0.849	0.217	0.391	0.502	0.562	12
Uttarakhand	0.616	0.367	0.504	0.457	0.512	15
West Bengal	0.670	0.312	0.438	0.572	0.532	13
Minor States						
Arunachal Pradesh	0.712	0.183	0.401	0.422	0.486	7
Delhi	0.572	0.076	1.000	0.461	0.536	5
Goa	0.561	0.522	0.976	0.556	0.635	3
Manipur	0.536	0.456	0.370	0.454	0.471	8
Meghalaya	0.991	1.000	0.430	0.514	0.785	1
Mizoram	0.665	0.241	0.386	0.614	0.514	6
Nagaland	0.000	0.156	0.353	0.546	0.211	10
Pondicherry	0.761	1.000	0.862	0.371	0.751	2
Sikkim	0.879	0.103	0.474	0.685	0.604	4
Tripura	0.000	0.339	0.406	0.626	0.274	9
Total	0.777	0.287	0.484	0.537	0.572	

Note:YUR - Percentage of Youth not in school/work; YUTT- Youth Unemployment in total;
YEL- Employment Level; YLF - Youth in Labour Force.

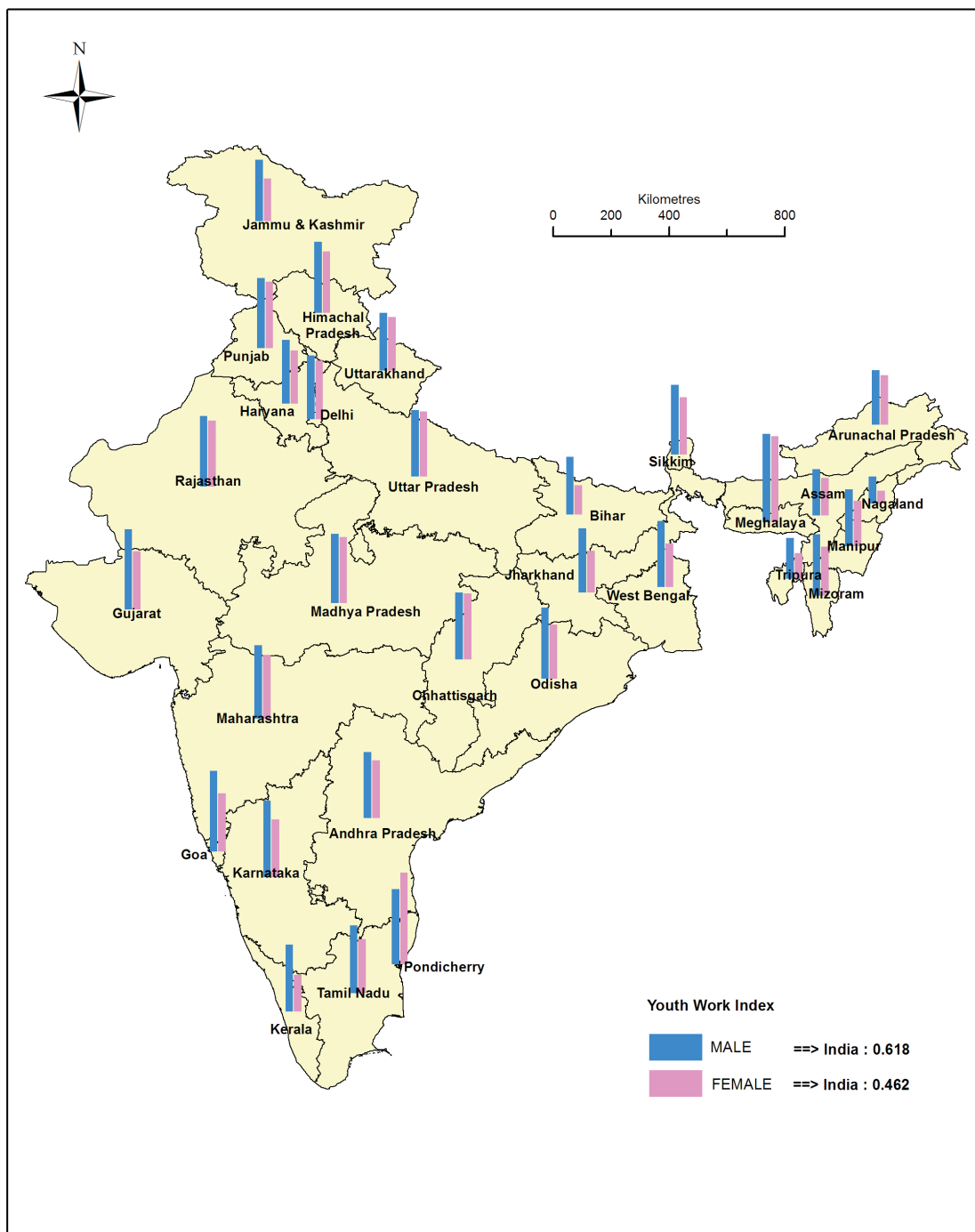
Table 2.14 Youth Gender Work Index - 2017

Major States	Female					Male					WORK GDI
	YUR-F	YUTT-F	YEL-F	YLF-F	Female Youth Work Index	YUR-M	YUTT-M	YEL-M	YLF-M	Male Youth Work Index	
Andhra Pradesh	0.872	0.335	0.381	0.181	0.528	0.729	0.218	0.574	0.753	0.601	0.879
Assam	0.446	0.312	0.431	0.080	0.343	0.418	0.110	0.382	0.773	0.420	0.817
Bihar	0.000	0.464	0.351	0.509	0.265	0.684	0.273	0.315	0.662	0.524	0.506
Chhattisgarh	0.926	0.484	0.344	0.332	0.603	0.812	0.277	0.397	0.759	0.611	0.985
Gujarat	0.955	0.130	0.444	0.165	0.530	0.970	0.191	0.662	0.869	0.732	0.723
Haryana	0.683	0.000	0.486	0.556	0.481	0.702	0.164	0.603	0.708	0.576	0.836
Himachal Pradesh	0.856	0.328	0.355	0.386	0.556	0.863	0.296	0.559	0.647	0.646	0.861
Jammu & Kashmir	0.536	0.245	0.387	0.221	0.385	0.699	0.236	0.502	0.648	0.557	0.691
Jharkhand	0.576	0.106	0.345	0.292	0.379	0.755	0.274	0.351	0.790	0.585	0.648
Karnataka	0.820	0.090	0.589	0.300	0.524	0.855	0.422	0.569	0.766	0.694	0.755
Kerala	0.000	0.541	0.816	0.304	0.332	0.648	0.500	0.516	0.734	0.609	0.545
Madhya Pradesh	0.968	0.360	0.352	0.347	0.599	0.901	0.173	0.385	0.774	0.627	0.955
Maharashtra	0.865	0.308	0.522	0.341	0.580	0.873	0.220	0.633	0.740	0.668	0.869
Odisha	0.798	0.252	0.328	0.276	0.490	0.748	0.408	0.407	0.898	0.642	0.764
Punjab	0.841	0.389	0.521	0.422	0.603	0.775	0.206	0.627	0.803	0.637	0.946
Rajasthan	0.956	0.402	0.331	0.361	0.601	0.876	0.293	0.468	0.702	0.643	0.935
Tamil Nadu	0.663	0.293	0.631	0.196	0.489	0.735	0.194	0.653	0.769	0.617	0.793
Uttar Pradesh	0.898	0.474	0.342	0.353	0.593	0.838	0.168	0.402	0.787	0.607	0.977
Uttarakhand	0.611	0.545	0.363	0.289	0.484	0.618	0.227	0.592	0.562	0.524	0.924
West Bengal	0.670	0.224	0.411	0.000	0.395	0.670	0.339	0.447	0.859	0.597	0.662
Minor States											
Arunachal Pradesh	0.751	0.181	0.386	0.185	0.451	0.685	0.185	0.412	0.511	0.495	0.910
Delhi	0.622	0.000	1.000	0.420	0.533	0.561	0.090	1.000	0.689	0.580	0.918
Goa	0.593	0.105	1.000	0.358	0.530	0.543	1.000	0.923	0.673	0.736	0.719
Manipur	0.473	0.379	0.340	0.404	0.414	0.575	0.508	0.388	0.541	0.517	0.800
Meghalaya	0.986	1.000	0.451	0.510	0.787	0.994	1.000	0.415	0.635	0.807	0.974
Mizoram	0.595	0.254	0.359	0.439	0.449	0.716	0.228	0.405	0.724	0.558	0.805
Nagaland	0.000	0.105	0.321	0.165	0.118	0.000	0.191	0.375	0.659	0.245	0.483
Pondicherry	0.780	1.000	1.000	0.603	0.833	0.756	0.518	0.802	0.593	0.685	1.216
Sikkim	0.910	0.000	0.391	0.399	0.522	0.857	0.150	0.536	0.761	0.632	0.826
Tripura	0.000	0.437	0.434	0.293	0.233	0.218	0.180	0.399	0.854	0.374	0.623
Total	0.756	0.359	0.437	0.000	0.462	0.784	0.256	0.501	0.765	0.618	0.747

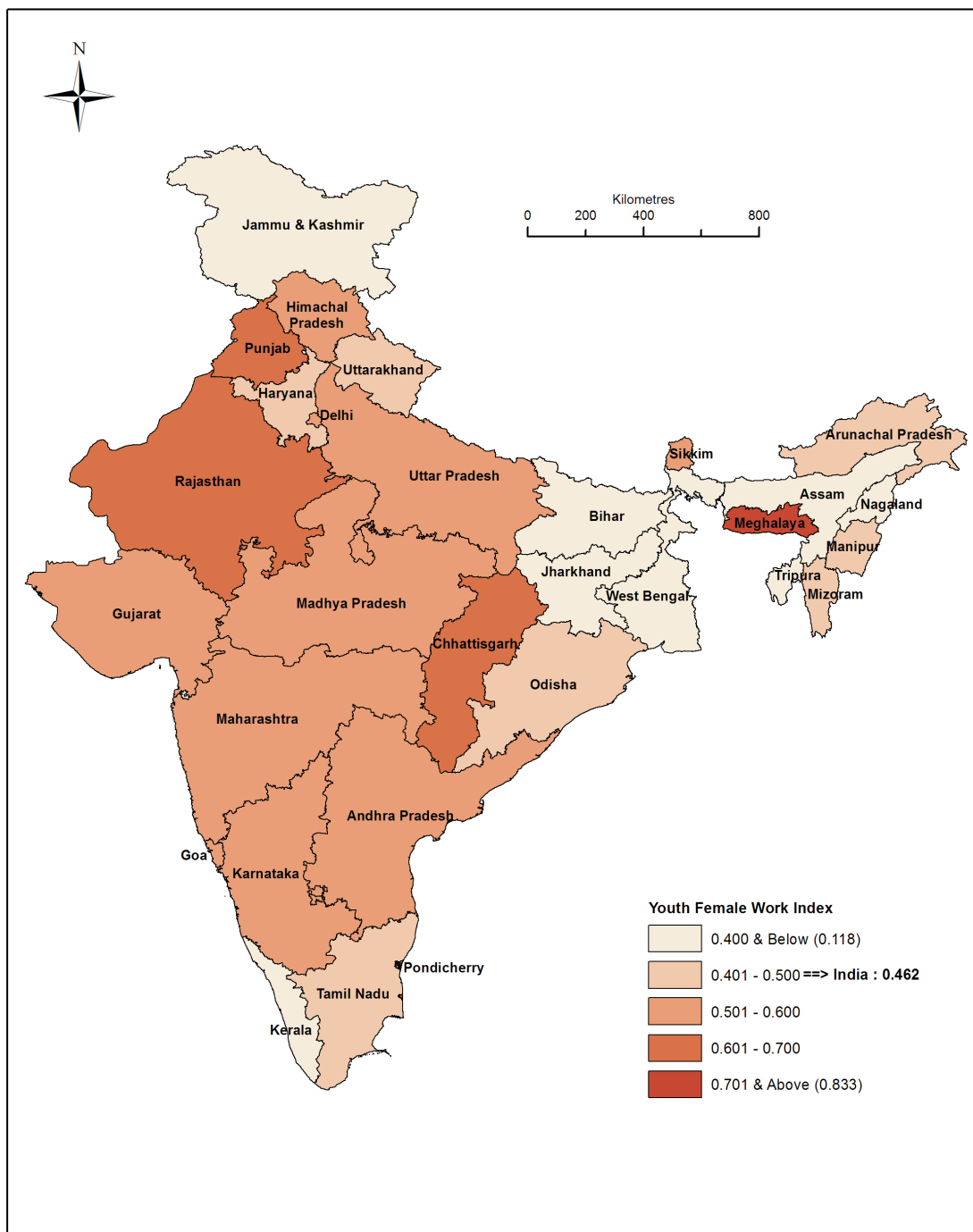
Map 2.14 Youth Work Index across Indian States - 2017



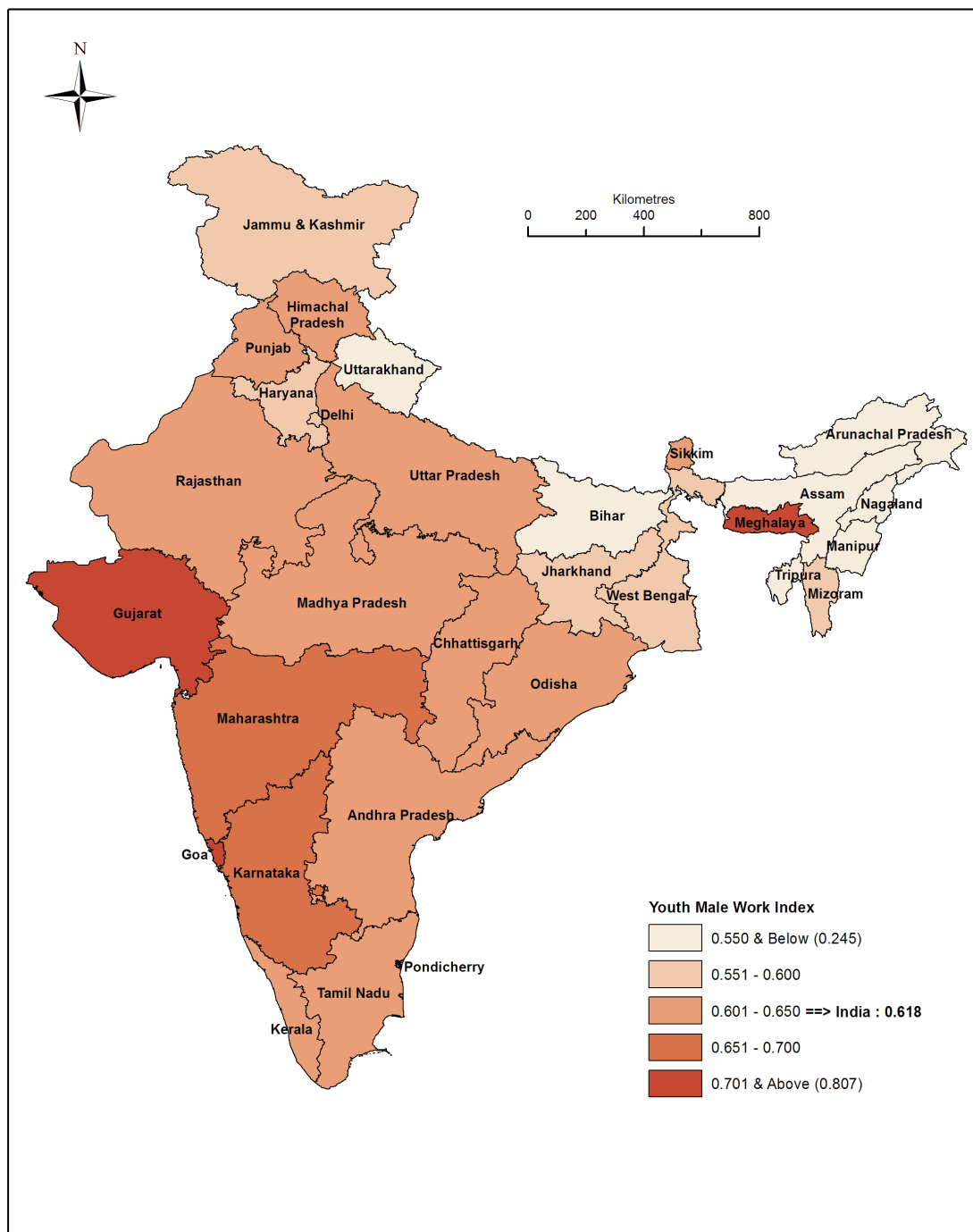
**Map 2.15 Youth Work Index (Male and Female)
across Indian States - 2017**



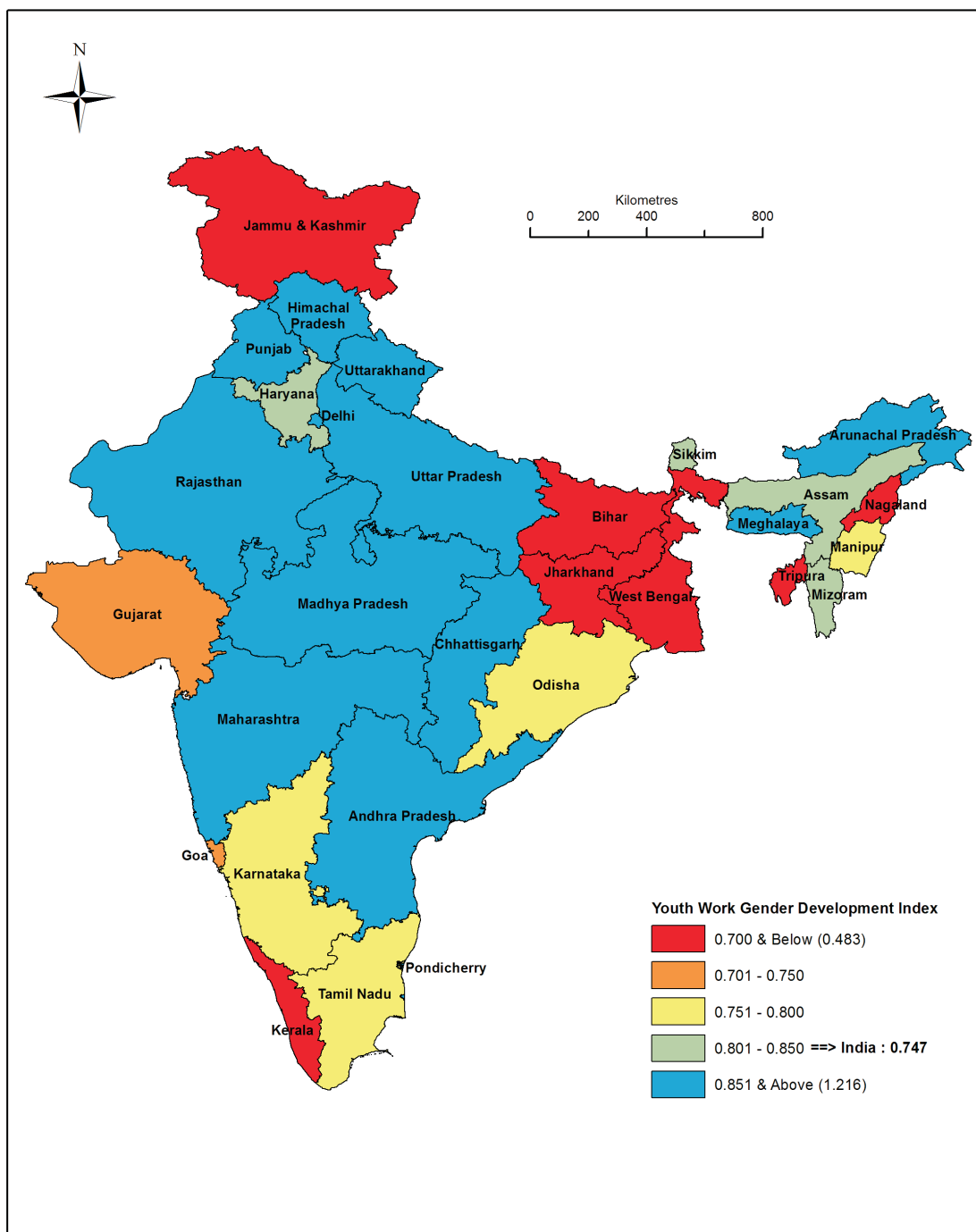
**Map 2.16 Youth Work Index (Female)
across Indian States - 2017**



**Map 2.17 Youth Work Index (Male)
across Indian States - 2017**



**Map 2.18 Youth Work Gender Development Index
across Indian States - 2017**



Youth Gender Work Index reflects upon the relative female participation in the labor market. This index is significant in the context of India's booming economic progress. The Youth Gender Work Index at the national level scores 0.747, indicating that there is a scope for improving female participation in the labor market. Among the major States, Chhattisgarh, Uttar Pradesh and Punjab top the list of better performers, while Bihar, Jharkhand and West Bengal exhibit poor performance. This performance reflects the culturally embedded patriarchal system and gender role ideologies that hinder women's entry to the labour market. Among the minor states, Pondicherry performs way better with female participation than male with its Work GDI being 1.216, followed by Meghalaya and Delhi with an almost similar performance by both male and female. Nagaland, Tripura and Goa perform poorly in Work GDI.

YOUTH AND POLITICAL PARTICIPATION

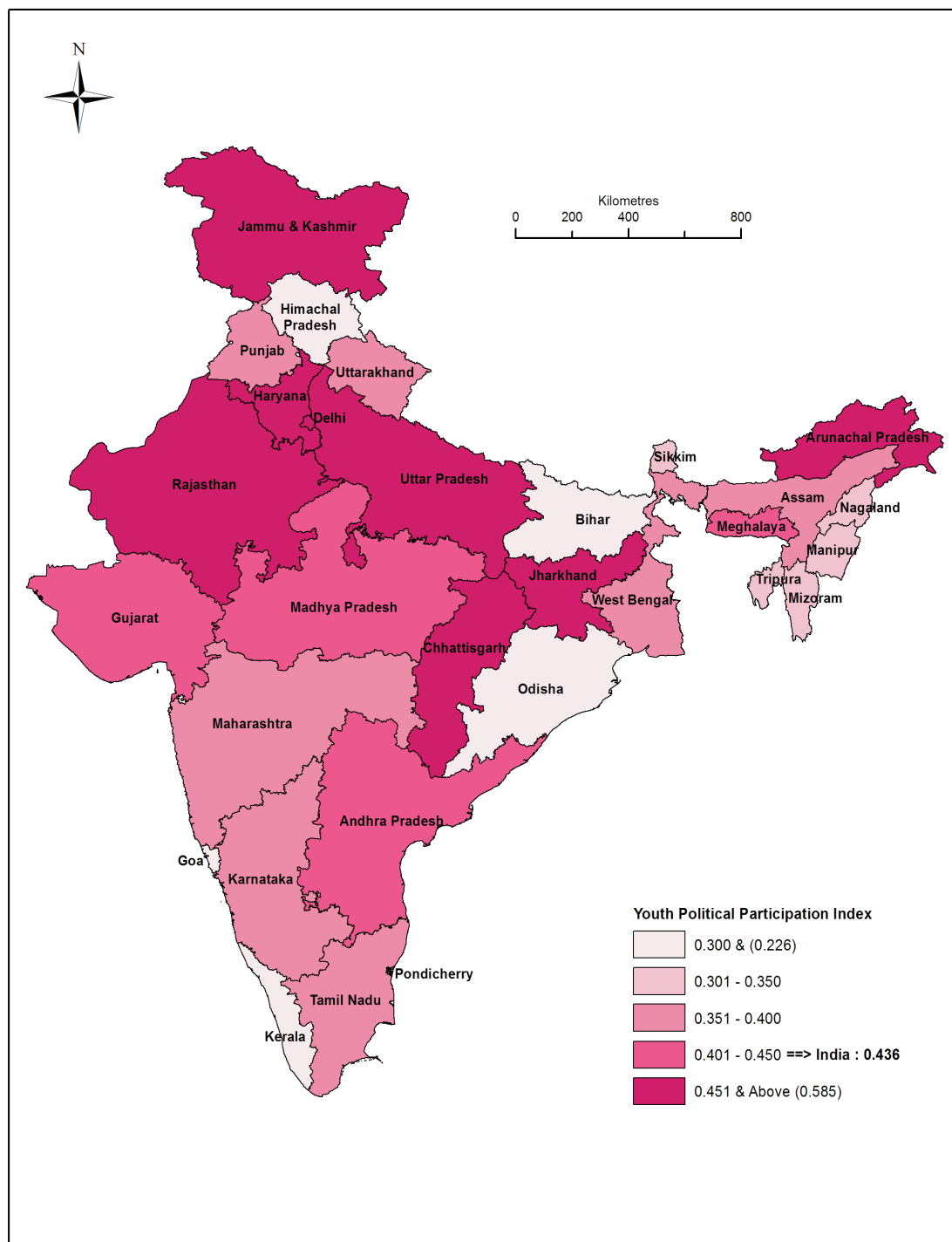
Political Participation provides a voice to the extent of expressing one's aspirations to lead a better quality of life. The ballot is an important catalyst that provides space to marginalised sections be it caste, class, ethnicity or gender. Youth participation in the political process provides young people a stake in their society and polity to bring overall youth development. Youth Political Participation Index tries to signify this as it is a composite index of Share of Youth Participating in Legislature and share of Youth Electors with equal weights. Youth Political Participation Index (YPPI) at the national level scores 0.436 implying that there is more scope for the youth to be politically active. Among the major states, Rajasthan, Chhattisgarh and Jharkhand top the list with Kerala, Bihar and Himachal Pradesh at the bottom of the table. An interesting observation is that among southern states, political participation among youth is relatively lesser. Among the minor states, Arunachal Pradesh, Delhi and Meghalaya perform relatively better, while the least performers in YPPI are Goa, Pondicherry and Nagaland. The data throws light on the interesting phenomena, where states like Arunachal Pradesh and Jharkhand perform poorly when all the social indicators have an active presence of political participation of youth, whereas, states like Kerala and Goa have the poor presence of youth in politics, despite performing better in development indicators like Health and Education.

Table 2.15 Youth Political Participation Index - 2017

Major States	YPL	YELE	Youth Pol Part index	Rank
Andhra Pradesh	0.504	0.349	0.427	8
Assam	0.188	0.606	0.397	10
Bihar	0.056	0.441	0.249	19
Chhattisgarh	0.705	0.440	0.572	2
Gujarat	0.396	0.466	0.431	7
Haryana	0.451	0.608	0.529	4
Himachal Pradesh	0.166	0.384	0.275	18
Jammu & Kashmir	0.375	0.654	0.515	5
Jharkhand	0.608	0.521	0.565	3
Karnataka	0.333	0.375	0.354	16
Kerala	0.250	0.203	0.226	20
Madhya Pradesh	0.328	0.486	0.407	9
Maharashtra	0.345	0.417	0.381	13
Odisha	0.205	0.394	0.300	17
Punjab	0.272	0.456	0.364	15
Rajasthan	0.589	0.581	0.585	1
Tamil Nadu	0.472	0.266	0.369	14
Uttar Pradesh	0.543	0.459	0.501	6
Uttarakhand	0.316	0.471	0.393	11
West Bengal	0.302	0.461	0.381	12
Minor States				
Arunachal Pradesh	0.465	0.606	0.535	1
Delhi	0.540	0.419	0.480	2
Goa	0.233	0.273	0.253	10
Manipur	0.084	0.606	0.345	4
Meghalaya	0.223	0.606	0.415	3
Mizoram	0.030	0.606	0.318	7
Nagaland	0.000	0.606	0.303	8
Pondicherry	0.278	0.266	0.272	9
Sikkim	0.108	0.551	0.329	6
Tripura	0.132	0.551	0.341	5
Total	0.402	0.471	0.436	

Note: YPL - Youth Participating in Legislature; YELE - Youth Electors.

Map 2.19 Youth Political Participation Index across Indian States - 2017



YOUTH AND CIVIC PARTICIPATION

Civic Engagement is complementary to Political Participation. It is a key marker of human development as it ensures active citizenry and empowerment of communities. Youth Civic Participation Index is a composite index of share of youth participating in Nehru Yuva Kendra Sangathan (NYKS) and share of college students participating in National Service Scheme (NSS) and National Cadet Corps (NCC) with equal weights. The Youth Civic Participation Index (YCPI) score at the national level is 0.191. Among the major states, Himachal Pradesh, Punjab and Uttarakhand top the list of better performers, while West Bengal, Uttar Pradesh and Bihar scored poorly. Among the minor states, Pondicherry, Sikkim and Mizoram perform better, while Delhi, Tripura and Meghalaya are the poor performers.

Table 2.16 Youth Civic Participation Index - 2017

Major States	YNYKS	YNCC&NSS	Youth Civic Part Index	Rank
Andhra Pradesh	0.1255	0.3120	0.2187	10
Assam	0.1990	0.1659	0.1825	13
Bihar	0.1541	0.0709	0.1125	18
Chhattisgarh	0.1307	0.2490	0.1899	11
Gujarat	0.0752	0.2093	0.1422	17
Haryana	0.2642	0.3279	0.2961	6
Himachal Pradesh	0.4610	0.5283	0.4947	1
Jammu & Kashmir	0.1926	0.4680	0.3303	5
Jharkhand	0.2440	0.1272	0.1856	12
Karnataka	0.1447	0.3107	0.2277	8
Kerala	0.1532	0.5623	0.3578	4
Madhya Pradesh	0.2673	0.1708	0.2191	9
Maharashtra	0.1330	0.2093	0.1711	14
Odisha	0.0825	0.2358	0.1591	15
Punjab	0.4069	0.3806	0.3937	2
Rajasthan	0.1235	0.1904	0.1570	16
Tamil Nadu	0.1753	0.3988	0.2871	7
Uttar Pradesh	0.1155	0.1049	0.1102	19
Uttarakhand	0.2680	0.4675	0.3678	3

Table 2.16 Continued...

Map 2.20 Youth Civic Participation Index across Indian States - 2017

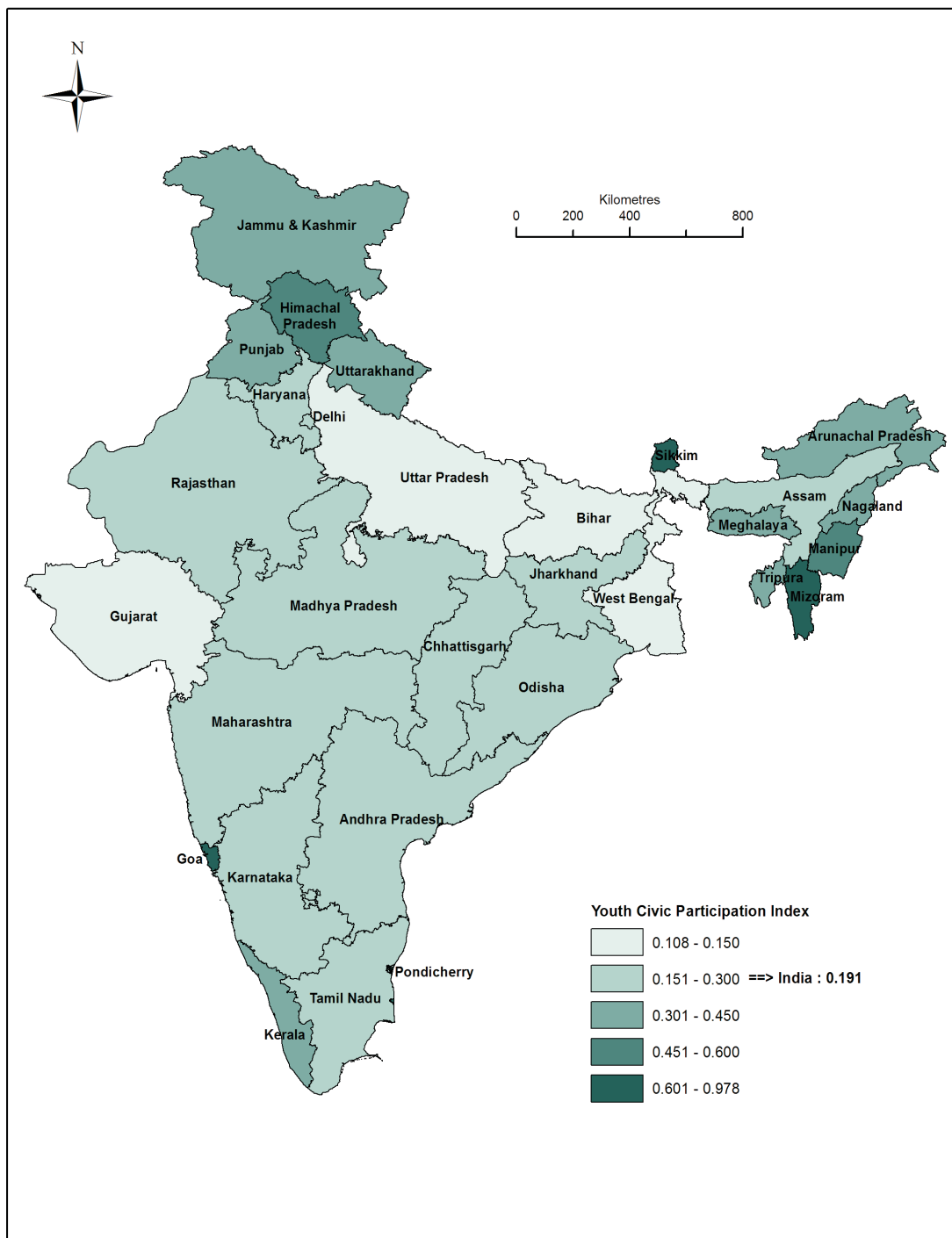


Table 2.16 Continued...

Major States	YNYKS	YNCC&NSS	Youth Civic Part Index	Rank
West Bengal	0.0968	0.1195	0.1082	20
Minor States				
Arunachal Pradesh	0.4590	0.3302	0.3946	6
Delhi	0.0817	0.3431	0.2124	10
Goa	0.4883	1.0000	0.7442	4
Manipur	0.5484	0.4145	0.4815	5
Meghalaya	0.2238	0.4745	0.3491	8
Mizoram	0.5560	1.0000	0.7780	3
Nagaland	0.4255	0.2840	0.3548	7
Pondicherry	0.9553	1.0000	0.9777	1
Sikkim	0.5898	1.0000	0.7949	2
Tripura	0.1911	0.4819	0.3365	9
Total	0.1575	0.2236	0.1906	

YOUTH AND SOCIAL INCLUSION

The Constitution of India provides an overarching framework to achieve Justice, Liberty, Equality and Fraternity. The structural features of Indian society, which puts certain groups of people at a disadvantageous position over others, creates disparity in socio-economic and political outcomes. This inhibits the creation of just society. Youth Social Inclusion Index tries to capture this social inequality across varied social categories among youth and helps to achieve the constitutional promises.

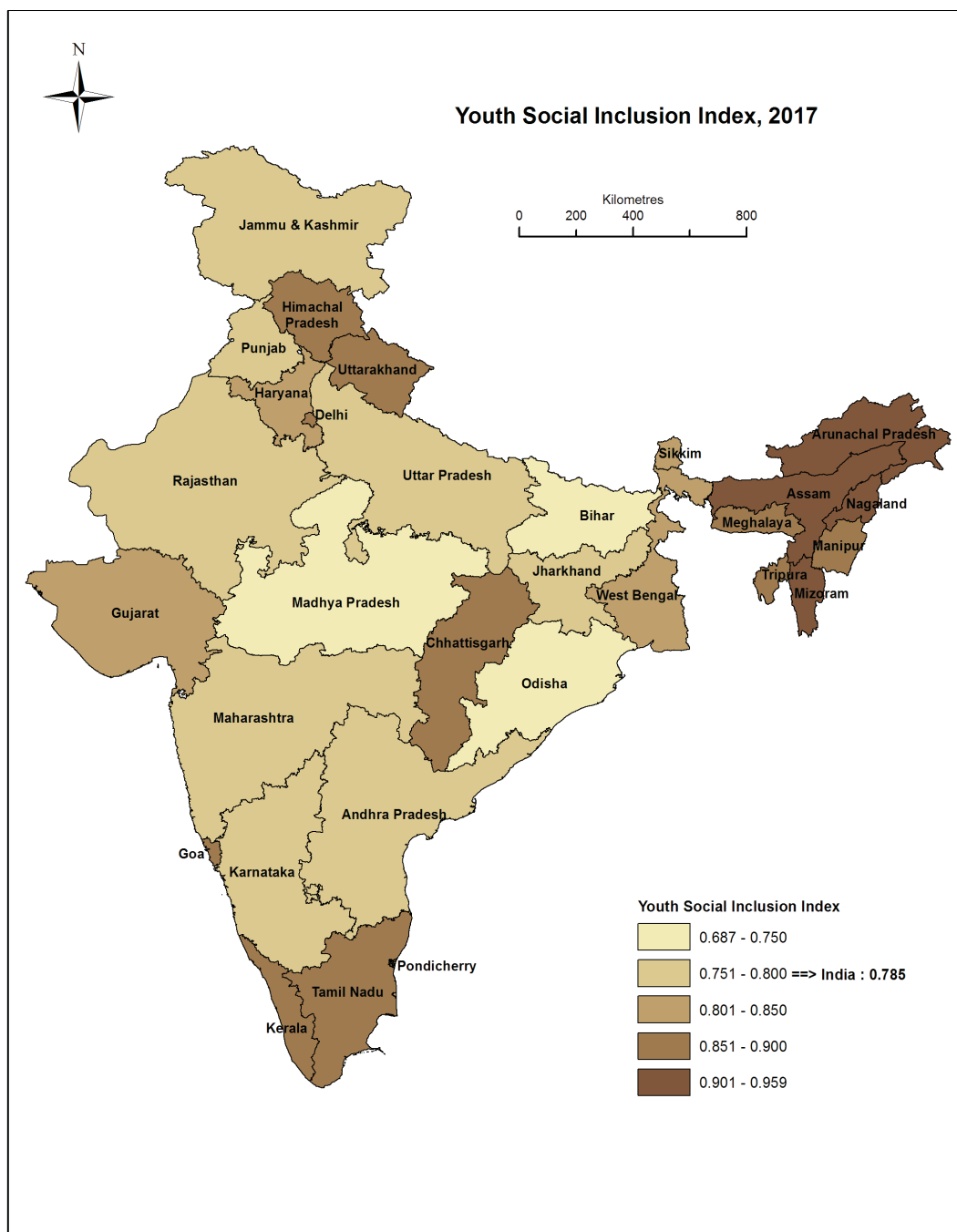
Youth Social Inclusion Index (YSII) is a composite index of Social Inequality index (with 75 percent weight) and share of youth with Disability (with 25 percent weight). Social Inequality index captures the discrimination between the social group, more specifically between SC/ST and Non SC/ST. Higher the number indicates more equality. The share of youth with disability being a negative indicator is converted to its positive form in the index. YSII at the national level scores is 0.785. This index reflects the extent of social inclusivity of marginalised sections in various social indicators of development. Among the major states, Assam, Himachal Pradesh and Kerala show good performance with respect to social inclusion, while Bihar, Madhya Pradesh and Odisha show poor performance. Almost all the minor states show a relatively better performance than almost all the major states. Among the minor states, Mizoram, Nagaland and Arunachal Pradesh top the list, with Pondicherry, Sikkim and Manipur in the bottom of the ladder concerning Social Inclusion.

Table 2.17 Youth Social Inclusion Index -2017

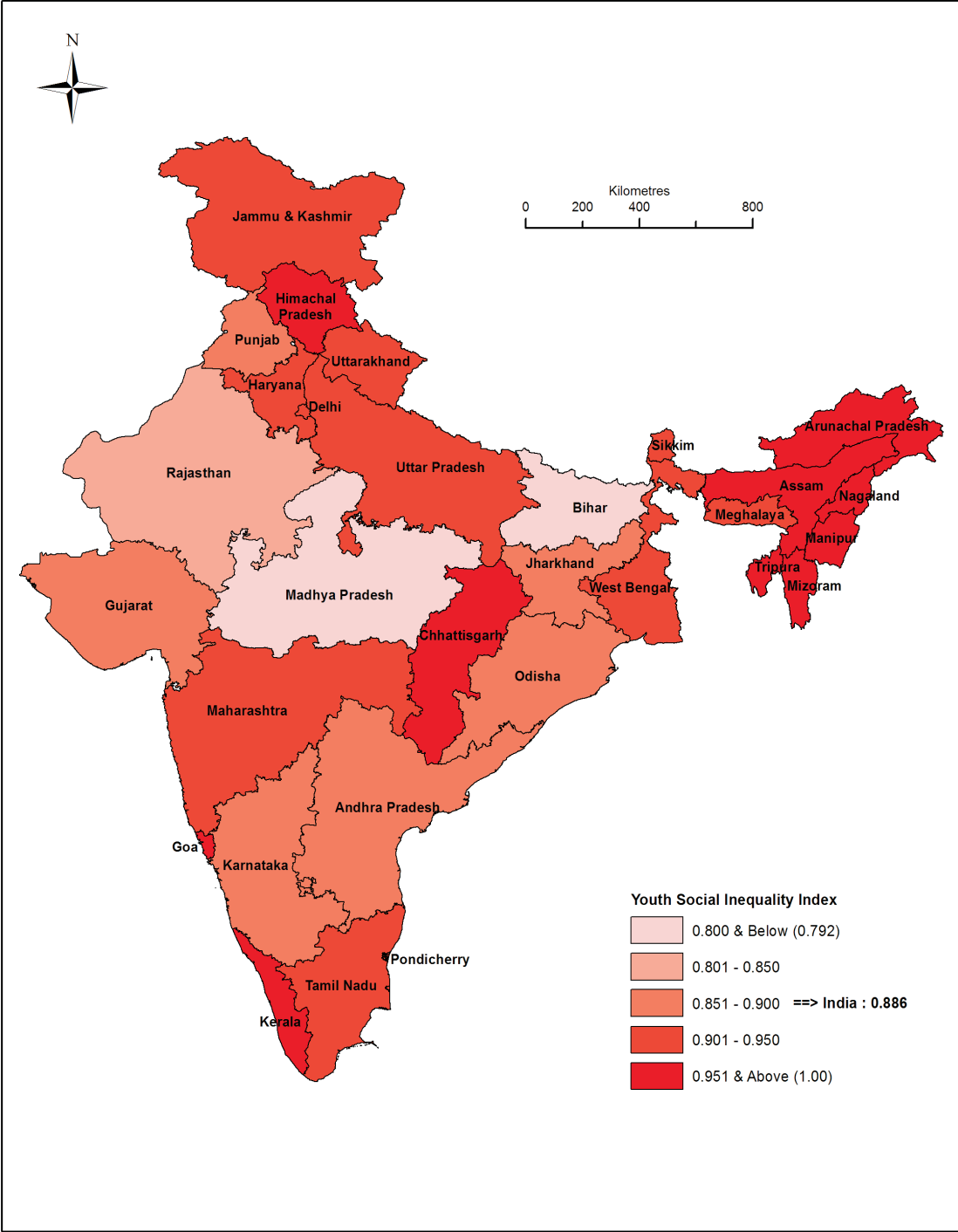
Major States	YSII	YDIS	Youth Social Inclusion Index	Rank
Andhra Pradesh	0.892	0.317	0.759	16
Assam	0.997	0.741	0.938	1
Bihar	0.792	0.335	0.687	20
Chhattisgarh	0.973	0.443	0.851	6
Gujarat	0.867	0.589	0.803	9
Haryana	0.919	0.515	0.826	7
Himachal Pradesh	0.965	0.600	0.881	2
Jammu & Kashmir	0.946	0.297	0.796	11
Jharkhand	0.900	0.396	0.784	12
Karnataka	0.863	0.398	0.755	17
Kerala	0.963	0.596	0.879	3
Madhya Pradesh	0.797	0.462	0.720	19
Maharashtra	0.906	0.301	0.766	13
Odisha	0.859	0.320	0.734	18
Punjab	0.879	0.359	0.759	15
Rajasthan	0.810	0.605	0.763	14
Tamil Nadu	0.949	0.599	0.868	4
Uttar Pradesh	0.917	0.406	0.799	10
Uttarakhand	0.928	0.599	0.852	5
West Bengal	0.910	0.466	0.807	8
Minor States				
Arunachal Pradesh	1.000	0.593	0.906	3
Delhi	0.943	0.757	0.900	4
Goa	0.974	0.586	0.884	6
Manipur	0.969	0.509	0.863	8
Meghalaya	0.946	0.678	0.884	7
Mizoram	1.000	0.824	0.959	1
Nagaland	1.000	0.794	0.953	2
Pondicherry	0.905	0.475	0.806	10
Sikkim	0.950	0.483	0.842	9
Tripura	0.975	0.649	0.900	5
Total	0.886	0.447	0.785	

Note: YSII - Social Inequality Index; YDIS - Youth Disability.

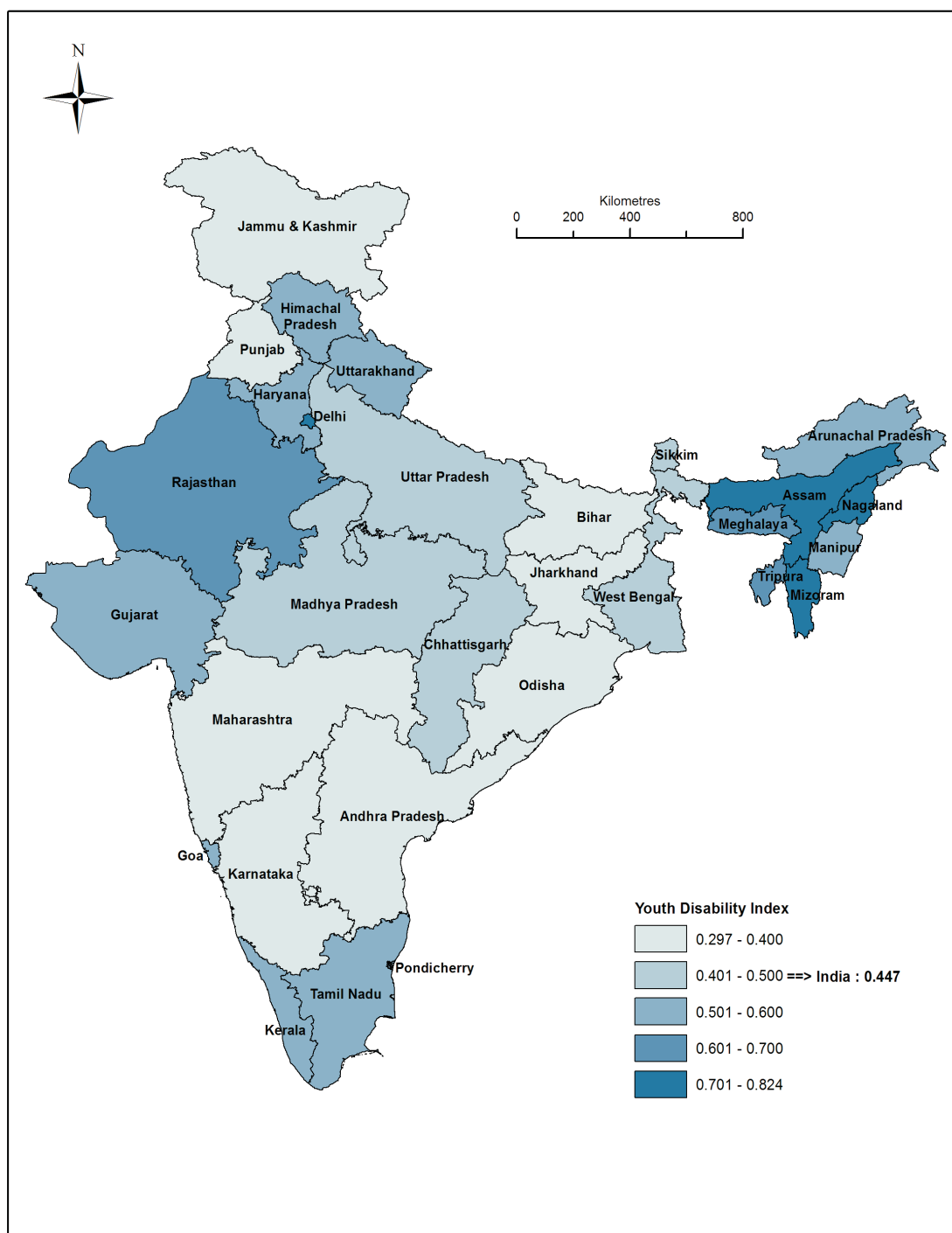
Map 2.21 Youth Social Inclusion Index across Indian States - 2017



Map 2.22 Youth Social Inequality Index across Indian States - 2017



Map 2.23 Youth Disability Index across Indian States - 2017



Conclusion

It is of paramount importance to consider 'Youth' as a distinct social category that requires targeting, especially in the context of India which houses largest proportion of young population in the world. Youth is a critical phase in individual's life when identities are shaped and destinies are forged. Thus, Youth Development constitutes a matter of global importance and this is reiterated in various international and national policies like Commonwealth Youth Programme and National Youth Policy 2014 of India respectively. The main aim of these policies is to enhance the abilities and contribution of the young population through their engagement and empowerment. Youth Development Index is an initiative of United Nations that defines Youth Development as “enhancing the status of young people, empowering them to build on their competencies and capabilities for life. It will enable young people to contribute and benefit from the politically stable, economically viable, and legally supportive environment, ensuring their full participation as active citizens in their countries”. The significance of the construction of YDI helps to identify the drivers of youth development. YDI provides better evidence for better-informed policies that can result in better targeting of resources. In addition, it helps all the stakeholders evaluate and assess the impact of interventions on youth empowerment. This evidence-based research analysis compliments the rights-based approach to youth development. YDI is used across many countries like Brazil, Malaysia, India and Australia for specific targeting of youth. This is not necessary in case of combined edition.

The objective of India YDI - 2017 was “to construct an index which can be used across the country by the states, academia and other organisation in civil society, to ascertain the status of youth vis-à-vis the systemic dimensions which influence their growth and empowerment”. National Youth Policy - 2014 highlights the priority of the Indian government with its policy being 'youth-centered'. Youth are not only instrumental in enhancing growth but it is their right to lead a dignified life in a democratic society. In this report, YDI for India borrows domains that international agencies have used that influence their growth and empowerment. It also incorporates an additional domain i.e., social inclusion, as it can make the structural character of the Indian society distinct and visible. The methodology adopted in the construction of YDI - 2017 has undergone certain changes and the results are presented for a comprehensive understanding.

India's Global YDI score stands at 0.548 in 2015 which posits India in a medium category. As per YDI - 2017 the overall score stands at 0.569 thus reaching some conformities with the global YDI scores. The performance of various domains has shown that there is a vast scope for improvement in youth development (at national level YEI-0.513, YHI-0.632, YWI-0.572, YPPI-0.436, YCPI-0.1906, and YSII-0.785). The scores also indicate that gender inequality

across domains in youth development is still a major challenge and this calls for specific interventions. Also, there persist widening disparities across states resulting in divergence in youth development. This lack of convergence emphasises the need for structural and institutional changes that ensure the optimal utilisation of young population.

Though literacy rates have shown a tremendous improvement, education is not mere literacy. Education is a tool that transforms individuals and society. Education and Health are considered as fundamental rights by UN as its access enables one's ability to grow holistically. India's focus has to be on the provision of quality education that significantly enhances the productivity of youth. There has been government policies like Skill India or National Skill Development Mission that addresses these issues but it requires a further boost to realise the potential of youth as an asset. Technical or Vocational Training should be provided simultaneously to youth as it ensures decent employment. Though India's GDP growth is higher, the nature of growth represents a depressing picture. The organised sector is showing a poor performance concerning employment, highlighting the importance of the quality of employment as it alone can lead to sustainable growth through demand creation. India's out of pocket health expenditure is one of the highest in the world with its Public Health Expenditure as a share of GDP being less than 2 percent of the national output. The young population can become parasites if such investments do not take place, especially in a country with wide income disparities. Further, the holistic development of youth population becomes a reality only when such development process is inclusive in nature. Development deficit can be avoided when certain socially disadvantaged groups like women and SCs/STs become the subject of study and policy intervention. Political participation of youth in India requires a boost, especially in formal politics, as most often youth activism is limited to digital activism that tends to be passive in nature. Therefore, to avoid sluggish youth development, National Youth Surveys can be conducted that involves systematic investigation which monitors outcomes and evaluates the impact successively. The insights thrown up by the YDI – 2017 firmly helps to build the capabilities of young people that are vital for optimal usage of the demographic dividend that the country possesses.

Youth represents a force for peace, democracy, equality and good governance. In order to realise the benefits of country's youth potential the government should strengthen the programs pertaining to quality education, skill development, health care and inclusiveness. This is possible when all the stakeholders work towards increasing youth participation and development so as to avoid the demographic dividend to become an illusion.

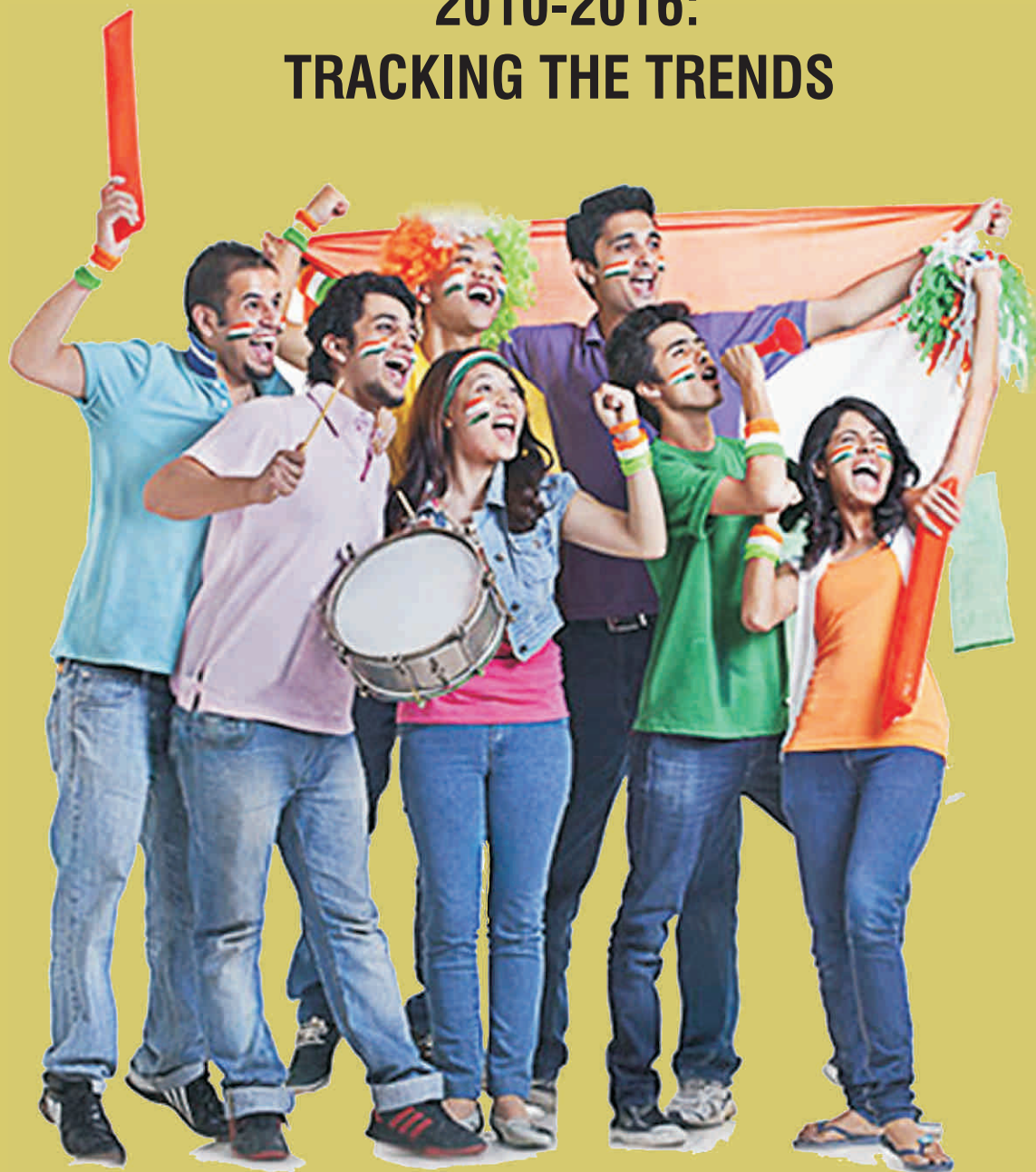
This is summarised aptly in the following words:

'This is the time for bold measures.

This is the country, and you are the generation.'

SECTION - B

YOUTH DEVELOPMENT IN INDIA 2010-2016: TRACKING THE TRENDS



CHAPTER III

YOUTH DEVELOPMENT IN INDIA 2010-2016: TRACKING THE TRENDS

SECTION - B

Introduction

India stands at a historical juncture, with a potential to reap unprecedented Demographic Dividend. It is poised to become world's youngest nation by 2020, with an average age of 29 years. It is experiencing a dramatic demographic shift with a huge bulge in youth population in the last few decades. The proportion of population aged 0-14 years is currently on a rapid decline from 40 percent in 1981 to 31 percent in 2011, besides which, the percentage of population in 60+ years is increasing at a rapid pace. As a result of these demographic changes, working age population of 15-59 years has recorded phenomenal increase from 57 percent in 2001 to 61 percent in 2011 and the youth population remains very high in India. It was expected that by productively utilising the current youth population, our country

can achieve better economic heights. In order to harness the youth potential at the optimum level and to convert the youth resource into a constructive force for development gains it becomes imperative to assess the status of youth in India with a single measure encompassing several relevant indicators. Hence, a pioneering attempt was made by RGNIYD to construct Youth Development Index for the year 2010. (In order to review the status of youth in India over a period of time i.e. 2010-2016 and also to assess the trends in youth development across the states for the same time period, Youth Development Index was constructed separately for the year 2016 (YDI – 2016) adopting the same methodological framework used in YDI – 2010 for comparative analysis). The comparison of YDI - 2010 with that of YDI -

2016 will help the state agencies, policy makers and all the other stakeholders to recognise high and low performing states, identify the weak domains and redesign the policy options or intensify the existing policies.

Methodology

The YDI - 2016 is constructed using the same definition of youth, more or less same set of variables/indicators and same methodology as used in YDI – 2010 to facilitate strict comparison.

Definition of Youth

As youth has been defined as the population in the age group of 13- 35 years in the India's National Youth policies of 1986 and 2003, YDI – 2010 used the same definition of youth. Since, the primary aim of 2016 is to assess the trends in youth development during 2010-2016, the definition of youth in YDI - 2016 is similar to that of YDI – 2010 i.e. 13 – 35 years.

Dimensions and Indicators

The YDI – 2016 is a composite measure of youth status encompassing 15 indicators across five key domains of Health, Education, Work, Amenities and Political Participation.

Figure 3.1 Youth Development Index - 2016: Dimensions and Indicators

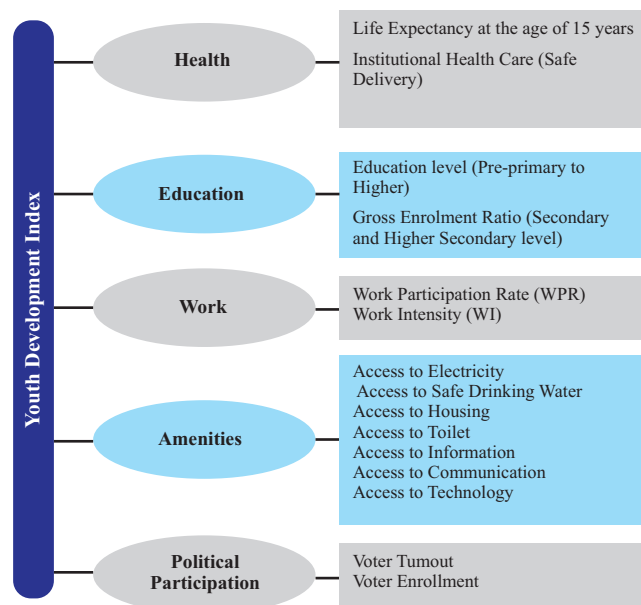
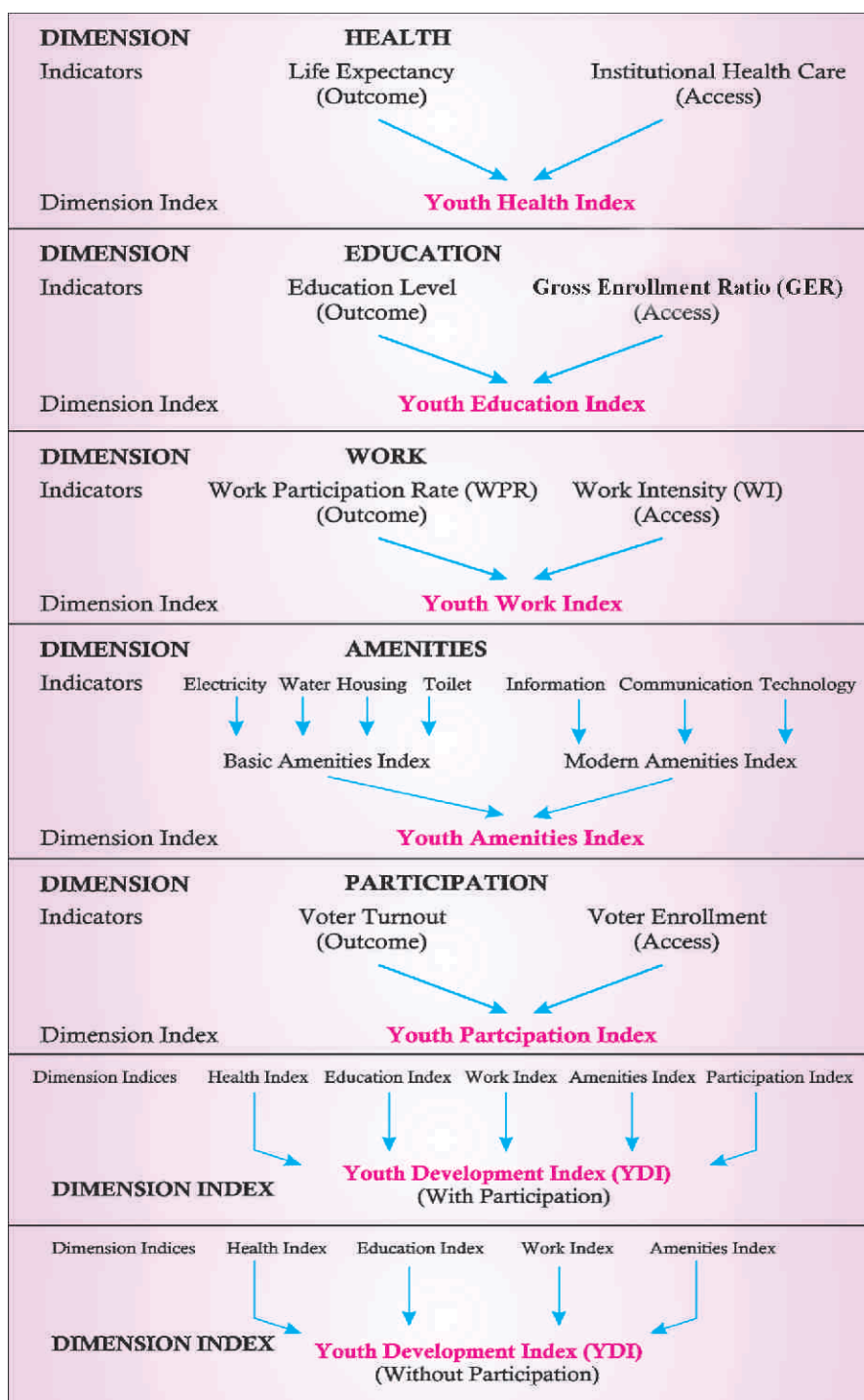


Figure 3.2 Youth Development Indices: Graphical Representation



Construction of Youth Development Index - 2016

For computing YDI - 2016, the data for all the variables and indicators have been collected from various secondary sources such as DLHS, AHS, SRS, Census, various rounds of NSSO and General Elections 2009 and 2014*. As indicated earlier, the methodology used in YDI - 2010 has been followed to calculate each dimension index for the YDI - 2016 so that they are strictly comparable. The definition of youth in the YDI - 2016 is similar to that of National Youth Policy 2003 and the YDI - 2010 report, i.e., young population in the age group of 13-35 years.

Following the YDI - 2010, a two-stage methodological procedure has been adopted in constructing the YDI - 2016. First, all Dimension Indices have been calculated by assigning appropriate weights and goalpost minimum and maximum (Table 3.1). For each Dimension Index, there are two components *viz.*, Outcome and Access with Male and Female classifications subscripted as *m* and *f* respectively. Secondly, all the Dimension Indices have been aggregated to produce the overall (i.e., final) Youth Development Index. For aggregating across Dimension Indices, Displaced Ideal (DI) technique has been used which defines that a system is considered to be better if it is less distant from the ideal. Based on the inverse of Euclidian Distance, Displaced Ideal has been used to construct the overall performance of Youth Development.

Construction of the Youth Development Index with the above mentioned methodology, is described in following four steps. Step 1: Computing the Youth Indicator Index for male and female separately.

$$YII_f = \frac{\text{State Value of the Indicator for Female} - \text{Minimum Cut off (Female)}}{\text{Maximum Cut off (Female)} - \text{Minimum Cut off (Female)}}$$

$$YII_m = \frac{\text{State Value of the Indicator for Male} - \text{Minimum Cut off (Male)}}{\text{Maximum Cut off (Male)} - \text{Minimum Cut off (Male)}}$$

Indicators are classified as Outcome Indicators and Access Indicators with respect to Health, Education and Work dimension. Since with respect to all the three dimensions Outcome and Access are represented through only one indicator Youth Outcome Dimension index is same as Youth Indicator Index. i.e., Indicators are classified as Outcome Indicators and Access

Indicators with respect to Health, Education and Work dimension. Since with respect to all the three dimensions Outcome and Access are represented through only one indicator Youth Outcome Dimension index is same as Youth Indicator Index. i.e., $YDiOI_f = YII_f$ and $YDiOI_m = YII_m$ and similarly Youth Access Dimension Index is same as corresponding Youth Indicator Index i.e., $YDiAI_f = YII_f$ and $YDiAI_m = YII_m$

With respect to Amenities dimension Indicators are classified as Basic and Modern Amenities and here no distinction is made between Males and Females. If the household possesses the amenities then all the youth in that household has an access to those amenities. Basic Amenities are aggregated as

$$YDiBI = 1 - \frac{\sqrt{(1-YAEI)^2 + (1-YAWI)^2 + (1-YAHI)^2 + (1-YATFI)^2}}{\sqrt{4}}$$

and Modern Amenities are aggregated as $YDiMI = 1 - \frac{\sqrt{(2-2 \times YACI)^2 + (1-YAII)^2 + (1-YATI)^2}}{\sqrt{6}}$

Political Participation is represented by Enrolment and Voting Indicators and here no distinction is made as outcome and access indicators.

In all the equations Di stands for Dimension and Di = H (Health) when i=1

= E (Education) when i=2

= W (Work) when i=3

= A (Amenities) when i=4

= P (Political Participation) when i=5

Step II: Obtaining dimension-wise development Index for Male and Female separately. Here Outcome indicators are given 2/3rd weight and Access indicators are given 1/3rd weight with respect to Health, Education and Work dimension.

$$YDiI_f = 1 - \frac{\sqrt{(2 - 2YDiOI_f)^2 + (1 - YDiAI_f)^2}}{\sqrt{5}}$$

$$YDiI_m = 1 - \frac{\sqrt{(2 - 2YDiOI_m)^2 + (1 - YDiAI_m)^2}}{\sqrt{5}}$$

With respect to Amenities dimension,

$$YDiI_f = YDiI_m = 1 - \frac{\sqrt{(1 - YDiBI)^2 + (1 - YDiMI)^2}}{\sqrt{2}}$$

With respect to Political Participation dimension,

$$YDiI_f = 1 - \frac{\sqrt{(1 - YDiEI_f)^2 + (1 - YDiVI_f)^2}}{\sqrt{2}}$$

$$YDiI_m = 1 - \frac{\sqrt{(1 - YDiEI_m)^2 + (1 - YDiVI_m)^2}}{\sqrt{2}}$$

Step III: Overall Dimension Index, Gender Development Dimension Index and sex-ratio adjusted Gender Development Dimension Index:

$$YDiI = P_f \times YDiI_f + P_m \times YDiI_m$$

Where P_f is the proportion of female and P_m is the proportion of male to the total youth population aged 13-35 years.

Computing Youth Gender Development Dimension Index (YGDDiI) for all the indicators

$$YGDDiI = [P_f \times (YDiI_f)^{-1} + P_m \times (YDiI_m)^{-1}]^{-1}$$

Finally in order to take account of gender specific inequality in population proportion, a sex ratio correction factor has been used to obtain sex-ratio adjusted Indicator indices as $YGDDiI_{SR}$

$$YGDDiI_{SR} = \frac{\min(P_f, P_m)}{0.5} \times [P_f \times (YDiI_f)^{-1} + P_m \times (YDiI_m)^{-1}]^{-1}$$

Step IV: Obtaining Overall Youth Development Index, Youth Gender Development Index and Sex-ratio corrected Gender Development Index.

$$YDI_f = 1 - \frac{\sqrt{\sum_{i=1}^k (1 - YDiI_f)^2}}{\sqrt{k}}$$

$$YDI_m = 1 - \frac{\sqrt{\sum_{i=1}^k (1 - YDiI_m)^2}}{\sqrt{k}}$$

$k=4$ for Youth Development Index without political participation and $k=5$ with Political Participation.

$$YDI = P_f \times YDI_f + P_m \times YDI_m$$

$$YGDI = [P_f \times (YDI_f)^{-1} + P_m \times (YDI_m)^{-1}]^{-1}$$

$$YGDI_{SR} = \frac{\min(P_f, P_m)}{0.5} \times [P_f \times (YDI_f)^{-1} + P_m \times (YDI_m)^{-1}]^{-1}$$

Table 3.1 Indicators and Weights used in Construction of YDI

Indicators	Abbreviation	Definition	Min	Max
Dimension: Health				
Outcome				
Youth Life Expectancy Index	YLEI	Life Expectancy at age 15	36.7	76.2
Access				
Institutional Health Care	YHAI	Percentage of mothers who have been assisted by Institutional Health Care	0	100
Dimension : Education				
Outcome				
Educational level	YEOI	$0.25 \times \text{Proportion of female/male just literate} + 0.5 \times \text{Proportion of female/male primary educated} + 0.75 \times \text{Proportion of female/male secondary educated} + 1 \times \text{Proportion of female/male tertiary educated} + 1 \times \text{Proportion of female/male vocational educated}$	0	1
Access				
Gross Enrollment Ratio	YEA I	$\text{Secondary population proportion of female/male} \times \text{secondary GER of female/male} + \text{Tertiary population proportion of female/male} \times \text{Tertiary GER of female/male}$	0	1
Dimension : Work				
Outcome				
Work Participation rate	YWOI	Youth work participation rate	0	1000

Access				
Work Intensity	YWAI	Proportion of females/males working for 0 days×0 + Proportion of females/males working for 1 day×0.2+ Proportion of females/males working for 2 days×0.4+Proportion of females/males working for 3 days×0.6+Proportion of females/males working for 4 days×0.8+Proportion of females/males working for 5 days or more ×1.0	0	1
Dimension: Amenities				
Basic				
Electricity	YAEI	Percentage of households having access to Electricity	0	100
Water	YAWI	Percentage of Households having access to safe drinking water	0	100
Housing	YAHl	Percentage of households with Kaccha house×0.25+Percentage of households with semi-pucca house×0.5 + Percentage of households with pucca house×1.0	0	100
Toilet Facility	YATFI	Percentage of households having access to toilet facility	0	100
Modern				
Communication	YACI	(Percentage of households having access to telephone + Percentage of households having access to Mobile)/2	0	100
Information	YAlI	Percentage of households havin g access to Television	0	100
Technology	YATI	Percentage of households having access to Computers	0	100
Dimension: Political Participation				
Enrolment	YPEI	Percentage of females/males enrolled as voters	0	100
Voting	YPVI	Percentage of females/males voted	0	100

YOUTH DEVELOPMENT INDEX (YDI - 2016)

The Youth Development Index - 2016 (YDI - 2016) has been calculated following the methodology used in the Youth Development Report – 2010. Two sets of YDIs are constructed:

(i) Youth Development Index - Without Participation which is a composite index of various indicators of four domains of youth development, namely Health, Education, Work and Amenities.

(ii) Youth Development Index - With Participation which encompasses various indicators from five domains of youth development, namely Health, Education, Work, Amenities and Participation.

It is noted that the YDI – 2010 (with Participation) was calculated only for 10 Indian states by using the primary data collected for the purpose. However, due to time bound nature of the current phase of YDI – Project, collecting primary data for all the states was not feasible. In view of this constraint, the Technical Advisory Committee of the project suggested to use the secondary data from general elections for 2009 and 2014 and to compute both the YDI - 2010 and YDI - 2016 to facilitate comparison. Accordingly, the data on voter enrolment and voter turnout from the general elections 2009 and 2014 are used to compute YDI - 2010 and YDI - 2016 with participation, respectively. It is also noted that for the YDI - 2010 the reference year was 2005, as it used most of the data in and around 2005. For the YDI - 2016, the reference year is 2011, as most of its data is in and around 2011.

As explained in methodology chapter, the YDI is computed separately for male and female for each Indian state using the youth population proportion as weight. In order to throw light on gender inequality, the Youth Gender Development Index (YGDI) and Sex Ratio adjusted Youth Gender Development Index (YGDI_{sr}) have also been calculated in line with the UNDP Gender Development Index.

The YDI score ranges between 0 and 1. For a state with a perfect score of 1, it represents the highest possible level of youth development attainable, while for a state with extreme low value of 0, it indicates that there is no youth development at all. Table 3.2 shows the current status of youth development (YDI - 2016) for India as well as across the states and changes in youth development over YDI - 2010. The YDI values in 2016 and 2010 in Table 3.2 highlight the progress that India and the states have made in improving access and outcome for their youth population. India's YDI - 2016 score is 0.552, while India's YDI - 2010 score was 0.451, registering an improvement by 0.101 or 10.1 percentage points in 2016 over 2010.

In the Global Commonwealth Youth Development Report 2016, India's score is 0.548. This report classified the countries into low (with scoring between 0 and 0.494), medium (0.494 - 0.607), high (0.607 - 0.671) and very high (above 0.671score) youth development nations and India is classified as medium category nation in youth development. As the Global Commonwealth Youth Development Report used slightly a different set of indicators, this score is not strictly comparable with the score of India YDI - 2016.

The top three states with high scores in YDI - 2016 are Himachal Pradesh (0.669), Goa (0.624) and Delhi (0.622) and the bottom three are Bihar (0.443), Jharkhand (0.464) and Assam (0.442). In YDI - 2010 top three states with high scores are Himachal Pradesh, Kerala and Goa and bottom three states are Bihar, Tripura and Jharkhand. Of all the 29 Indian states, 13 states showed improvement in their ranks (performances) over the last 6 years with large gains in Chhattisgarh (0.106), followed by Sikkim (0.106) and Tripura (0.098). A very meager improvement happened in Kerala (0.031), Nagaland (0.032) and Meghalaya (0.033). However, it is noticed that in all the states, the YDI score improved in 2016 over 2010. There was no fall in the YDI (2016) score in any state, but changes varied across states. As a result, the inequality has widened as shown in the Table 3.3.

Table 3.2 YDI (2016) and YDI (2010) Scores for India and States – Without Political Participation

States	YDI (2016) Score				YDI (2010) Score			
	YDI _f	YDI _m	YDI	YDI Rank	YDI _f	YDI _m	YDI	YDI Rank
India	0.490	0.610	0.552		0.408	0.491	0.451	
Andhra Pradesh	0.551	0.625	0.588	9	0.470	0.526	0.498	14
Arunachal Pradesh	0.476	0.549	0.513	21	0.419	0.467	0.443	22
Assam	0.418	0.543	0.481	27	0.372	0.468	0.421	26
Bihar	0.344	0.534	0.443	29	0.299	0.455	0.381	29
Chhattisgarh	0.521	0.570	0.546	17	0.411	0.468	0.440	23
Delhi	0.531	0.701	0.622	3	0.475	0.648	0.571	4
Goa	0.567	0.677	0.624	2	0.525	0.618	0.573	3
Gujarat	0.510	0.639	0.578	12	0.477	0.550	0.516	10
Haryana	0.499	0.641	0.574	15	0.482	0.563	0.526	8
Himachal Pradesh	0.659	0.678	0.669	1	0.587	0.611	0.599	1
Jammu and Kashmir	0.532	0.633	0.586	10	0.458	0.565	0.514	11
Jharkhand	0.392	0.533	0.464	28	0.360	0.459	0.411	27
Karnataka	0.525	0.626	0.576	14	0.482	0.540	0.512	12
Kerala	0.549	0.672	0.608	6	0.524	0.631	0.577	2

Madhya Pradesh	0.453	0.564	0.511	22	0.410	0.489	0.452	20
Maharashtra	0.555	0.652	0.606	7	0.515	0.575	0.547	6
Manipur	0.497	0.572	0.534	18	0.437	0.493	0.465	17
Meghalaya	0.506	0.536	0.521	20	0.478	0.498	0.488	16
Mizoram	0.553	0.600	0.577	13	0.476	0.521	0.499	13
Nagaland	0.467	0.522	0.495	26	0.452	0.474	0.463	19
Odisha	0.435	0.558	0.496	25	0.383	0.475	0.429	24
Punjab	0.509	0.684	0.620	4	0.509	0.593	0.554	5
Rajasthan	0.504	0.602	0.555	16	0.425	0.501	0.465	18
Sikkim	0.581	0.613	0.598	8	0.457	0.526	0.492	15
Tamil Nadu	0.563	0.662	0.612	5	0.500	0.564	0.532	7
Tripura	0.448	0.556	0.503	23	0.337	0.471	0.405	28
Uttar Pradesh	0.421	0.566	0.497	24	0.360	0.475	0.421	25
Uttarakhand	0.539	0.621	0.580	11	0.498	0.545	0.522	9
West Bengal	0.467	0.593	0.531	19	0.388	0.505	0.448	21

Note: YDI – Youth Development Index; YDI m - Youth Development Index_Male; YDI f - Youth Development Index_Female

**Table 3.3 States Below and Above all India YDI Score 2010 and 2016:
A Comparison**

YDI (2016)		Below all India Score	Above all India Score
YDI (2010)	Below all India Score	Bihar, Tripura, Jharkhand, Assam, Uttar Pradesh, Odisha, Chhattisgarh, Arunachal Pradesh, West Bengal	
	Above all India Score	Manipur, Meghalaya, Madhya Pradesh, Nagaland	Himachal Pradesh, Goa, Delhi, Punjab, Tamil Nadu, Kerala, Maharashtra, Sikkim, Andhra Pradesh, Jammu & Kashmir, Uttarakhand, Gujarat, Mizoram, Karnataka, Haryana, Rajasthan

According to YDI - 2010, there were only 9 states below All India score as shown in the Table 3.3. As per YDI - 2016, there are 13 states below all India score which reflects that 4 more states are added to this category due to their slow youth development (Manipur, Meghalaya, Madhya Pradesh and Nagaland).

A comparison between the YDI - 2016 scores for major Indian states and the HDI scores of the same states reveals that there is a strong positive correlation between the two, with correlation coefficient being estimated at 0.8389. This implies that states with high YDI scores are consistent with the high HDI scores.

There is a clear evidence of gender difference in youth development at national level as well as for States (Table 3.2). India's YDI - 2016 score is 0.61 for male and 0.49 for female. This shows that India's female youth are significantly less developed than male youth and India's female youth development is also lower than country's average youth development. Further, it is noticed that the YDI score for male improved from 0.491 in 2010 to 0.61 in 2016, while for female it improved from 0.408 to 0.49. That is, for male the score increased by 11.9%, while for female it increased only by 8.2% over the last 6 years. These findings indicate that the policies towards gender equality in youth development need more attention.

Among the States, Himachal Pradesh secured the top YDI - 2016 score of 0.659 for female, followed by Sikkim (0.581) and Goa (0.567). The lowest YDI - 2016 score for female has been observed in Odisha (0.435), Assam (0.418) and Bihar (0.344), respectively. The top three states with more gains in YDI score for female during last 6 years are: Sikkim (0.124), Tripura (0.111) and Chhattisgarh (0.11), whereas the lowest gain in YDI score for female are obtained by Nagaland (0.015), Haryana (0.017) and Kerala (0.025). These results clearly indicate that in spite of the numerous efforts by the government and various stakeholders towards enhancing the status of young women, striking gender disparities are observed in youth development. It further highlights that almost all the developed states exhibit significant gender disparities in youth development. It is more surprising that India's national capital ranks 2 in differential youth development.

Delhi ranks 1st in the YDI score for male (0.701) but ranks 12th in the YDI for female. Punjab (0.684) ranks 2nd and Himachal Pradesh ranks 3rd in YDI. The lowest YDI for male has been observed in Bihar (0.534) followed by Jharkhand (0.533) and Nagaland (0.522). The difference between the highest and the lowest YDI for male is 0.179 point (i.e., 18 percent). However, it is found to be much worse for female with the difference of 32 percent.

It is also noticed in 2010, the difference between the top and bottom states in YDI male was 19.3%, while the difference in the case of YDI female was 28.8%. This means that the gap between the top and bottom states has been reduced in the case of YDI male, while the gap has widened in the case of YDI female. This is an alarming situation which needs policy intervention.

Table 3.4. shows that YDI - 2016 scores with political participation for India and all the states. It also reports the corresponding YDI - 2010. These composite indices encompass indicators from five domains of youth development *viz.* Education, Health, Work, Amenities and Political Participation. For India, the YDI - 2016 score with political participation is 0.556 as against the YDI - 2016 score without political participation of 0.552.

It is observed that the YDI-2016 scores slightly vary in magnitude across the states, their ranking is more or less the same except for a few states. Notable difference in ranking is observed in two states, namely (i) Haryana and (ii) Jammu & Kashmir. Haryana's relative position has improved from 15th rank in YDI-2016 to 10th rank in YDI - 2016 without participation. Jammu & Kashmir ranks 10th in the first measure and 15th in the second measure.

Table 3.4 Youth Development Index – With Political Participation

States	2016				2010			
	YDI _f	YDI _m	YDI	YDI Rank	YDI _f	YDI _m	YDI	YDI Rank
India	0.503	0.606	0.556		0.428	0.504	0.468	
Andhra Pradesh	0.561	0.621	0.591	9	0.493	0.540	0.517	11
Arunachal Pradesh	0.502	0.561	0.532	21	0.446	0.489	0.468	21
Assam	0.450	0.560	0.505	27	0.406	0.492	0.450	25
Bihar	0.375	0.536	0.459	29	0.326	0.463	0.398	29
Chhattisgarh	0.532	0.575	0.553	17	0.429	0.482	0.456	23
Delhi	0.532	0.679	0.611	4	0.474	0.626	0.558	5
Goa	0.577	0.661	0.620	2	0.524	0.600	0.563	3
Gujarat	0.514	0.629	0.575	12	0.473	0.544	0.511	13
Haryana	0.510	0.637	0.578	10	0.494	0.572	0.536	8
Himachal Pradesh	0.637	0.654	0.646	1	0.577	0.596	0.587	1
Jammu and Kashmir	0.521	0.607	0.566	15	0.447	0.548	0.500	16
Jharkhand	0.420	0.542	0.482	28	0.381	0.473	0.429	28
Karnataka	0.533	0.618	0.576	11	0.491	0.545	0.519	10
Kerala	0.561	0.654	0.605	6	0.540	0.623	0.581	2
Madhya Pradesh	0.466	0.569	0.520	24	0.419	0.501	0.462	22
Maharashtra	0.548	0.635	0.594	8	0.507	0.566	0.538	7
Manipur	0.520	0.579	0.550	18	0.469	0.512	0.491	18
Meghalaya	0.522	0.544	0.533	20	0.495	0.510	0.503	14
Mizoram	0.554	0.590	0.572	14	0.480	0.521	0.501	15
Nagaland	0.496	0.544	0.520	23	0.483	0.504	0.494	17
Odisha	0.463	0.567	0.515	25	0.414	0.495	0.454	24
Punjab	0.554	0.667	0.613	3	0.521	0.594	0.560	4
Rajasthan	0.511	0.598	0.556	16	0.432	0.505	0.470	20
Sikkim	0.588	0.618	0.604	7	0.484	0.548	0.516	12
Tamil Nadu	0.570	0.649	0.609	5	0.517	0.571	0.544	6
Tripura	0.478	0.571	0.525	22	0.383	0.500	0.443	26
Uttar Pradesh	0.438	0.566	0.505	26	0.377	0.485	0.434	27
Uttarakhand	0.540	0.609	0.575	13	0.497	0.544	0.522	9
West Bengal	0.492	0.601	0.548	19	0.424	0.529	0.478	19

Note: YDI – Youth Development Index; YDI m - Youth Development Index_Male; YDI f - Youth Development Index_Female

Map 3.1 Youth Development Index - 2010 and 2016

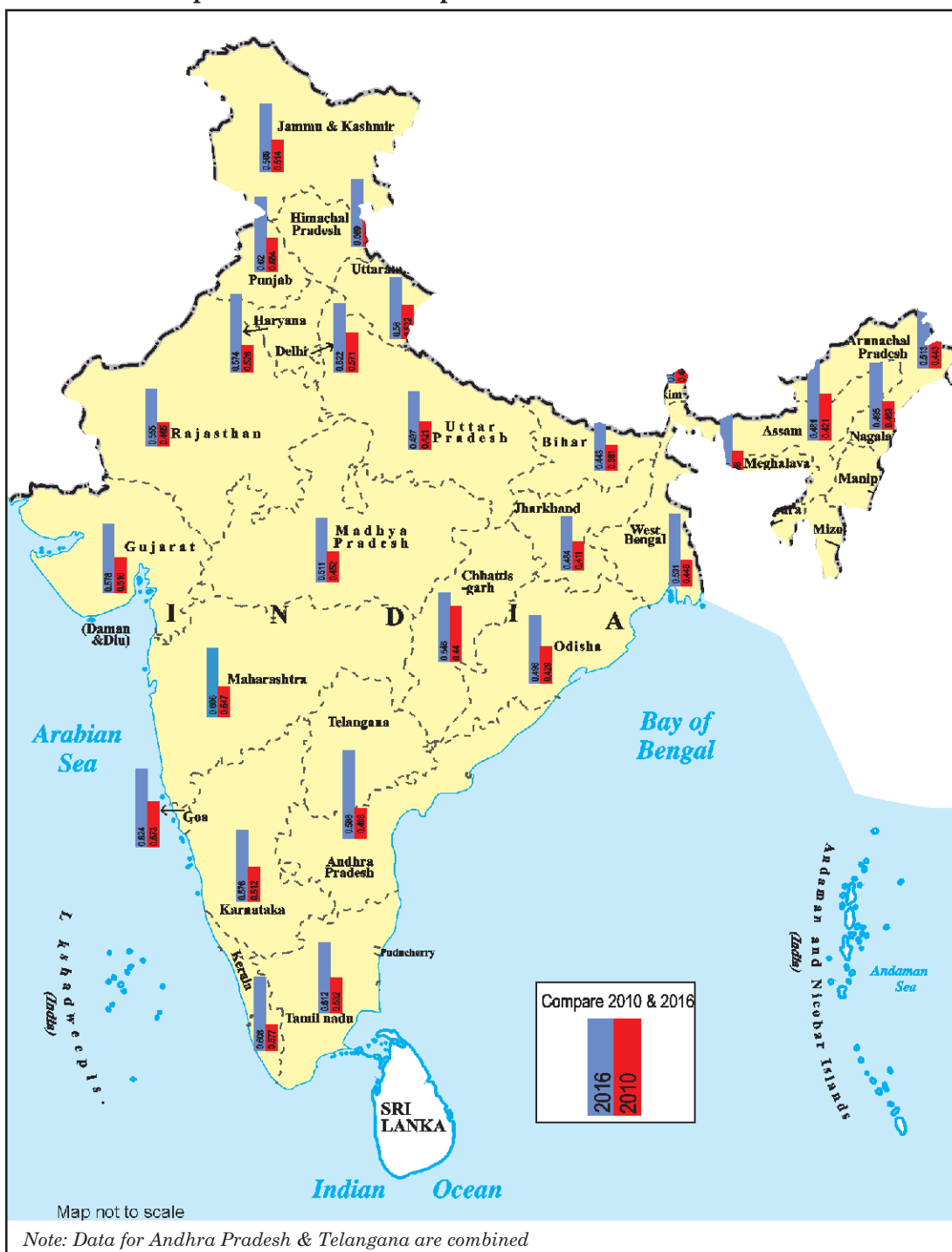


**Table 3.5 Linking Developments (Measured in Per Capita Income)
with YDI – 2016**

Per Capita Income		Above National Level	Below National level
YDI (2016)	Above National Level	Andhra Pradesh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu, Uttarakhand	Jammu & Kashmir, Mizoram
	Below National level	Arunachal Pradesh	Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Orissa, Rajasthan, Tripura, West Bengal

Table 3.5 enunciates the link between development measured in terms of per capita income and YDI. This link establishes the point that all the states, except Jammu & Kashmir, Mizoram and Arunachal Pradesh, have positioned themselves in the two diagonal boxes implying that YDI goes hand in hand with development. Jammu & Kashmir and Mizoram, though less than the national average in terms of income have shown a better performance in youth development.

YOUTH GENDER DEVELOPMENT INDEX

Gender discrimination has been an all pervasive feature of economic and social structure in India. Taking the inequality observed in gender based YDI into consideration, the Youth Gender Development Index (YGDI) has been calculated. To account for the sex ratio in the population, a correction factor was introduced as explained in the methodology chapter. Table 3.6 presents the YDI adjusted for gender disparity and sex ratio in youth development.

At national level, the YDI - 2016 score for male is 0.610 and for female is 0.490 (Table 3.2) in comparison to 0.491 and 0.408 in YDI - 2010. It can be seen from Table 3.5. that there is a progressive reduction in the value of YDI when corrected for gender disparity and sex ratio. It is worth noting that the ranks of states in terms of YGDI and in terms of YDI are more or less similar. The largest gap between YDI and YGDI is seen in Bihar and the lowest in Himachal Pradesh with both YDI and YGDI being the same in Meghalaya.

Table 3.6 Youth Gender Development Index with Political Participation

States	2016				2010			
	YDI	YGDI	YDI-YGDI	YDGI _{sr}	YDI	YGDI	YDI-YGDI	YDGI _{sr}
India	0.566	0.551	0.005	0.534	0.468	0.465	0.003	0.445
Andhra Pradesh	0.591	0.589	0.002	0.589	0.517	0.516	0.001	0.509
Arunachal Pradesh	0.532	0.530	0.002	0.521	0.468	0.467	0.001	0.458
Assam	0.505	0.499	0.006	0.499	0.450	0.446	0.004	0.436
Bihar	0.459	0.445	0.014	0.425	0.398	0.386	0.012	0.367
Chhattisgarh	0.553	0.552	0.001	0.548	0.456	0.454	0.002	0.448
Delhi	0.611	0.602	0.009	0.556	0.558	0.548	0.010	0.488
Goa	0.620	0.618	0.003	0.594	0.563	0.560	0.003	0.545
Gujarat	0.575	0.569	0.006	0.537	0.511	0.508	0.002	0.480
Haryana	0.578	0.571	0.007	0.531	0.536	0.534	0.003	0.488
Himachal Pradesh	0.646	0.646	0.000	0.642	0.587	0.586	0.001	0.572
Jammu and Kashmir	0.566	0.563	0.003	0.533	0.500	0.495	0.005	0.470
Jharkhand	0.482	0.475	0.008	0.461	0.429	0.424	0.005	0.409
Karnataka	0.576	0.573	0.003	0.563	0.519	0.517	0.001	0.503
Kerala	0.605	0.602	0.004	0.574	0.581	0.577	0.003	0.566
Madhya Pradesh	0.520	0.515	0.005	0.489	0.462	0.459	0.004	0.432
Maharashtra	0.594	0.590	0.003	0.562	0.538	0.536	0.002	0.502
Manipur	0.550	0.548	0.002	0.544	0.491	0.490	0.001	0.481
Meghalaya	0.533	0.532	0.000	0.531	0.503	0.502	0.000	0.493
Mizoram	0.572	0.571	0.001	0.569	0.501	0.500	0.001	0.491
Nagaland	0.520	0.519	0.001	0.510	0.494	0.493	0.000	0.484
Odisha	0.515	0.510	0.005	0.506	0.454	0.451	0.004	0.450
Punjab	0.613	0.608	0.005	0.573	0.560	0.558	0.002	0.517
Rajasthan	0.556	0.553	0.003	0.527	0.470	0.467	0.003	0.442
Sikkim	0.604	0.603	0.000	0.569	0.516	0.514	0.002	0.505
Tamil Nadu	0.609	0.607	0.003	0.601	0.544	0.543	0.001	0.543
Tripura	0.525	0.521	0.004	0.515	0.443	0.435	0.008	0.427
Uttar Pradesh	0.505	0.497	0.008	0.471	0.434	0.428	0.007	0.399
Uttarakhand	0.575	0.573	0.002	0.568	0.522	0.520	0.001	0.509
West Bengal	0.548	0.542	0.005	0.534	0.478	0.472	0.006	0.459

Note: YGDI – Youth Gender Development Index; YDGI_{sr} - Youth Gender Development Index, adjusted for Sex Ratio

Table 3.7. provides the details of Youth Gender Development Index - Without Political Participation for India and across the states for 2016 and 2010. Results are more or less the same as in Table 3.6. with minor variations in the magnitudes. Table 3.8. shows the overall YDI - 2016 and YDI - 2010 for India and the states in respect to the components *viz.*, Youth Education Index (YEI), Youth Health Index (YHI), Youth Work Index (YWI), Youth Amenities Index (YAI) and Youth Participation Index (YPI).

Table 3.7 Youth Gender Development Index without Political Participation

States	2016				2010			
	YDI	YGDI	YDI-YGDI	YDGI _{sr}	YDI	YGDI	YDI-YGDI	YDGI _{sr}
India	0.552	0.545	0.006	0.528	0.451	0.448	0.004	0.429
Andhra Pradesh	0.588	0.586	0.002	0.586	0.498	0.497	0.002	0.490
Arunachal Pradesh	0.513	0.511	0.003	0.502	0.443	0.442	0.001	0.434
Assam	0.481	0.472	0.008	0.472	0.421	0.416	0.005	0.407
Bihar	0.443	0.423	0.021	0.404	0.381	0.364	0.016	0.347
Chhattisgarh	0.546	0.544	0.001	0.540	0.440	0.438	0.002	0.431
Delhi	0.622	0.611	0.012	0.565	0.571	0.558	0.013	0.497
Goa	0.624	0.619	0.005	0.595	0.573	0.569	0.004	0.554
Gujarat	0.578	0.571	0.007	0.539	0.516	0.513	0.003	0.485
Haryana	0.574	0.566	0.009	0.526	0.526	0.523	0.003	0.478
Himachal Pradesh	0.669	0.669	0.000	0.665	0.599	0.598	0.001	0.584
Jammu and Kashmir	0.586	0.581	0.004	0.550	0.514	0.508	0.006	0.483
Jharkhand	0.464	0.545	0.011	0.441	0.411	0.405	0.006	0.391
Karnataka	0.576	0.572	0.004	0.562	0.512	0.511	0.002	0.497
Kerala	0.608	0.601	0.006	0.573	0.577	0.571	0.005	0.560
Madhya Pradesh	0.511	0.505	0.006	0.480	0.452	0.448	0.003	0.422
Maharashtra	0.606	0.602	0.004	0.573	0.547	0.545	0.002	0.510
Manipur	0.534	0.532	0.003	0.528	0.465	0.464	0.002	0.455
Meghalaya	0.521	0.521	0.000	0.519	0.488	0.488	0.000	0.479
Mizoram	0.577	0.576	0.001	0.574	0.499	0.498	0.001	0.489
Nagaland	0.495	0.494	0.002	0.485	0.463	0.463	0.000	0.455
Odisha	0.496	0.489	0.008	0.485	0.429	0.424	0.005	0.424
Punjab	0.620	0.613	0.007	0.577	0.554	0.551	0.003	0.510
Rajasthan	0.555	0.551	0.004	0.525	0.465	0.462	0.003	0.437
Sikkim	0.598	0.598	0.000	0.563	0.492	0.489	0.002	0.480
Tamil Nadu	0.612	0.608	0.004	0.603	0.532	0.530	0.002	0.530

Tripura	0.503	0.497	0.006	0.491	0.405	0.394	0.011	0.387
Uttar Pradesh	0.497	0.487	0.011	0.461	0.421	0.413	0.008	0.386
Uttarakhand	0.580	0.577	0.003	0.573	0.522	0.521	0.001	0.510
West Bengal	0.531	0.523	0.008	0.515	0.448	0.440	0.008	0.428

Note: YGDI – Youth Gender Development Index; YGDI sr - Youth Gender Development Index, adjusted for Sex Ratio

During the last six years, (i) the Youth Education Index (YEI) score for India increased from 0.413 to 0.509; (ii) the Youth Health Index (YHI) score increased from 0.521 to 0.598; (iii) the Youth Amenities Index (YAI) score increased from 0.295 to 0.574; and (iv) the Youth Participation Index (YPI) score increased from 0.540 to 0.574. However, the Youth Work Index (YWI) declined from 0.684 to 0.608. This reflects the fact that India has registered the jobless growth not only for its general population but also for the youth. This deserves a serious policy attention. Details of these indices for Indian states and their changes overtime are elaborately discussed in the subsequent sections.

Table 3.8 Components of YDI-2016 and YDI-2010

States	2016							2010						
	YHI	YEI	YWI	YAI	YPI	YDI	YDI-PP	YHI	YEI	YWI	YAI	YPI	YDI	YDI-PP
India	0.598	0.509	0.608	0.545	0.574	0.552	0.556	0.521	0.413	0.684	0.295	0.540	0.451	0.468
Andhra Pradesh	0.586	0.551	0.667	0.580	0.603	0.588	0.591	0.552	0.408	0.762	0.382	0.600	0.498	0.517
Arunachal Pradesh	0.512	0.487	0.585	0.496	0.615	0.513	0.532	0.413	0.354	0.717	0.375	0.582	0.443	0.468
Assam	0.535	0.462	0.531	0.458	0.619	0.481	0.505	0.408	0.417	0.626	0.319	0.586	0.421	0.450
Bihar	0.607	0.372	0.495	0.391	0.531	0.443	0.459	0.478	0.298	0.588	0.272	0.472	0.381	0.398
Chhattisgarh	0.607	0.534	0.727	0.393	0.586	0.546	0.553	0.470	0.350	0.788	0.295	0.525	0.440	0.456
Delhi	0.661	0.649	0.524	0.735	0.571	0.622	0.611	0.607	0.603	0.539	0.611	0.512	0.571	0.558
Goa	0.635	0.631	0.570	0.701	0.610	0.624	0.620	0.629	0.548	0.574	0.580	0.526	0.573	0.563
Gujarat	0.619	0.516	0.653	0.598	0.563	0.578	0.575	0.568	0.429	0.734	0.430	0.491	0.516	0.511
Haryana	0.586	0.573	0.544	0.660	0.594	0.574	0.578	0.580	0.462	0.687	0.447	0.581	0.526	0.536
Himachal Pradesh	0.664	0.638	0.738	0.652	0.566	0.669	0.646	0.590	0.611	0.792	0.475	0.540	0.599	0.587
Jammu and Kashmir	0.706	0.528	0.591	0.560	0.498	0.586	0.566	0.624	0.421	0.629	0.446	0.448	0.514	0.500
Jharkhand	0.560	0.386	0.581	0.410	0.564	0.464	0.482	0.472	0.315	0.687	0.283	0.506	0.411	0.429
Karnataka	0.594	0.541	0.613	0.605	0.577	0.576	0.576	0.569	0.419	0.737	0.421	0.545	0.512	0.519
Kerala	0.695	0.663	0.542	0.603	0.602	0.608	0.605	0.678	0.575	0.570	0.547	0.601	0.577	0.581

Madhya Pradesh	0.557	0.470	0.643	0.447	0.555	0.511	0.520	0.515	0.363	0.738	0.319	0.506	0.452	0.462
Maharashtra	0.641	0.584	0.643	0.591	0.549	0.606	0.594	0.573	0.509	0.724	0.451	0.505	0.547	0.538
Manipur	0.515	0.573	0.541	0.530	0.618	0.534	0.550	0.409	0.515	0.589	0.382	0.611	0.465	0.491
Meghalaya	0.513	0.489	0.665	0.456	0.583	0.521	0.533	0.476	0.402	0.808	0.388	0.566	0.488	0.503
Mizoram	0.521	0.536	0.656	0.627	0.555	0.577	0.572	0.421	0.481	0.687	0.463	0.509	0.499	0.501
Nagaland	0.473	0.562	0.431	0.533	0.636	0.495	0.520	0.395	0.441	0.694	0.385	0.640	0.463	0.494
Odisha	0.567	0.492	0.628	0.383	0.601	0.496	0.515	0.474	0.391	0.680	0.282	0.570	0.429	0.454
Punjab	0.656	0.611	0.606	0.673	0.591	0.620	0.613	0.620	0.481	0.670	0.518	0.588	0.554	0.560
Rajasthan	0.629	0.455	0.666	0.530	0.561	0.555	0.556	0.544	0.325	0.763	0.361	0.493	0.465	0.470
Sikkim	0.529	0.504	0.782	0.652	0.628	0.598	0.604	0.457	0.424	0.656	0.481	0.629	0.492	0.516
Tamil Nadu	0.610	0.622	0.630	0.627	0.601	0.612	0.609	0.584	0.496	0.719	0.410	0.599	0.532	0.544
Tripura	0.519	0.455	0.567	0.524	0.630	0.503	0.525	0.447	0.399	0.499	0.341	0.630	0.405	0.443
Uttar Pradesh	0.530	0.460	0.573	0.492	0.541	0.497	0.505	0.449	0.372	0.641	0.320	0.489	0.421	0.434
Uttarakhand	0.532	0.584	0.599	0.637	0.554	0.580	0.575	0.479	0.501	0.707	0.457	0.518	0.522	0.522
West Bengal	0.618	0.479	0.604	0.491	0.625	0.531	0.548	0.536	0.399	0.608	0.342	0.623	0.448	0.478

Note: YDI-PP – YDI accounting for political participation

YOUTH AND HEALTH

National Health Policy (2015) aims at strengthening the health care services in all dimensions covering the most important aspects such as prevention of diseases, promoting medical pluralism, building knowledge base for better health, financial protection strategies etc. However, youth specific issues in the health sphere are yet to draw the adequate attention of the policy makers. Nevertheless, the National Youth Policy - 2014 stresses the need for special attention to be given to the issues relating to maternal health of young women, awareness creation among the youth about ill-effects of drug / substance abuse and disease control programmes with respect to HIV/AIDS and TB, where youth are more at risk.

This chapter examines the status of health among youth in the country. For the construction of Youth Health Index (YHI), only two important indicators of youth health i.e. life expectancy at age 15 years and the Institutional Deliveries are taken into account. The former is a health outcome indicator, while the latter is a health access indicator. Although, nutrition related indicators like BMI and non-anaemic are also important, due to non-availability of comparable data, these indicators are not included in YDI - 2016.

Youth Health Index (YHI)

Table 3.9 presents the YHI scores for India and across Indian States. The YHI score for India was 0.521 in 2010, and 0.598 in 2016. Thus during the last 6 years, the YHI has changed by 0.077 points. Considering the fact that the overall YDI for all India increased by 0.101 points during the same period, the progress in youth health development in the country is not satisfactory. More efforts are needed for youth health development.

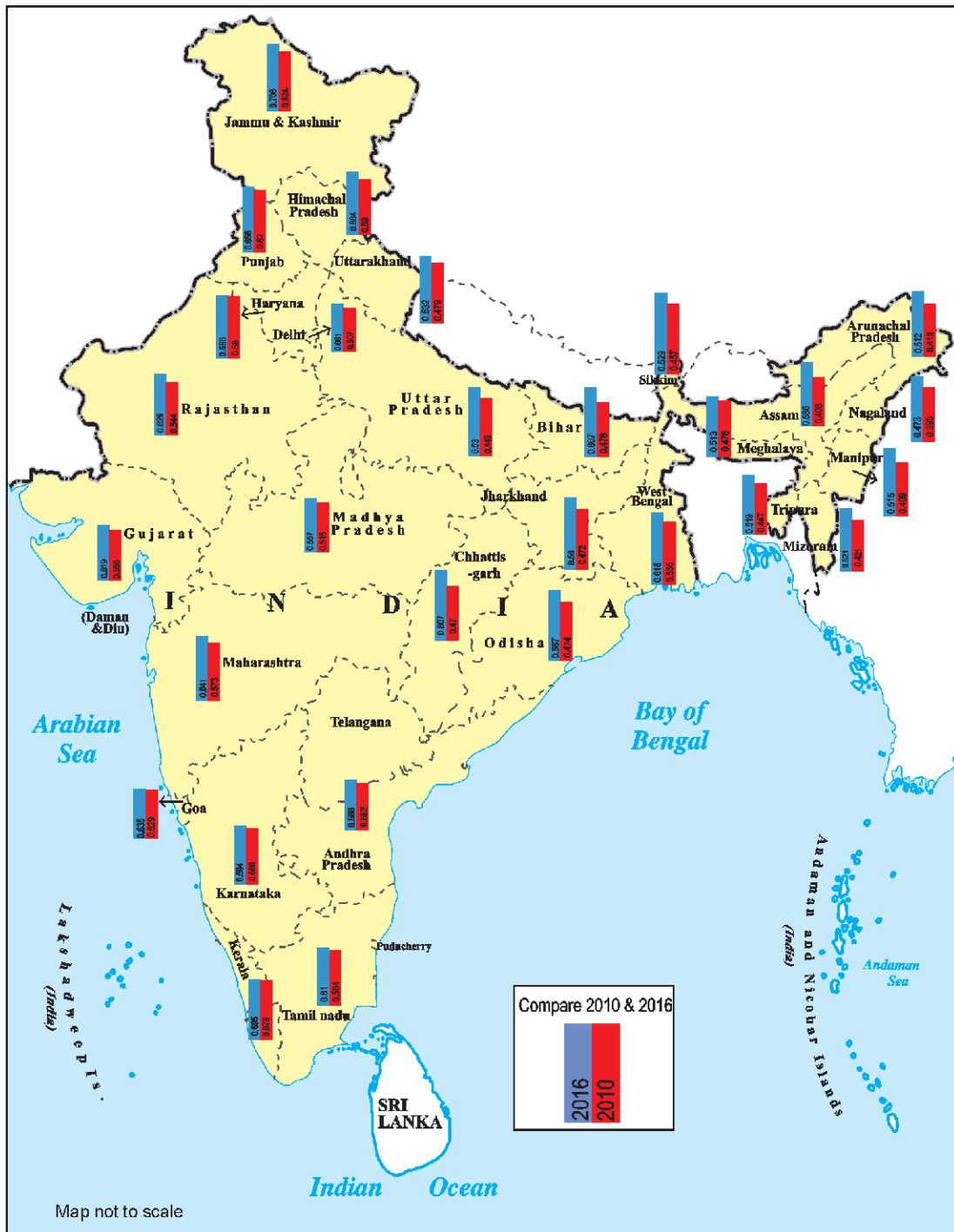
Similarly, the YHI (2016) scores also vary across the Indian states (Table 3.9). The top three states with high YHI scores in 2016 are Jammu & Kashmir (0.706), Himachal Pradesh (0.664) and Maharashtra (0.641), while the bottom three states are Nagaland (0.473), Arunachal Pradesh (0.512) and Meghalaya (0.513). Scores for 13 states are above the all India score and the scores for remaining 16 states are below the all India score. The difference between the top and bottom scores is 0.233 points. It is noticed that in 2010, Kerala ranked 1st with the highest YHI score of 0.678 and Nagaland ranked the lowest with the score of 0.474. The difference between the highest and lowest score was 0.204 points. Further, in 2010, there were 14 states with above all India score. The estimated values of Coefficient of Variation (CV) for 2010 and 2016 are 6.64 and 9.56 respectively, clearly indicating the widening disparities over the years. It is also noticed from the Table 3.9 that all the states made improvement in their YHI scores. The most gains have come from Chhattisgarh, Bihar and Assam. In Chhattisgarh, the improvement in the score is 0.137 point, while in other two states the change in YHI scores are 0.129 and 0.127 respectively. At the same time, the gain is very small in states like Haryana and Goa.

Table 3.9 Youth Health Index for India and States

States	YHI (2016)	Rank	YHI (2010)	Rank	Difference
India	0.598		0.521		0.077
Andhra Pradesh	0.586	15	0.552	12	0.035
Arunachal Pradesh	0.512	28	0.413	26	0.099
Assam	0.535	20	0.408	28	0.127
Bihar	0.607	13	0.478	17	0.129
Chhattisgarh	0.607	12	0.470	21	0.137
Delhi	0.661	4	0.607	5	0.054
Goa	0.635	7	0.629	2	0.006
Gujarat	0.619	9	0.568	11	0.051
Haryana	0.586	16	0.580	8	0.005

Himachal Pradesh	0.664	3	0.590	6	0.074
Jammu and Kashmir	0.706	1	0.624	3	0.081
Jharkhand	0.560	18	0.472	20	0.088
Karnataka	0.594	14	0.569	10	0.024
Kerala	0.695	2	0.678	1	0.017
Madhya Pradesh	0.557	19	0.515	15	0.042
Maharashtra	0.641	6	0.573	9	0.068
Manipur	0.515	26	0.409	27	0.106
Meghalaya	0.513	27	0.476	18	0.037
Mizoram	0.521	24	0.421	25	0.099
Nagaland	0.473	29	0.395	29	0.078
Odisha	0.567	17	0.474	19	0.093
Punjab	0.656	5	0.620	4	0.036
Rajasthan	0.629	8	0.544	13	0.086
Sikkim	0.529	23	0.457	22	0.072
Tamil Nadu	0.610	11	0.584	7	0.026
Tripura	0.519	25	0.447	24	0.072
Uttar Pradesh	0.530	22	0.449	23	0.081
Uttarakhand	0.532	21	0.479	16	0.053
West Bengal	0.618	10	0.536	14	0.083

Map 3.2 Youth Health Index across Indian States - 2010 and 2016



Note: Data for Andhra Pradesh & Telangana are combined

Youth Gender Health Development Index

Table 3.10 presents the Youth Health Development Index score values for male (YHI) and female (YHI), separately for India and the states for 2016 and 2010. It is interesting to note that YHI - 2016 is 0.61 which is higher than the overall YHI - 2016 (0.598), as well as YHI - 2016 (0.586). It is observed that the overall YDI - 2016 is higher than the overall YDI (2016) and the YDI - 2016 (Table 3.4)

It is also interesting to notice from the Table 3.10 the YHI score for female was 0.525 and the YHI score for male was 0.517 in 2010. Therefore, during the last 6 years, the change in YHI score for male, is by 0.063 point, while the YHI score for female changed by 0.085 point.

Wide variation exists in both YHI (2016) and YHI (2016) scores across Indian states. Kerala ranks 1st in YHI with the highest score of 0.724, while Jammu & Kashmir ranks first in YHI with the highest score of 0.707. Nagaland obtains the last rank in both YHI (0.487) and YHI (0.460).

Table 3.10 shows that the Youth Health Index scores for female (YHI) improved in almost all the states during the last 6 years except in Jharkhand and Odisha. The highest gain comes from Haryana, where the improvement is by 0.077 point. Similarly the youth health scores for male (YHI) improved over 2010, in almost all the states except in Haryana. The highest gain (0.132 point) is evident in Bihar.

As shown in the Table 3.10 there is a very minor decline in the value of YHI when corrected for gender disparity and sex ratio. The ranks of the states remain the same. The correlation between YHI and YGHI is 0.999, the correlation between YHI and YGHI_{sr} is 0.972 and correlation between YGHI and YGHI_{sr} is 0.973.

Table 3.10 Youth Gender Health Development Index for India and States

States	YHI (2016)					YHI (2010)				
	YHI _f	YHI _m	YHI	YGHI	YGHI _{sr}	YHI _f	YHI _m	YHI	YGHI	YGHI _{sr}
India	0.610	0.586	0.598	0.598	0.579	0.525	0.517	0.521	0.521	0.499
Andhra Pradesh	0.614	0.558	0.586	0.585	0.585	0.579	0.525	0.552	0.550	0.543
Arunachal Pradesh	0.527	0.498	0.512	0.512	0.503	0.408	0.418	0.413	0.413	0.405
Assam	0.551	0.520	0.535	0.535	0.535	0.403	0.413	0.408	0.408	0.599
Bihar	0.580	0.631	0.607	0.606	0.579	0.455	0.499	0.478	0.477	0.455
Chhattisgarh	0.617	0.597	0.607	0.607	0.602	0.471	0.470	0.470	0.470	0.463
Delhi	0.662	0.660	0.661	0.661	0.611	0.624	0.593	0.607	0.606	0.541
Goa	0.637	0.633	0.635	0.635	0.610	0.646	0.612	0.629	0.628	0.612
Gujarat	0.643	0.598	0.619	0.618	0.584	0.592	0.546	0.568	0.567	0.535
Haryana	0.620	0.556	0.586	0.584	0.543	0.607	0.558	0.580	0.579	0.529
Himachal Pradesh	0.686	0.642	0.664	0.663	0.659	0.605	0.572	0.590	0.589	0.575
Jammu and Kashmir	0.704	0.707	0.706	0.706	0.667	0.609	0.638	0.624	0.624	0.593
Jharkhand	0.536	0.582	0.560	0.559	0.543	0.450	0.493	0.472	0.471	0.454
Karnataka	0.615	0.574	0.594	0.593	0.583	0.590	0.550	0.569	0.569	0.554
Kerala	0.724	0.663	0.695	0.694	0.661	0.708	0.647	0.678	0.677	0.663
Madhya Pradesh	0.573	0.542	0.557	0.556	0.528	0.515	0.514	0.515	0.515	0.485
Maharashtra	0.652	0.630	0.641	0.641	0.610	0.585	0.563	0.573	0.573	0.536
Manipur	0.530	0.500	0.515	0.515	0.511	0.404	0.414	0.409	0.409	0.402
Meghalaya	0.528	0.498	0.513	0.513	0.511	0.470	0.482	0.476	0.476	0.467
Mizoram	0.536	0.505	0.521	0.520	0.518	0.416	0.426	0.421	0.421	0.413
Nagaland	0.487	0.460	0.473	0.473	0.464	0.390	0.400	0.395	0.395	0.388

Odisha	0.560	0.573	0.567	0.566	0.563	0.472	0.476	0.474	0.474	0.473
Punjab	0.676	0.639	0.656	0.656	0.618	0.635	0.608	0.620	0.620	0.574
Rajasthan	0.667	0.595	0.629	0.627	0.598	0.556	0.533	0.544	0.543	0.514
Sikkim	0.545	0.514	0.529	0.528	0.498	0.451	0.463	0.457	0.457	0.448
Tamil Nadu	0.624	0.596	0.610	0.610	0.604	0.585	0.583	0.584	0.584	0.584
Tripura	0.534	0.504	0.519	0.518	0.513	0.442	0.452	0.447	0.447	0.439
Uttar Pradesh	0.544	0.518	0.530	0.530	0.502	0.444	0.454	0.449	0.449	0.419
Uttarakhand	0.545	0.519	0.532	0.532	0.528	0.473	0.484	0.479	0.479	0.468
West Bengal	0.618	0.619	0.618	0.618	0.609	0.539	0.532	0.536	0.535	0.521

Note: YHI_m – Youth Health Index_Male; YHI_f – Youth Health Index_Female; $YGHI$ – Youth Gender Health Index; $YGHI_{sr}$ Youth Gender Health Index, adjusted for Sex Ratio.

Youth Health Outcome and Access Indices

Health Outcome Index (YHOI)

As stated earlier, due to the non-availability of comparable data on nutrition variables like BMI, non-anaemic, etc., YDI - 2016 used only the Life Expectancy at the age of 15 years as health outcome indicator. Table 3.11 presents Youth Health Outcome Index at national and state levels. In addition to this, YHOI has been computed for male and female along with gender and sex ratio adjusted indices for 2016. In order to facilitate comparison, corresponding YHOI from YDI - 2010 is also presented. The YHOI score for all India is 0.557 in 2016, as against its score of 0.51 in 2010. Similar to the other indices, wide variations exist across Indian states/UTs.

Kerala has the highest score of 0.659 among the Indian States, while Tripura, Sikkim, Nagaland, Mizoram, Meghalaya, Manipur, Arunachal Pradesh, and Assam have the lowest YHOI score (Table 3.11). Kerala also ranks 1st in YHOI score for female (0.692) and Jammu & Kashmir ranks 1st in YHOI score for male (0.675).

In consistent with YHOI, the $YHOI_f$ and $YHOI_m$ are also low for Tripura, Sikkim, Nagaland, Mizoram, Meghalaya, Manipur, Arunachal Pradesh, and Assam.

It may be noted that youth life expectancy in Japan for male is 65.52 years and for female is 71.89 years. Correspondingly, in the Indian scenario, the life expectancy for male and female are 55.1 and 59.3 years respectively. Even in Kerala with highest female life expectancy, female survive 8 years less than female in Japan. Similarly, in Jammu and Kashmir with highest male life expectancy, male survive 6 years less than male in Japan. Though there has been an improvement in YHI and its components over the last six years, India is yet to reach at par with the developed countries.

Table 3.11 Youth Health Outcome Index for India and States

States	YHOI (2016)					YHOI (2010)				
	YHO_f	YHO_m	YHOI	YGHOI	$YGHOI_{sr}$	YHO_f	YHO_m	YHOI	YGHOI	$YGHOI_{sr}$
India	0.571	0.544	0.557	0.557	0.539	0.537	0.526	0.531	0.531	0.509
Andhra Pradesh	0.569	0.507	0.538	0.536	0.536	0.547	0.485	0.516	0.514	0.507
Arunachal Pradesh	0.498	0.463	0.480	0.480	0.471	0.428	0.441	0.435	0.435	0.426
Assam	0.498	0.463	0.481	0.480	0.480	0.428	0.441	0.435	0.435	0.426
Bihar	0.531	0.588	0.561	0.599	0.534	0.499	0.599	0.530	0.528	0.504
Chhattisgarh	0.612	0.587	0.599	0.599	0.594	0.478	0.476	0.478	0.477	0.470
Delhi	0.623	0.621	0.622	0.622	0.575	0.618	0.579	0.596	0.596	0.531
Goa	0.628	0.624	0.626	0.626	0.601	0.605	0.568	0.586	0.585	0.570
Gujarat	0.601	0.550	0.574	0.573	0.541	0.580	0.524	0.550	0.549	0.518
Haryana	0.614	0.535	0.572	0.569	0.529	0.625	0.562	0.591	0.589	0.538
Himachal Pradesh	0.651	0.602	0.626	0.626	0.622	0.641	0.591	0.616	0.614	0.600
Jammu and Kashmir	0.671	0.675	0.673	0.673	0.636	0.610	0.647	0.630	0.629	0.598
Jharkhand	0.531	0.588	0.560	0.559	0.543	0.499	0.559	0.530	0.528	0.509
Karnataka	0.572	0.526	0.548	0.547	0.538	0.565	0.518	0.540	0.539	0.525

Kerala	0.692	0.623	0.659	0.657	0.627	0.673	0.606	0.640	0.638	0.625
Madhya Pradesh	0.528	0.492	0.509	0.508	0.483	0.478	0.476	0.477	0.477	0.450
Maharashtra	0.612	0.587	0.599	0.599	0.570	0.577	0.550	0.563	0.562	0.526
Manipur	0.498	0.463	0.481	0.480	0.476	0.428	0.441	0.435	0.435	0.426
Meghalaya	0.498	0.463	0.481	0.480	0.479	0.428	0.441	0.435	0.435	0.426
Mizoram	0.498	0.463	0.481	0.480	0.478	0.428	0.441	0.435	0.435	0.426
Nagaland	0.498	0.463	0.480	0.480	0.471	0.428	0.441	0.435	0.435	0.426
Odisha	0.515	0.530	0.522	0.522	0.519	0.473	0.479	0.476	0.476	0.475
Punjab	0.638	0.596	0.616	0.615	0.579	0.623	0.591	0.606	0.605	0.560
Rajasthan	0.637	0.554	0.594	0.591	0.563	0.592	0.562	0.576	0.576	0.545
Sikkim	0.498	0.463	0.480	0.479	0.451	0.428	0.441	0.435	0.435	0.426
Tamil Nadu	0.58	0.548	0.564	0.564	0.559	0.537	0.535	0.536	0.536	0.536
Tripura	0.498	0.463	0.481	0.480	0.475	0.428	0.441	0.435	0.435	0.426
Uttar Pradesh	0.523	0.492	0.507	0.506	0.480	0.489	0.503	0.496	0.496	0.463
Uttarakhand	0.523	0.492	0.507	0.507	0.503	0.489	0.503	0.496	0.496	0.485
West Bengal	0.584	0.585	0.584	0.584	0.575	0.562	0.553	0.557	0.557	0.542

Note: YHOL_m - Youth Health Outcome Index_Male; YHOL_f - Youth Health Outcome Index_Female; YGHOI - Youth Gender Health Outcome Index; YGHOI_{sr} - Youth Gender Health Outcome Index, adjusted for Sex Ratio.

Youth Health Access Index (YHAI)

The Youth Health Access Index (YHAI) has been calculated using the data on percentage of deliveries among young women that were attended by the health personnel. The data was compiled from third National Family Health Survey 2005 for the YDI - 2010 and fourth District Level Household and Facility Survey 2011 for the year YDI 2016. At the national level, only 48.2 percent of deliveries among young women were attended by the trained health personnel in (2005) and it has increased to 84.9 percent in (2011) with an increase of 36.7 percentage points between the two time periods. There is a significant variation across the

states in the deliveries attended by trained health personnel. Kerala has the highest score of 99.8% and Jharkhand has the lowest score of 55.9% in YHAI – 2016 against the highest score of Kerala (99.7%) and the lowest score of Uttar Pradesh (29.2%) in YHAI - 2010. Thus, the Co-efficient of Variation has declined from 38% in YHAI - 2010 to 19% in YHAI - 2016, showing slight improvement in highest ranking states.

Table 3.12 Youth Health Access Index for India and States

States	YHAI (2016)		YHAI (2010)	
	YGHAI	YGHAI _{sr}	YGHAI	YGHAI _{sr}
India	0.849	0.823	0.482	0.462
Andhra Pradesh	0.954	0.954	0.742	0.732
Arunachal Pradesh	0.669	0.657	0.334	0.328
Assam	0.973	0.972	0.312	0.305
Bihar	0.993	0.949	0.309	0.294
Chhattisgarh	0.640	0.635	0.443	0.436
Delhi	0.955	0.883	0.651	0.581
Goa	0.674	0.647	0.943	0.918
Gujarat	0.998	0.942	0.647	0.611
Haryana	0.648	0.603	0.542	0.495
Himachal Pradesh	0.917	0.911	0.502	0.490
Jammu and Kashmir	0.927	0.876	0.605	0.575
Jharkhand	0.559	0.543	0.287	0.277
Karnataka	0.903	0.888	0.713	0.694
Kerala	0.998	0.951	0.997	0.976
Madhya Pradesh	0.864	0.820	0.707	0.666
Maharashtra	0.953	0.908	0.617	0.577
Manipur	0.688	0.682	0.317	0.311
Meghalaya	0.674	0.671	0.694	0.681
Mizoram	0.735	0.732	0.371	0.364

Nagaland	0.445	0.437	0.259	0.254
Odisha	0.837	0.832	0.464	0.463
Punjab	0.973	0.916	0.686	0.635
Rajasthan	0.838	0.800	0.432	0.409
Sikkim	0.835	0.787	0.558	0.548
Tamil Nadu	0.993	0.984	0.932	0.932
Tripura	0.719	0.711	0.500	0.491
Uttar Pradesh	0.640	0.607	0.292	0.272
Uttarakhand	0.648	0.643	0.415	0.406
West Bengal	0.807	0.794	0.457	0.444

Note: YGHAI_{sr} - Youth Gender Health Access Index adjusted for Sex Ratio

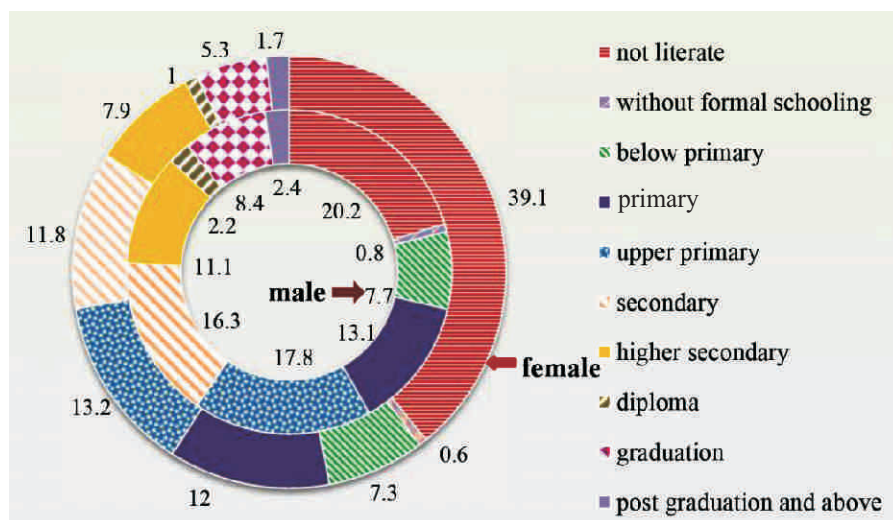
YOUTH AND EDUCATION

According to Article 26 of the 1948 Universal Declaration of Human Rights “everyone has the right to education”. Education is considered not only a right but a passport for the human development. In 2013, the United Nations highlighted that around 61 million children in their primary age are out of school and almost half of them are in conflict affected poor countries. It is estimated that 250 million children cannot read, write or count well. All the stake holders who make policy advocacy directly or indirectly insisted that education be given priority with an emphasis not only for access to education but also for quality education.

With all the consistent efforts to promote education, India has witnessed a considerable improvement in literacy rate over a period of time. Yet, there are persistent disparities with reference to educational attainment across the geographic regions, religion, caste, class and gender. Though, adult literacy (15years and above) rate in India is 71 percent according to NSSO 71st Round (2014), there is a significant disparity in literacy rate in rural and urban regions for all the age groups.

The youth literacy (15-29 years) has shown a substantial improvement from 76.4 percent to 86.54 percent over the last decade, but the female youth literacy rate is only around 42.1 percent against male youth literacy rate of 89.6 percent in 2014.

Figure 3.3 Percentage Distribution of Population (age 15 years and above) by Completed Level of Education



Source: NSSO 71st Round (2014)

Youth Education Index (YEI)

The Youth Education Index (YEI) is a composite measure of outcome (Educational Attainment) and access (Gross Enrollment Ratio) indices and it provides an estimate on the current status of education of youth in India. Table 3.13 presents the computed Youth Education Index (YEI) for India as well as for all the states for the year 2016 along with the corresponding index from YDI - 2010 in order to facilitate the comparison and assess the progress in YEI over a period of time. The YEI (2016) score for India is 0.509 which is an improvement by 0.096 point over the YEI (2010) score of 0.414. Kerala ranks first in YEI (2016) with the highest score of 0.663, closely followed by Delhi (0.649) and Himachal Pradesh (0.638) with second and third ranks respectively. The states with low values are Bihar (0.372), Jharkhand (0.386) and Rajasthan (0.455). While comparing with national average, it is observed that 17 states are above national YEI, while the remaining 12 states fall below the national YEI.

Thus, there exists a wide variation in the YEI - 2016 scores across Indian states. The difference between Kerala and Bihar is 0.291 point i.e., 29.1 percent reflecting the wide disparity in youth education among the states. A comparison with YEI (2010) reveals that in all the states, the YEI (2016) scores are improved (Figure 3.5). Considerable improvement is evident in Chhattisgarh (0.184point), Andhra Pradesh (0.143 point), Punjab (0.13 point), Tamil Nadu (0.126 point), Nagaland (0.121 point) and Haryana (0.111 point). The inequality across the states also increased over the years as the estimated coefficient for 2016 is 7.064, while it is 5.296 for 2010.

Table 3.13 Youth Education Index (YEI) for India and States in Descending Order of 2016 Values

States	YEI (2016)	YEI (2010)
India	0.509	0.413
Kerala	0.663	0.575
Delhi	0.649	0.603
Himachal Pradesh	0.638	0.611
Goa	0.631	0.548
Tamil Nadu	0.622	0.496
Punjab	0.611	0.481
Maharashtra	0.584	0.509
Uttarakhand	0.584	0.501
Haryana	0.573	0.462
Manipur	0.573	0.515
Nagaland	0.562	0.441
Andhra Pradesh	0.551	0.408
Karnataka	0.514	0.419
Mizoram	0.536	0.481
Chhattisgarh	0.534	0.350
Jammu & Kashmir	0.528	0.421
Gujarat	0.516	0.429
Sikkim	0.504	0.424
Odisha	0.492	0.391
Meghalaya	0.489	0.402
Arunachal Pradesh	0.487	0.354
West Bengal	0.479	0.399
Madhya Pradesh	0.470	0.363
Assam	0.462	0.417
Uttar Pradesh	0.460	0.372
Tripura	0.455	0.399
Rajasthan	0.455	0.325
Jharkhand	0.386	0.315
Bihar	0.372	0.298

Map 3.3 Youth Education Index across Indian States - 2010 and 2016

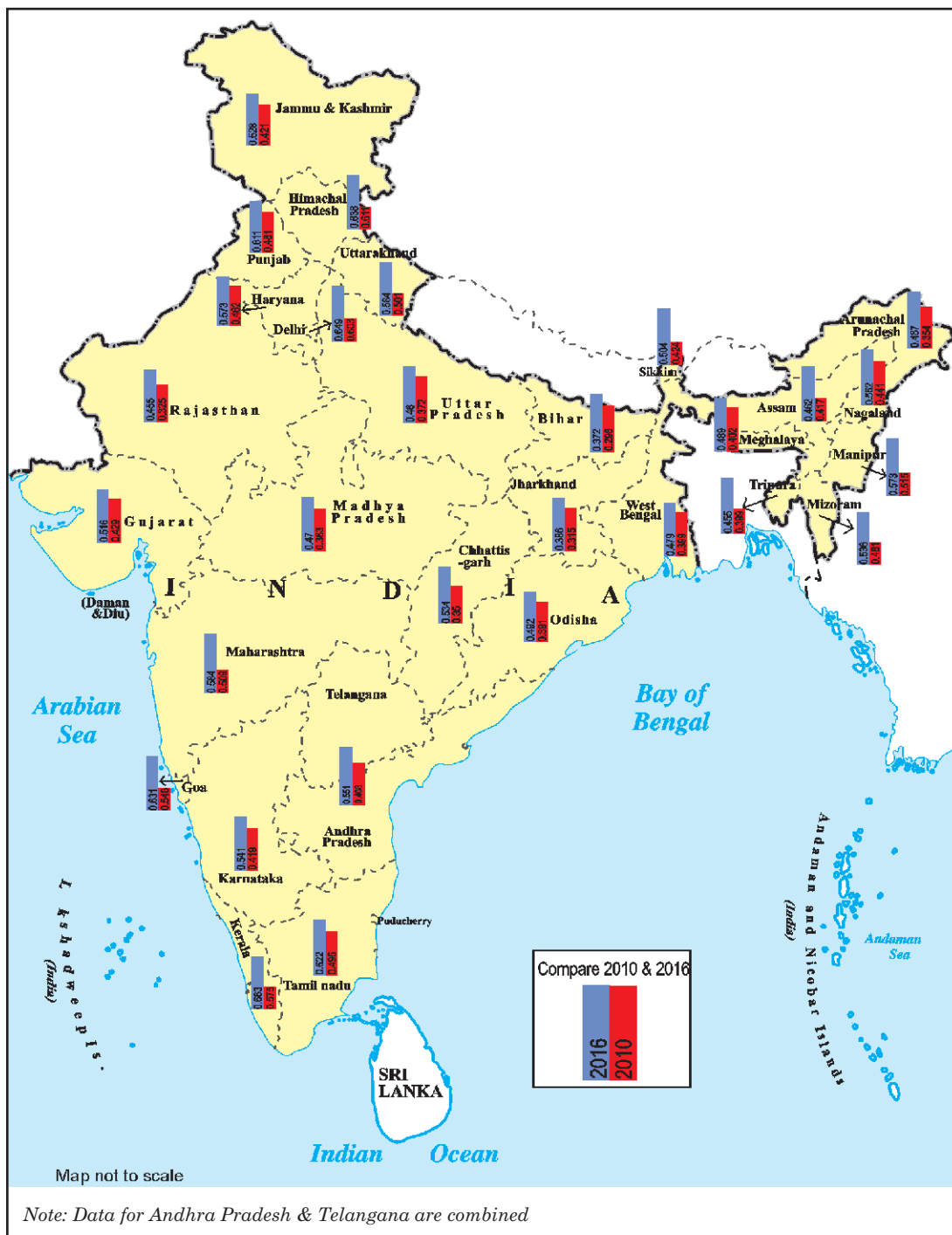


**Figure 3.4 Youth Educational Attainment in India:
Comparison of 2010 and 2016**

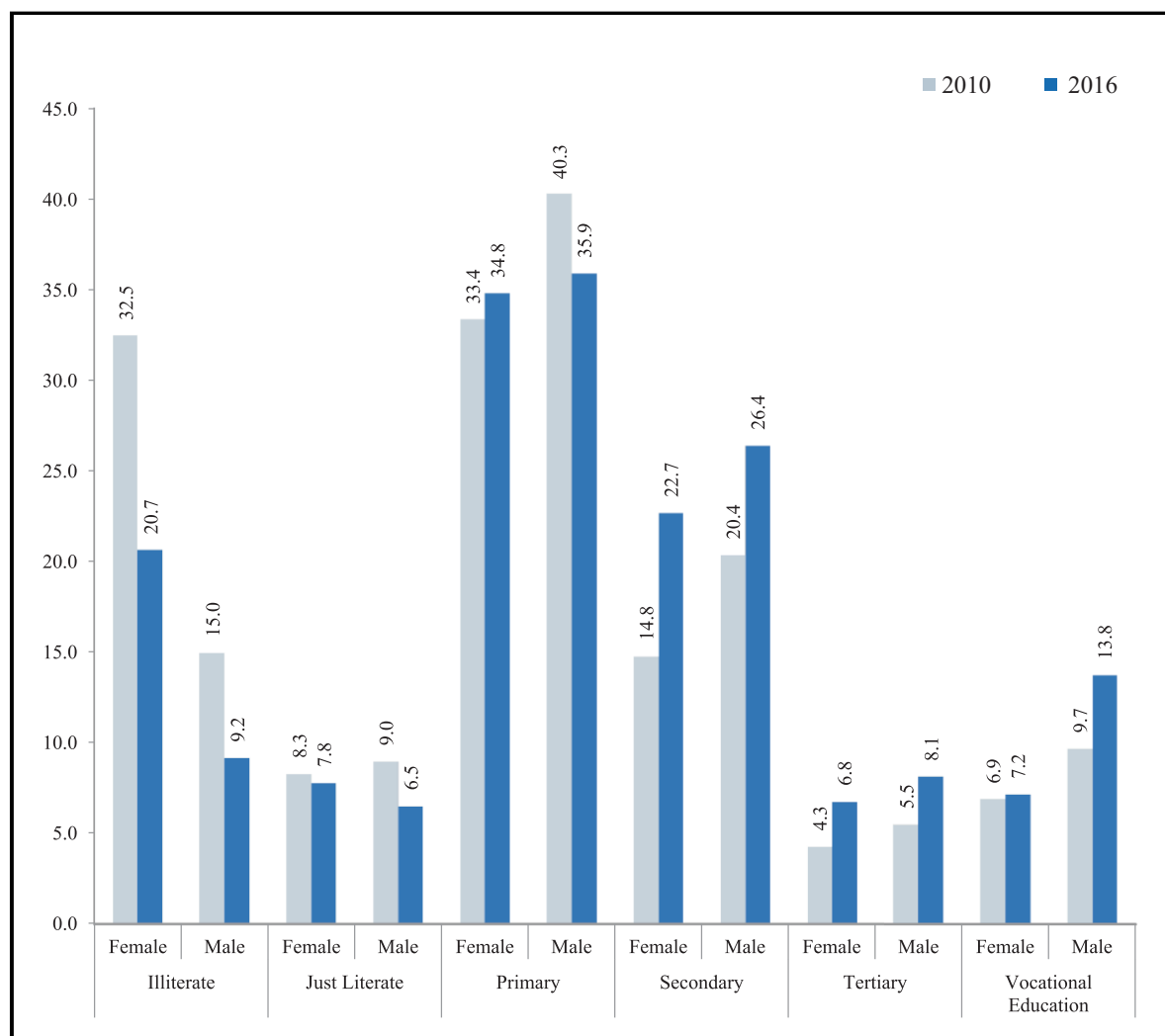
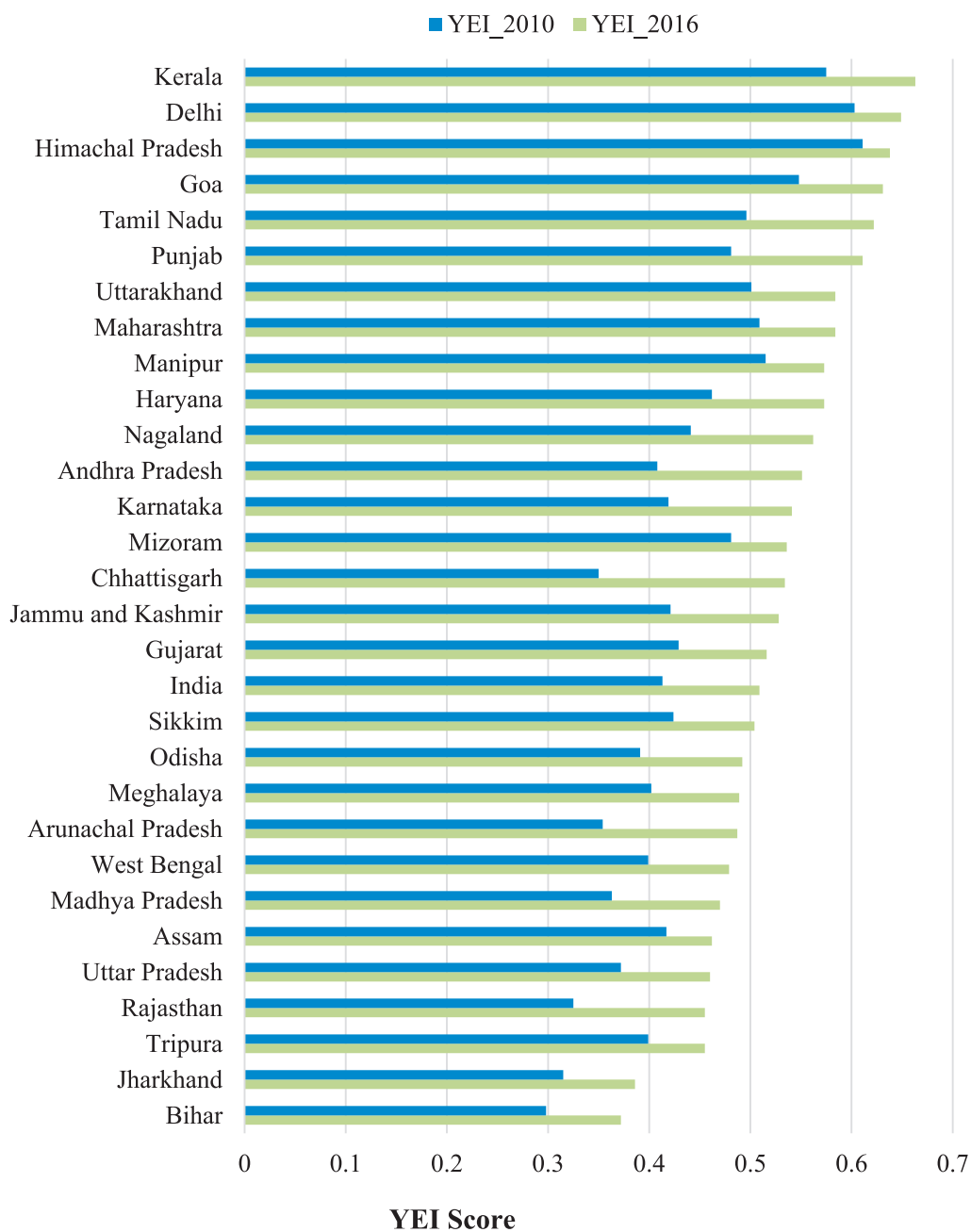


Figure 3.5 Youth Education Index - 2016 arranged according to 2016 in comparison with 2010 in descending order



Youth Gender Education Index

As in case of other indices, there exists a gender disparity in the estimated Youth Education Index at the national level and for almost all the states. At the national level, the YEI (2016) score for female is 0.463 and for male is 0.551 (Table 3.14) and the corresponding figures in YDI - 2010 were 0.360 and 0.462 respectively. It is encouraging to observe that YEI score for female in 2016 increased by 0.103 point over 2010 and this change is higher than the change in male score (0.089) as well as total score (0.096).

However, it is still below the overall YEI score and YEI score for male. It is also noticed from the Table 3.14 that Kerala (0.662) ranks first in YEI score for male, followed by Delhi (2nd rank) and Tamil Nadu (3rd rank). Kerala (0.664) again tops the list which is closely followed by Delhi (2nd rank) and Himachal Pradesh (3rd rank) in terms of YEI score for female. Bihar ranks 29th in YEI score for female (0.300) followed by Jharkhand with 28th rank in YEI score for male (0.431). These findings highlight the gender inequality in education in India and across its States/UTs. This is also confirmed by the fact that the YEI score declines to 0.505 when estimated for Youth Gender Development and further to 0.489 when adjusted for sex ratio (Table 3.14).

Table 3.14 Youth Gender Education Index for India and States

States	2010						2010					
	YEI _f	YEI _m	YEI	Rank	YGEI	YGEI _{sr}	YEI _f	YEI _m	YEI	Rank	YGEI	YGEI _{sr}
India	0.463	0.551	0.509		0.505	0.489	0.360	0.462	0.413		0.407	0.390
Andhra Pradesh	0.499	0.603	0.551	12	0.546	0.546	0.344	0.471	0.408	18	0.398	0.393
Arunachal Pradesh	0.462	0.512	0.487	21	0.486	0.477	0.315	0.391	0.354	25	0.350	0.343
Assam	0.444	0.479	0.462	24	0.461	0.461	0.385	0.449	0.417	17	0.415	0.406
Bihar	0.300	0.438	0.372	29	0.359	0.343	0.212	0.376	0.298	29	0.275	0.262
Chhattisgarh	0.496	0.571	0.534	15	0.531	0.527	0.279	0.419	0.350	26	0.336	0.331
Delhi	0.636	0.661	0.649	2	0.649	0.600	0.577	0.624	0.603	2	0.602	0.537
Goa	0.619	0.641	0.631	4	0.630	0.606	0.543	0.552	0.548	4	0.548	0.533
Gujarat	0.455	0.570	0.516	17	0.509	0.481	0.370	0.482	0.429	13	0.421	0.398
Haryana	0.536	0.606	0.573	9	0.571	0.531	0.409	0.507	0.462	11	0.457	0.418

Himachal Pradesh	0.632	0.644	0.638	3	0.638	0.634	0.577	0.644	0.611	1	0.610	0.596
Jammu and Kashmir	0.489	0.563	0.528	16	0.526	0.497	0.366	0.470	0.421	15	0.414	0.394
Jharkhand	0.340	0.431	0.386	28	0.381	0.370	0.240	0.384	0.315	28	0.298	0.288
Karnataka	0.517	0.564	0.541	13	0.540	0.531	0.381	0.456	0.419	16	0.416	0.405
Kerala	0.664	0.662	0.663	1	0.663	0.632	0.572	0.578	0.575	3	0.575	0.562
Madhya Pradesh	0.408	0.525	0.470	23	0.463	0.439	0.295	0.423	0.363	24	0.351	0.331
Maharashtra	0.549	0.615	0.584	7	0.582	0.555	0.475	0.539	0.509	6	0.507	0.475
Manipur	0.554	0.592	0.573	10	0.572	0.568	0.497	0.535	0.515	5	0.515	0.510
Meghalaya	0.493	0.486	0.489	20	0.489	0.488	0.395	0.408	0.402	19	0.401	0.396
Mizoram	0.531	0.542	0.536	14	0.536	0.534	0.475	0.487	0.481	9	0.481	0.470
Nagaland	0.545	0.578	0.562	11	0.561	0.551	0.431	0.451	0.441	12	0.441	0.425
Odisha	0.438	0.546	0.492	19	0.486	0.483	0.328	0.453	0.391	22	0.381	0.380
Punjab	0.591	0.630	0.611	6	0.611	0.575	0.471	0.488	0.481	10	0.480	0.446
Rajasthan	0.366	0.535	0.455	27	0.439	0.419	0.238	0.403	0.325	27	0.303	0.287
Sikkim	0.482	0.524	0.504	18	0.503	0.474	0.391	0.453	0.424	14	0.421	0.395
Tamil Nadu	0.597	0.648	0.622	5	0.621	0.615	0.465	0.526	0.496	8	0.494	0.493
Tripura	0.436	0.474	0.455	26	0.455	0.450	0.378	0.419	0.399	21	0.398	0.394
Uttar Pradesh	0.401	0.513	0.460	25	0.453	0.429	0.306	0.430	0.372	23	0.361	0.338
Uttarakhand	0.558	0.609	0.584	8	0.582	0.578	0.487	0.515	0.501	7	0.500	0.490
West Bengal	0.444	0.513	0.479	22	0.477	0.469	0.351	0.444	0.399	20	0.393	0.382

Note: YEI_m – Youth Education Index_Male; YEI_f - Youth Education Index_Female; $YGEI$ - Youth Gender Education Index; $YGEI_{sr}$ - Youth Gender Education Index, adjusted for Sex Ratio

Youth Education Outcome and Access Indices

There are two components of Youth Education Index (YEI) viz. (i) Educational attainment comprising of percentage of youth who have completed their education level at pre-primary, primary, secondary, tertiary and vocational, each with differential weight. The horizontal aggregation of all educational levels gives Youth Education Outcome Index; and (ii) Youth Access Index is measured by using Gross Enrollment Ratio (GER) at secondary and tertiary level.

Youth Education Outcome Index (YEOI)

For the computation of YEOI, the data set has been compiled from NSS 62nd round(2005-06) and 68th round (2011-12). As can be seen from the Table 3.15, the Youth Education Outcome Index (YEOI) value for India is 0.560 which is an improvement over the YEOI score for 2010 (0.472). Among the states, Kerala ranks 1st with an index value of 0.737 and the lowest rank is obtained by Bihar with the index value of 0.409. The difference between highest and the lowest YEOI is around 32 percent. With respect to YEOI for male and female, a significant difference is observed among the states. The largest difference was observed in Rajasthan (18 percent) whereas the lowest is recorded in Meghalaya (0.007). When adjusted for gender disparity and sex ratio, the YEOI further declines considerably highlighting the differential educational status among male and female across the states in India.

Youth Education Access Index (YEAJ)

The calculated Youth Education Access Index (YEAJ) shows a disturbing condition of access to education by the youth of the country. As stated earlier, Gross Enrollment Ratio (GER) at secondary and tertiary level is used to measure the Youth Education Access Index. There has been substantial improvement in both secondary and tertiary enrollment ratios among young men and women over the years. At the national, level the secondary enrollment ratio for young females increased from 34.2 to 54.5 and for males it increased from 43.4 to 58.8 (Table 3.16). The improvement in tertiary enrollment ratio was also reasonably good, although enrollment ratios themselves are quite low. Tertiary enrollment ratio for females increased from 7.9 to 19.4 and for males the increase was from 10.9 to 22.1.

Youth Education Access Index increased from 0.223 to 0.343 at the national level with wide variations across states over the years (Table 3.17). The YEAJ for Himachal Pradesh declined over the years while in all other states, improvement has been recorded. However, it is

noticed that Himachal Pradesh ranks second in YEAI next to Delhi and Tamil Nadu ranks third. Similar to YEOI, there is a remarkable difference in YEAI for male and female. However, for the states of Delhi, Kerala, Meghalaya, Goa, Assam, Punjab, Haryana, Jammu & Kashmir and Sikkim, YEAI for female is encouragingly higher. This scenario may be attributed to the favourable socio-economic conditions and education policies of the respective states. It is seen that states with higher YEOI have relatively higher YEAI than the states with lower YEOI.

Table 3.15 Youth Education Outcome Index for India and States

States	YEOI (2016)					YEOI (2010)				
	YEO _f	YEO _m	YEOI	YGEOI	YGEOI _{sr}	YEO _f	YEO _m	YEOI	YGEOI	YGEOI _{sr}
India	0.504	0.613	0.560	0.555	0.537	0.409	0.530	0.472	0.464	0.445
Andhra Pradesh	0.534	0.661	0.598	0.591	0.591	0.379	0.526	0.454	0.442	0.436
Arunachal Pradesh	0.503	0.559	0.532	0.530	0.521	0.353	0.432	0.393	0.389	0.382
Assam	0.510	0.568	0.539	0.537	0.537	0.459	0.531	0.496	0.493	0.483
Bihar	0.321	0.490	0.409	0.391	0.374	0.254	0.448	0.355	0.328	0.314
Chhattisgarh	0.577	0.684	0.631	0.626	0.621	0.311	0.470	0.392	0.376	0.370
Delhi	0.654	0.688	0.672	0.672	0.621	0.605	0.707	0.661	0.657	0.586
Goa	0.677	0.729	0.704	0.703	0.676	0.623	0.658	0.640	0.640	0.624
Gujarat	0.519	0.664	0.596	0.587	0.554	0.424	0.564	0.498	0.488	0.462
Haryana	0.566	0.665	0.619	0.615	0.572	0.463	0.594	0.534	0.526	0.482
Himachal Pradesh	0.670	0.683	0.676	0.676	0.672	0.573	0.647	0.611	0.608	0.595
Jammu and Kashmir	0.532	0.639	0.589	0.584	0.552	0.424	0.561	0.496	0.486	0.462
Jharkhand	0.387	0.508	0.449	0.441	0.428	0.286	0.468	0.380	0.358	0.345
Karnataka	0.565	0.628	0.597	0.595	0.585	0.422	0.518	0.471	0.466	0.455
Kerala	0.725	0.750	0.737	0.737	0.702	0.684	0.704	0.694	0.694	0.678
Madhya Pradesh	0.442	0.557	0.503	0.496	0.471	0.333	0.471	0.406	0.394	0.371
Maharashtra	0.602	0.682	0.644	0.641	0.611	0.536	0.613	0.577	0.574	0.538

Manipur	0.611	0.664	0.637	0.636	0.631	0.579	0.622	0.601	0.600	0.594
Meghalaya	0.567	0.574	0.571	0.571	0.569	0.452	0.469	0.460	0.460	0.454
Mizoram	0.588	0.603	0.596	0.595	0.593	0.561	0.567	0.564	0.564	0.551
Nagaland	0.666	0.708	0.687	0.687	0.675	0.544	0.573	0.559	0.559	0.538
Odisha	0.498	0.634	0.565	0.557	0.554	0.376	0.501	0.439	0.430	0.429
Punjab	0.662	0.726	0.696	0.694	0.654	0.551	0.583	0.568	0.568	0.526
Rajasthan	0.388	0.580	0.488	0.469	0.448	0.271	0.453	0.367	0.344	0.326
Sikkim	0.512	0.579	0.547	0.545	0.514	0.452	0.541	0.499	0.495	0.465
Tamil Nadu	0.636	0.700	0.668	0.666	0.660	0.520	0.602	0.561	0.558	0.558
Tripura	0.485	0.521	0.503	0.502	0.497	0.436	0.480	0.458	0.457	0.453
Uttar Pradesh	0.423	0.558	0.494	0.484	0.459	0.345	0.488	0.421	0.409	0.382
Uttarakhand	0.581	0.650	0.616	0.614	0.609	0.547	0.566	0.557	0.556	0.545
West Bengal	0.495	0.587	0.541	0.538	0.529	0.413	0.523	0.470	0.463	0.450

Note: $YEOI_m$ - Youth Education Outcome Index_Male; $YEOI_f$ - Youth Education Outcome Index_Female; $YGEOI$ - Youth Gender Education Outcome Index; $YGEOI_{sr}$ - Youth Gender Education Outcome Index, adjusted for Sex Ratio

Table 3.16 Youth Education Enrolment Rates across Indian States

States	2016				2010			
	GER at Secondary Level		GER at Tertiary Level		GER at Secondary Level		GER at Tertiary Level	
	Female	Male	Female	Male	Female	Male	Female	Male
India	54.50	58.80	19.40	22.10	34.20	43.40	7.90	10.90
Andhra Pradesh	59.30	58.70	26.40	33.30	42.30	51.50	8.10	13.30
Arunachal Pradesh	49.60	54.60	20.20	22.50	35.80	46.80	4.30	6.60
Assam	39.90	33.50	14.80	14.60	27.60	35.00	5.60	7.80
Bihar	41.00	44.30	10.80	14.00	9.80	20.80	3.20	8.90
Chhattisgarh	49.00	53.90	10.10	11.00	29.20	43.00	5.40	9.00
Delhi	91.80	88.80	39.00	38.90	53.70	48.40	43.70	33.80
Goa	82.10	82.10	25.90	21.50	57.20	58.40	14.80	9.40
Gujarat	43.70	53.20	14.70	18.10	33.10	42.80	8.90	10.70
Haryana	69.50	65.60	27.70	28.30	39.50	45.50	9.80	10.10

Himachal Pradesh	97.50	97.00	25.10	24.60	127.60	135.20	13.10	13.90
Jammu and Kashmir	51.10	54.30	24.00	21.80	31.20	38.40	6.10	6.60
Jharkhand	31.60	32.10	9.50	10.20	11.30	17.00	5.30	8.50
Karnataka	62.30	59.30	22.70	24.90	44.60	47.50	9.50	11.00
Kerala	92.30	86.30	25.60	17.80	62.20	59.50	9.20	6.80
Madhya Pradesh	51.30	71.20	14.60	22.00	26.70	41.80	7.30	13.80
Maharashtra	64.10	67.40	24.30	28.10	52.00	57.50	10.50	14.50
Manipur	50.90	51.30	29.90	30.40	46.30	49.50	11.50	14.20
Meghalaya	39.10	32.40	18.50	16.30	33.60	32.10	10.20	12.00
Mizoram	64.80	62.20	18.30	19.60	44.10	43.20	7.10	12.30
Nagaland	38.20	37.30	13.40	18.20	20.90	21.10	4.20	4.70
Odisha	40.90	48.80	15.00	18.30	34.20	50.90	3.30	13.10
Punjab	65.10	63.20	23.60	22.40	39.90	38.90	10.70	8.80
Rajasthan	48.10	65.80	15.50	20.60	20.30	42.30	4.30	7.50
Sikkim	55.20	45.90	27.40	28.90	33.50	33.10	7.70	9.70
Tamil Nadu	66.70	59.00	36.80	43.20	62.20	63.00	9.40	10.60
Tripura	60.40	62.70	10.20	14.60	36.30	40.70	4.90	6.80
Uttar Pradesh	50.90	61.00	17.20	17.50	27.70	41.30	6.80	8.90
Uttarakhand	71.00	72.50	32.30	30.10	51.70	62.00	12.30	12.90
West Bengal	56.10	51.50	11.80	15.40	26.70	34.60	5.90	9.60

Note: GER – Gross Enrolment Ratio

Table 3.17 Youth Education Access Index for India and States

States	YEAI (2016)					YEAI (2010)				
	YEA _f	YEA _m	YEAI	YGEAI	YGEAI _{sr}	YEA _f	YEA _m	YEAI	YGEAI	YGEAI _{sr}
India	0.325	0.361	0.343	0.342	0.332	0.193	0.205	0.223	0.219	0.210
Andhra Pradesh	0.377	0.426	0.401	0.400	0.400	0.218	0.290	0.255	0.249	0.246
Arunachal Pradesh	0.321	0.357	0.339	0.338	0.332	0.184	0.246	0.216	0.211	0.207
Assam	0.236	0.220	0.228	0.228	0.228	0.152	0.200	0.216	0.211	0.207
Bihar	0.223	0.267	0.246	0.244	0.233	0.063	0.147	0.107	0.090	0.086
Chhattisgarh	0.254	0.279	0.266	0.266	0.264	0.163	0.248	0.206	0.197	0.195
Delhi	0.572	0.568	0.570	0.570	0.527	0.480	0.396	0.434	0.430	0.383
Goa	0.444	0.408	0.426	0.425	0.408	0.311	0.269	0.289	0.288	0.280
Gujarat	0.252	0.311	0.283	0.280	0.265	0.187	0.237	0.213	0.210	0.199

Haryana	0.431	0.427	0.429	0.429	0.399	0.231	0.253	0.243	0.242	0.222
Himachal Pradesh	0.506	0.518	0.512	0.512	0.509	0.594	0.633	0.314	0.614	0.600
Jammu and Kashmir	0.344	0.342	0.343	0.343	0.325	0.175	0.206	0.191	0.190	0.180
Jharkhand	0.178	0.192	0.185	0.185	0.180	0.081	0.125	0.104	0.099	0.096
Karnataka	0.362	0.372	0.367	0.367	0.361	0.237	0.256	0.247	0.246	0.240
Kerala	0.490	0.433	0.463	0.461	0.439	0.283	0.267	0.275	0.275	0.268
Madhya Pradesh	0.290	0.415	0.355	0.344	0.327	0.161	0.264	0.216	0.203	0.191
Maharashtra	0.381	0.422	0.402	0.401	0.382	0.280	0.320	0.301	0.300	0.281
Manipur	0.376	0.383	0.380	0.380	0.377	0.253	0.285	0.269	0.268	0.265
Meghalaya	0.266	0.229	0.247	0.246	0.245	0.206	0.212	0.209	0.208	0.206
Mizoram	0.350	0.353	0.352	0.352	0.350	0.222	0.247	0.235	0.234	0.229
Nagaland	0.232	0.259	0.246	0.245	0.241	0.114	0.116	0.115	0.115	0.111
Odisha	0.245	0.298	0.272	0.269	0.267	0.163	0.292	0.228	0.210	0.209
Punjab	0.383	0.380	0.381	0.381	0.359	0.232	0.218	0.224	0.224	0.208
Rajasthan	0.285	0.389	0.340	0.332	0.316	0.117	0.234	0.178	0.158	0.150
Sikkim	0.377	0.350	0.363	0.362	0.341	0.190	0.191	0.191	0.191	0.179
Tamil Nadu	0.469	0.489	0.479	0.479	0.474	0.285	0.302	0.294	0.293	0.293
Tripura	0.273	0.320	0.297	0.295	0.292	0.187	0.223	0.205	0.203	0.201
Uttar Pradesh	0.321	0.364	0.343	0.342	0.324	0.168	0.241	0.207	0.200	0.187
Uttarakhand	0.474	0.476	0.475	0.475	0.472	0.296	0.348	0.322	0.320	0.314
West Bengal	0.277	0.292	0.285	0.284	0.280	0.147	0.204	0.176	0.172	0.167

Note: $YEAI_m$ - Youth Education access Index_Male; $YEAI_f$ - Youth Education access Index_Female; $YGEAI$ - Youth Gender Education access Index; $YGEAI_{sr}$ - Youth Gender Education access Index, adjusted for Sex Ratio

YOUTH AND WORK

According to the Director of the HDR Office of UNDP, Selim Jahan, the concept of work encompasses creativity, human potential and innovation, and helps to make lives meaningful, productive and worthwhile. In contrast to employment or jobs, 'work' also includes unpaid care work, creative work and voluntary work, all of which Jahan says are critical for human development. He cautions, however, that the link between human development and work is not automatic, pointing out that exploitative and hazardous work does not contribute to human development. HDR 2015 describes work with wider connotation than just a job (Fig.3.6). As can be seen from the figure, work not only includes job, it also comprises of unpaid care work, voluntary work and creative expressions. Work was termed as an individual's overall social role but in current world, work acts as a catalyst for an individual to be considered as a central agent of the development.

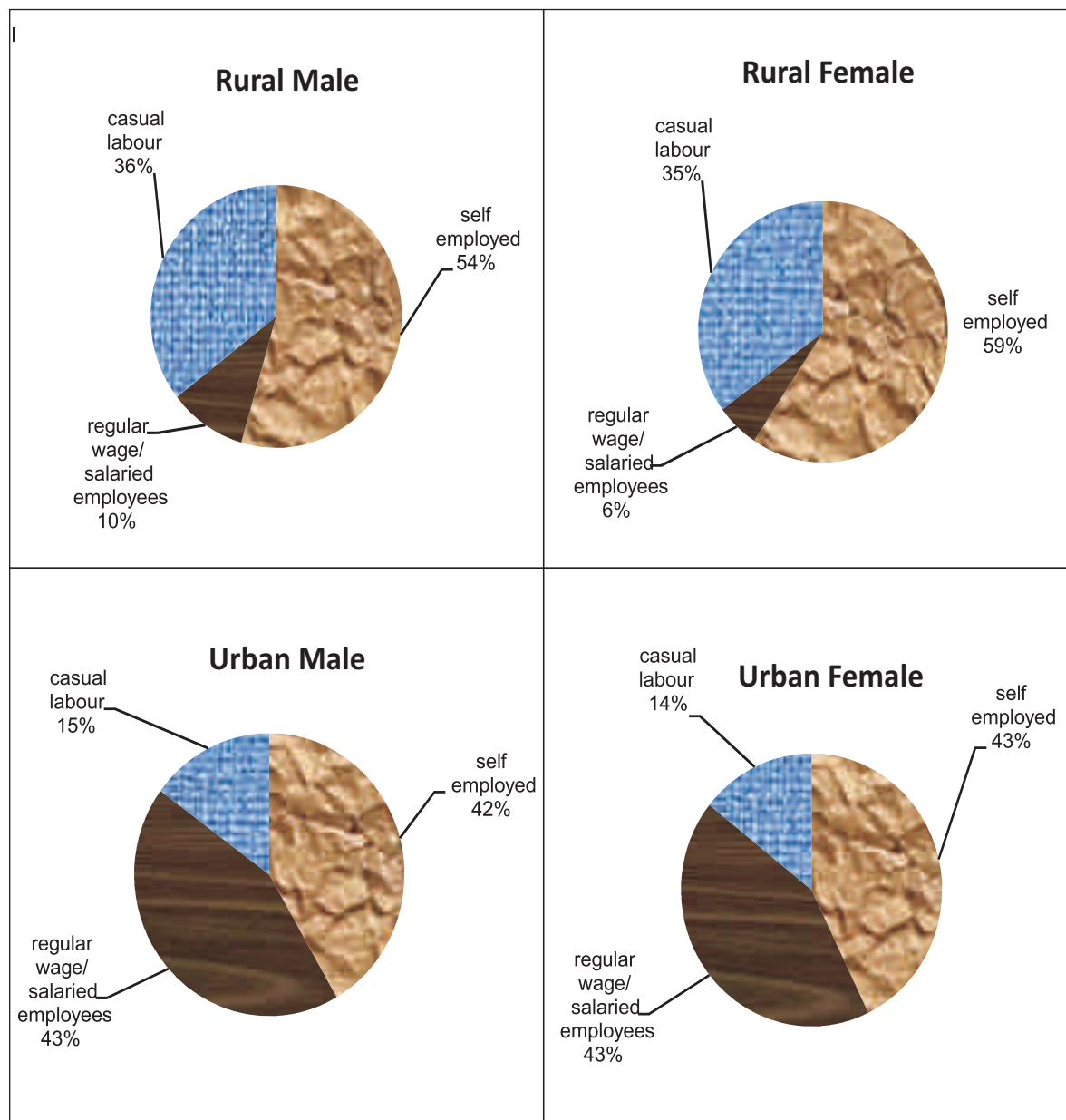
At the national level, there have been consistent efforts to promote numerous employment opportunities over a period of time. However, there has been a sluggish improvement in the employment scenario in India. As per the NSSO 68th Round(2012-13), the Worker Population Ratio (WPR) usual status for the year 2012-13 was 35 percent at national level (Fig. 3.7). There was a significant difference of WPR among male and female. The WPR for male was 56 percent for both urban and rural areas, where as WPR for female was observed as 13 and 18 percent in urban and rural regions respectively. It may be more striking that unemployment rate is 3 percent which has not shown any significant decrease over the last decade and it is a matter of serious concern for the government and all the stakeholders. Among the youth, securing decent employment is the most important concern. Vast majority of workers in India are in the informal sector and most of these workers, especially youth do not have access to the employment benefits or social security. In spite of an increase in the education levels, youth unemployment levels are quite high making them more vulnerable especially in cities.

Figure 3.6 Work Encompasses More Than Just Job



Source: Human Development Index – 2015

Fig. 3.7 Percentage Share of Different Statuses of Employment in Total Workforce



Source: NSSO 68th Round (2011-12)

Youth Work Index (YWI)

The Youth Work Index is a summary measure of work participation among youth and the intensity of employment for those who are working. Table 3.18 provides YWI in India and States for two periods i.e., 2010 and 2016. At an All India level, YWI which was 0.684 in 2010 declined to 0.608 in 2016 i.e., by about 8 percentage points.

A substantial inter-state variation is also seen in both the time periods. It is found that 13 states are above the national YWI and 16 states are below the national YWI. Among the major states, Himachal Pradesh, Chhattisgarh, Andhra Pradesh and Rajasthan are in the top four positions for both the years, while the states with lower values are Bihar, Kerala, West Bengal and Assam for YDI - 2010 and Bihar, Kerala, Haryana and Assam for YDI - 2016. The difference between the highest and lowest YWI is found to be 35 percent and it reflects the significant differential work status across Indian states. The states like Sikkim (by 13 percentage points) and Tripura (by 7 percentage points) showed an improvement in the index value. Among the major states with more than 10 percentage points decline are Assam, Haryana, Jharkhand, Karnataka, Madhya Pradesh and Uttarkhand. A comparison of YWI for male and female across Indian states can be seen in table 3.19. It is very clear that work index for male is much higher than female in all the states and for both the years. YWI has drastically declined to 0.521 when estimated for Youth Gender Development Index and further to 0.505 in sex ratio adjusted Youth Gender Development Index. The states where the difference is striking are Gujarat, Haryana, Jharkhand, Kerala, Orissa, Punjab, Uttar Pradesh and West Bengal. The difference between the highest and lowest male YWI is found to be 36 percent, whereas, it is significantly much higher among females (50 percent). The reasons for differential status of work among youth may vary across states as there are differential employment structures.

Table 3.18 Youth Work Index for India and States

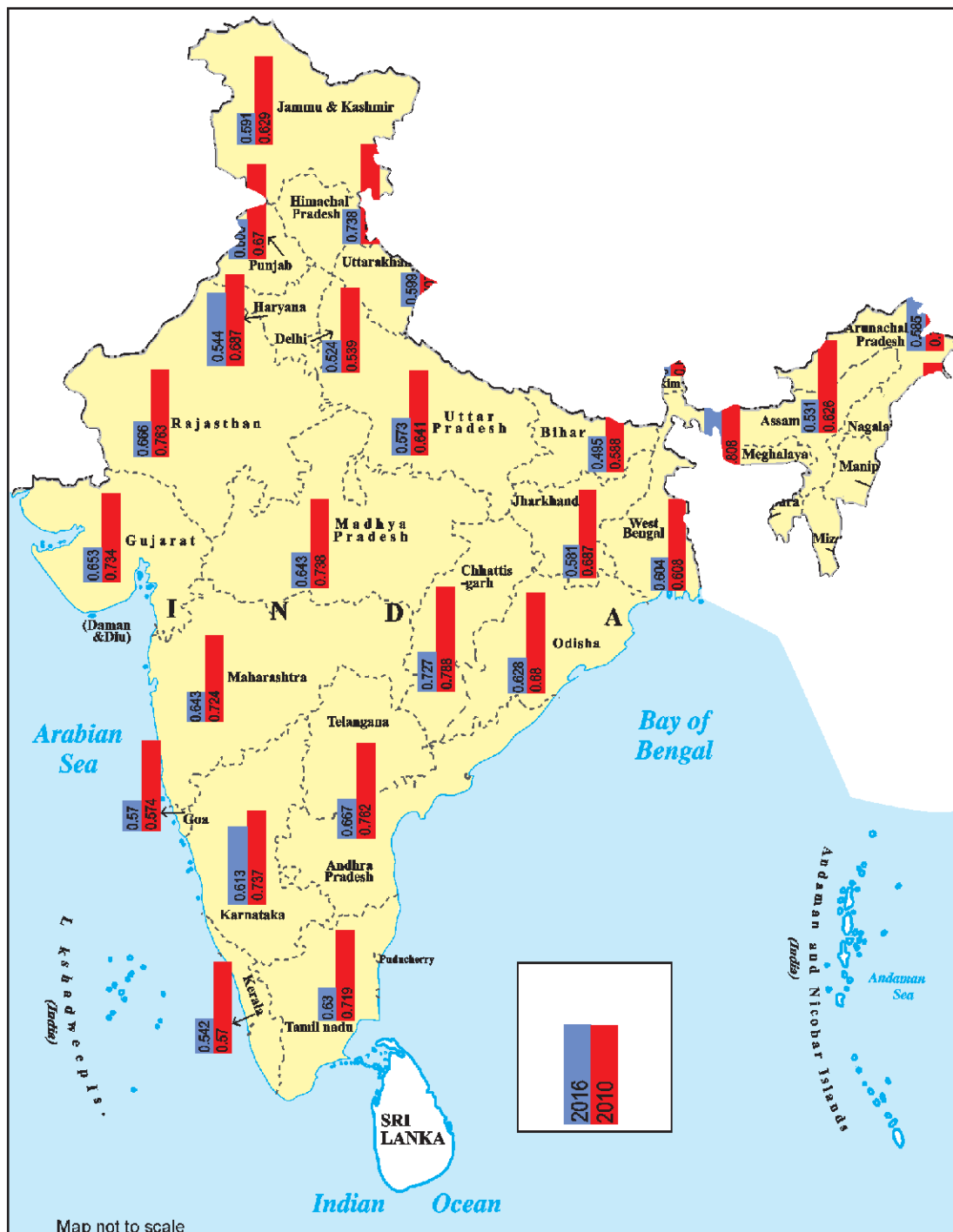
States	2016		2010	
	YWI	Rank	YWI	Rank
India	0.608		0.684	
Andhra Pradesh	0.667	4	0.762	5
Arunachal Pradesh	0.585	18	0.717	11
Assam	0.531	26	0.626	22
Bihar	0.495	28	0.588	25
Chhattisgarh	0.727	3	0.788	3
Delhi	0.524	27	0.539	28
Goa	0.570	21	0.574	26
Gujarat	0.653	8	0.734	8
Haryana	0.544	23	0.687	14
Himachal Pradesh	0.738	2	0.792	2
Jammu and Kashmir	0.591	17	0.629	21
Jharkhand	0.581	19	0.687	15
Karnataka	0.613	13	0.737	7
Kerala	0.542	24	0.570	27
Madhya Pradesh	0.643	10	0.738	6
Maharashtra	0.643	9	0.724	9
Manipur	0.541	25	0.589	24
Meghalaya	0.665	6	0.808	1
Mizoram	0.656	7	0.687	16
Nagaland	0.431	29	0.694	13
Odisha	0.628	12	0.680	17
Punjab	0.606	14	0.670	18
Rajasthan	0.666	5	0.763	4
Sikkim	0.782	1	0.656	19
Tamil Nadu	0.630	11	0.719	10
Tripura	0.567	22	0.499	29
Uttar Pradesh	0.573	20	0.641	20
Uttarakhand	0.599	16	0.707	12
West Bengal	0.604	15	0.608	23

Table 3.19 Components of Youth Work Index

States	2016					2010				
	YWI _f	YWI _f	YWI	YGWI	YGWI _{sr}	YWI _f	YWI _f	YWI	YGWI	YGWI _{sr}
India	0.374	0.828	0.608	0.521	0.505	0.481	0.871	0.684	0.628	0.601
Andhra Pradesh	0.522	0.813	0.667	0.636	0.636	0.634	0.886	0.762	0.741	0.731
Arunachal Pradesh	0.425	0.740	0.585	0.542	0.533	0.623	0.807	0.717	0.705	0.692
Assam	0.257	0.804	0.531	0.389	0.389	0.385	0.857	0.626	0.535	0.524
Bihar	0.172	0.790	0.495	0.291	0.278	0.280	0.868	0.588	0.434	0.413
Chhattisgarh	0.615	0.838	0.727	0.710	0.705	0.701	0.872	0.788	0.778	0.766
Delhi	0.251	0.760	0.524	0.392	0.362	0.207	0.806	0.539	0.352	0.314
Goa	0.381	0.745	0.570	0.511	0.491	0.374	0.764	0.574	0.507	0.493
Gujarat	0.387	0.891	0.653	0.552	0.521	0.547	0.901	0.734	0.690	0.652
Haryana	0.272	0.780	0.544	0.417	0.388	0.488	0.855	0.687	0.636	0.581
Himachal Pradesh	0.669	0.806	0.738	0.731	0.727	0.726	0.855	0.792	0.786	0.768
Jammu and Kashmir	0.424	0.741	0.591	0.547	0.518	0.439	0.802	0.629	0.576	0.547
Jharkhand	0.307	0.840	0.581	0.456	0.443	0.507	0.854	0.687	0.642	0.619
Karnataka	0.395	0.824	0.613	0.537	0.528	0.570	0.896	0.737	0.701	0.682
Kerala	0.315	0.790	0.542	0.442	0.422	0.343	0.806	0.570	0.477	0.467
Madhya Pradesh	0.402	0.860	0.643	0.558	0.530	0.557	0.899	0.738	0.697	0.657
Maharashtra	0.452	0.817	0.643	0.590	0.562	0.562	0.867	0.724	0.691	0.647
Manipur	0.392	0.692	0.541	0.499	0.495	0.473	0.702	0.589	0.567	0.556
Meghalaya	0.552	0.778	0.665	0.645	0.643	0.738	0.876	0.808	0.802	0.787
Mizoram	0.527	0.785	0.656	0.631	0.629	0.560	0.808	0.687	0.664	0.652
Nagaland	0.332	0.526	0.431	0.409	0.401	0.643	0.744	0.694	0.691	0.678
Odisha	0.379	0.880	0.628	0.529	0.526	0.476	0.883	0.680	0.619	0.618
Punjab	0.340	0.843	0.606	0.497	0.468	0.435	0.873	0.670	0.596	0.551
Rajasthan	0.501	0.817	0.666	0.628	0.599	0.629	0.884	0.763	0.741	0.702
Sikkim	0.673	0.879	0.782	0.768	0.724	0.511	0.795	0.656	0.624	0.613
Tamil Nadu	0.434	0.830	0.630	0.568	0.563	0.562	0.876	0.719	0.685	0.684
Tripura	0.325	0.804	0.567	0.465	0.460	0.209	0.777	0.499	0.333	0.327
Uttar Pradesh	0.282	0.835	0.573	0.433	0.410	0.380	0.870	0.641	0.543	0.506
Uttarakhand	0.437	0.759	0.599	0.556	0.551	0.585	0.824	0.707	0.686	0.672
West Bengal	0.349	0.851	0.604	0.498	0.490	0.342	0.859	0.608	0.495	0.481

Note: YWI_m - Youth Work Index_Male; YWI_f - Youth Work Index_Female; YGWI - Youth Gender Work Index; YGWI_{sr} - Youth Gender Work Index, adjusted by Sex Ratio

Map 3.4 Youth Work Index across Indian States - 2010 and 2016



Note: Data for Andhra Pradesh & Telangana are combined

Youth Work Outcome and Access Indices

There are two components of Youth Work Index (YWI) *viz.*, Worker Participation Rate which is used to estimate Youth Work Outcome Index and Work Intensity comprising of number of days one has worked. The horizontal aggregation of work intensity with the appropriate weight provides the estimates of Youth Work Access Index.

Youth Work Outcome Index (YWOI)

Work participation rate among males and females weighted with their population proportions is termed as Work Outcome Index. The data set has been compiled from NSS 61st round (2005) and NSS 68th round (2011) and work participation is based on the Usual Principal and Subsidiary Status (UPSS). Table 3.20 presents the youth outcome index for both the YDI's i.e. 2010 and 2016. It can be seen from the Table 3.20 that the work outcome index for India is 0.656 in YDI - 2010 and 0.564 in YDI - 2016. The decline in the Youth Work Index is mainly due to the decline in the work participation rate. Work Outcome Index ranged from 0.441 (Tripura) to 0.803 (Meghalaya) in YDI - 2010 and from 0.367 (Nagaland) to 0.756 (Sikkim) in YDI - 2016. The states with high level of work participation rates are Himachal Pradesh, Chhattisgarh and Andhra Pradesh, whereas, Kerala, Assam and Bihar witnessed low youth participation rates among the major states. Work Outcome Index is much higher for males than females.

At the national level, youth work participation rate for males is 86.7 as against 42.5 for females in the year 2005 (NSSO 61st round). The difference between the participation rate for males and females is 44.2 percentage points. In the year 2011 (NSSO 68th round), the work participation rate for males is 81.0 and for female it is 30.3.

Participation rates have declined for both males and females and decline is sharper with respect to females (12.2 percentage points) than males (5.7 percentage points). This has also increased the gap between male and female participation rates i.e., 50.7 percentage points as against 44.2 percentage points in 2005. This decline can be attributed partly to the rising participation in education among young females. Among the major states, the decline in female work participation rate is very high in Gujarat (18 percentage points), Haryana (25), Jharkhand (23), Karnataka (20), Madhya Pradesh (18), Tamil Nadu (16) and Uttarakhand (16). The states of Karnataka and Bihar also faced high decline in the male work participation rates.

Table 3.20 Youth Work Outcome Index (YWOI) for India and States

States	2016					2010				
	YWOI <i>f</i>	YWOI <i>m</i>	YWOI	YGWOI	YGWOI <i>sr</i>	YWOI <i>f</i>	YWOI <i>m</i>	YWOI	YGWOI	YGWOI <i>sr</i>
India	0.303	0.810	0.564	0.447	0.433	0.425	0.867	0.656	0.579	0.555
Andhra Pradesh	0.468	0.793	0.630	0.588	0.588	0.598	0.885	0.743	0.715	0.706
Arunachal Pradesh	0.357	0.709	0.536	0.478	0.469	0.579	0.785	0.684	0.669	0.656
Assam	0.173	0.781	0.477	0.283	0.283	0.317	0.847	0.588	0.466	0.456
Bihar	0.077	0.766	0.437	0.145	0.139	0.200	0.865	0.549	0.335	0.319
Chhattisgarh	0.573	0.828	0.702	0.679	0.673	0.673	0.869	0.773	0.760	0.749
Delhi	0.162	0.731	0.468	0.279	0.258	0.115	0.785	0.486	0.218	0.194
Goa	0.308	0.715	0.519	0.437	0.420	0.304	0.742	0.529	0.436	0.424
Gujarat	0.319	0.883	0.617	0.481	0.454	0.501	0.902	0.713	0.655	0.618
Haryana	0.188	0.754	0.491	0.314	0.292	0.433	0.840	0.654	0.588	0.537
Himachal Pradesh	0.631	0.783	0.707	0.699	0.695	0.707	0.845	0.778	0.771	0.753
Jammu and Kashmir	0.363	0.712	0.547	0.489	0.463	0.379	0.780	0.589	0.519	0.494
Jharkhand	0.232	0.822	0.535	0.368	0.357	0.457	0.848	0.660	0.601	0.579
Karnataka	0.326	0.807	0.571	0.468	0.460	0.525	0.899	0.717	0.667	0.650
Kerala	0.239	0.774	0.494	0.356	0.339	0.270	0.801	0.530	0.400	0.392
Madhya Pradesh	0.333	0.845	0.602	0.488	0.464	0.508	0.896	0.713	0.659	0.621
Maharashtra	0.389	0.797	0.603	0.532	0.507	0.515	0.862	0.700	0.656	0.613
Manipur	0.322	0.656	0.488	0.431	0.428	0.412	0.667	0.542	0.512	0.502
Meghalaya	0.513	0.774	0.643	0.617	0.615	0.715	0.889	0.803	0.794	0.779
Mizoram	0.485	0.789	0.637	0.601	0.599	0.526	0.818	0.675	0.643	0.631
Nagaland	0.258	0.471	0.367	0.335	0.329	0.616	0.726	0.672	0.668	0.655
Odisha	0.309	0.874	0.590	0.456	0.453	0.420	0.880	0.650	0.569	0.567
Punjab	0.266	0.826	0.562	0.415	0.391	0.374	0.861	0.636	0.538	0.498
Rajasthan	0.445	0.797	0.629	0.579	0.552	0.588	0.873	0.738	0.710	0.672
Sikkim	0.635	0.864	0.756	0.739	0.696	0.461	0.780	0.623	0.582	0.571
Tamil Nadu	0.369	0.816	0.591	0.507	0.502	0.515	0.871	0.693	0.647	0.647
Tripura	0.246	0.786	0.519	0.377	0.373	0.117	0.753	0.441	0.206	0.202
Uttar Pradesh	0.202	0.821	0.528	0.335	0.317	0.315	0.874	0.613	0.478	0.446
Uttarakhand	0.379	0.732	0.557	0.500	0.497	0.541	0.807	0.677	0.650	0.636
West Bengal	0.276	0.840	0.563	0.419	0.412	0.270	0.860	0.573	0.417	0.406

Youth Work Access Index (YWAI)

Youth Work Access Index was derived from the intensity of employment (number of days worked in a week). The information on this is again compiled from NSSO 61st and 68th rounds. Differential weights, as explained earlier, were assigned for the different ranges of number of days worked. The objective was to use the extent of those who reported as working actually had an access to work. Table 3.21 presents the youth work access index. It can be seen that YWAI is much higher in all the states i.e., most of those who were working reported that they got work for at least five days in a week. At the national level, the Youth Work Access Index score is 0.867 in YDI - 2010 and it increased to 0.903 in YDI - 2016. It may be noted that this index does not include those who are not working. There is no much interstate variation. The states like Jammu & Kashmir, Jharkhand, Rajasthan and Uttarkhand showed a decline in the Youth Female Access Index. Jammu & Kashmir showed a decline in the Youth Access Index even with respect to males.

Table 3.21 Youth Work Access Index for India and States

States	2016					2010				
	YWAI _f	YWAI _m	YWAI	YGWAI	YGWAI _{sr}	YWAI _f	YWAI _m	YWAI	YGWAI	YGWAI _{sr}
India	0.874	0.931	0.903	0.902	0.874	0.844	0.887	0.867	0.866	0.830
Andhra Pradesh	0.914	0.931	0.923	0.922	0.922	0.852	0.892	0.872	0.872	0.861
Arunachal Pradesh	0.983	0.977	0.980	0.980	0.962	0.953	0.966	0.959	0.959	0.941
Assam	0.843	0.969	0.906	0.901	0.901	0.833	0.908	0.872	0.870	0.852
Bihar	0.855	0.966	0.913	0.910	0.869	0.811	0.878	0.846	0.845	0.805
Chhattisgarh	0.881	0.888	0.885	0.885	0.878	0.855	0.885	0.870	0.870	0.857
Delhi	0.982	0.982	0.982	0.982	0.908	0.904	0.944	0.926	0.926	0.825
Goa	0.998	0.999	0.999	0.999	0.960	0.857	0.887	0.872	0.872	0.849
Gujarat	0.847	0.929	0.891	0.889	0.839	0.829	0.896	0.864	0.863	0.815
Haryana	0.872	0.987	0.934	0.930	0.865	0.842	0.939	0.894	0.892	0.815
Himachal Pradesh	0.942	0.972	0.957	0.957	0.951	0.822	0.905	0.865	0.862	0.842
Jammu and Kashmir	0.814	0.935	0.878	0.874	0.826	0.822	0.946	0.887	0.883	0.839
Jharkhand	0.803	0.956	0.882	0.875	0.851	0.813	0.881	0.848	0.847	0.816
Karnataka	0.880	0.919	0.900	0.899	0.884	0.857	0.884	0.871	0.871	0.847
Kerala	0.847	0.878	0.862	0.861	0.821	0.834	0.826	0.830	0.830	0.813
Madhya Pradesh	0.920	0.951	0.937	0.936	0.889	0.881	0.910	0.896	0.896	0.844
Maharashtra	0.888	0.941	0.916	0.915	0.872	0.855	0.891	0.874	0.874	0.817

Manipur	0.896	0.975	0.935	0.934	0.926	0.904	0.967	0.939	0.935	0.917
Meghalaya	0.736	0.795	0.779	0.779	0.776	0.864	0.833	0.848	0.848	0.832
Mizoram	0.767	0.767	0.767	0.767	0.764	0.737	0.775	0.756	0.756	0.742
Nagaland	0.828	0.921	0.875	0.873	0.857	0.779	0.831	0.805	0.804	0.789
Odisha	0.864	0.908	0.886	0.885	0.880	0.847	0.892	0.870	0.869	0.868
Punjab	0.851	0.963	0.910	0.907	0.854	0.833	0.942	0.891	0.888	0.822
Rajasthan	0.880	0.950	0.916	0.915	0.873	0.892	0.948	0.921	0.921	0.871
Sikkim	0.990	0.992	0.991	0.991	0.934	0.815	0.874	0.845	0.844	0.828
Tamil Nadu	0.884	0.906	0.895	0.895	0.887	0.866	0.898	0.882	0.882	0.882
Tripura	0.908	0.902	0.905	0.905	0.895	0.903	0.939	0.921	0.921	0.904
Uttar Pradesh	0.826	0.912	0.871	0.868	0.823	0.787	0.853	0.822	0.821	0.765
Uttarakhand	0.798	0.929	0.864	0.859	0.853	0.862	0.927	0.896	0.894	0.875
West Bengal	0.844	0.907	0.876	0.875	0.861	0.810	0.855	0.833	0.832	0.809

Note: YWAI m - Youth Work access Index_Male; YWAI f - Youth Work access Index_Female; YGWAI - Youth Gender Work access Index; YGWAI sr - Youth Gender Work access Index, adjusted by Sex Ratio

YOUTH AND AMENITIES

The household amenities enjoyed by people is a direct reflection of their standard of living and quality of life in a particular country. Household amenities are not only the instruments for better life but also serve as the indicators of socio-economic status of the people (IHDS – 2005). There has been a substantial improvement in household amenities over the last decade especially in basic amenities. On an average, the houses with liveable conditions have increased by 33 percent at the national level with increased dwellings (Census – 2011). It is observed that 87 percent of the house holds use safe drinking water sources and around 67 percent of the households use electricity as the main sources of light, with an increase of 11 percent over the last decade. It is noted that around 51 percent of households have drainage facilities. There is 11 percent decline in households with no toilets, but use of toilets has increased by 47 percent compared to that of in 2001. Almost 47 percent of the households own TV, 63 percent use phone/landline and 9.5 percent of the population possess computer/laptop. The improvement in household amenities indicates progress in one's own living condition in particular and status of development of the country in general. The improvement in amenities is a positive sign of improved quality of life in India. Nevertheless, India has to go a long way to improve living standards and quality of life at par with the developed countries.

Youth Amenities Index has been calculated for India and across its states/UTs by aggregating dimension indices of Basic and Modern Amenities following Displaced Ideal Technique. The data set for household amenities was compiled from Census 2011. Appropriate methodological framework has been followed to compute the Youth Amenities Index and dimension indices. The indices are calculated considering unit level information on access to Electricity, Safe Drinking Water, Housing, Toilet Facility, Communication, Information and Technology. The above mentioned amenities are classified into two categories as Basic and Modern Amenities. Basic Amenities include Electricity, Safe Drinking Water, Housing and Toilet Facility, while Modern Amenities include Communication, Information and Technology.

Youth Amenities Index (YAI)

Youth Amenities Index is the summary measure of household amenities enjoyed by the youth in India. The estimated value of Youth Amenities Index has shown a steady improvement from 0.295 to 0.545 over last six years (Table 3.22). Among the states, Delhi ranks first with a value of 0.735 closely followed by Goa and Punjab with the values of 0.701 and 0.673 respectively. On the other hand, Orissa (29th rank), Bihar (28th Rank) and Chhattisgarh (27th rank) held the lowest ranks. The difference between the highest and lowest YAI values is found to be around 44 percent which reflects the significant disparity in youth related amenities among Indian states. It is observed that all the states have shown improvement in the YAI (Fig. 7.1.). Kerala which was in the 3rd position in YDI - 2010 slipped down to the 11th position in YDI - 2016. The highest percentage of change is observed in the states of Tripura followed by Tamil Nadu and Andhra Pradesh, and the lowest percentage of change in Sikkim followed by Jammu and Kashmir. It is observed that 17 states are above the national average of YAI and 12 states are below the national average of YAI.

As the data set related to amenities has been collected at household level, it is considered that access to these amenities will remain same for both male and female e.g., having a house is accessible for both male and female of the household. Hence, the value of YAI for male and female will remain the same. However, while calculating sex ratio adjusted YAI, the values have considerably declined across the states (Table 3.22). It has brought down the value of national YAI from 0.545 to 0.528 and is persistent in all the states and UTs. The largest gender gap has been observed in Delhi followed by Haryana and Gujarat, while the lowest difference is found in Arunachal Pradesh closely followed by West Bengal and Jharkhand.

The dimension indices *viz.* Basic Amenities and Modern Amenities Indices have been calculated by aggregating all the indicators. Table 3.23 presents the estimated Youth Basic Amenities Index (YBAI) and Youth Modern Amenities Index (YMAI). The calculated value of YBAI for India is 0.669. Among the states, Delhi ranks 1st with an index value of 0.916 and the lowest rank is observed in Bihar with the index value of 0.421. The difference between the highest and the lowest YBAI is recorded around 50 percent. When adjusted with sex ratio, the YBAI slows down considerably.

The calculated Youth Modern Amenities Index (YMAI) shows considerably low scores. The calculated YMAI for India turned out to be 0.448. Delhi ranks 1st in YMAI closely followed by Sikkim and Goa. It is seen that states with higher YBAI have relatively higher YMAI than states with lower YBAI (Table 3.23). It may be concluded that Youth Amenities Index for India and its states/UTs has considerably improved over the time. The YAI - 2016 and Dimension Indices have shown significantly better position than YAI - 2010.

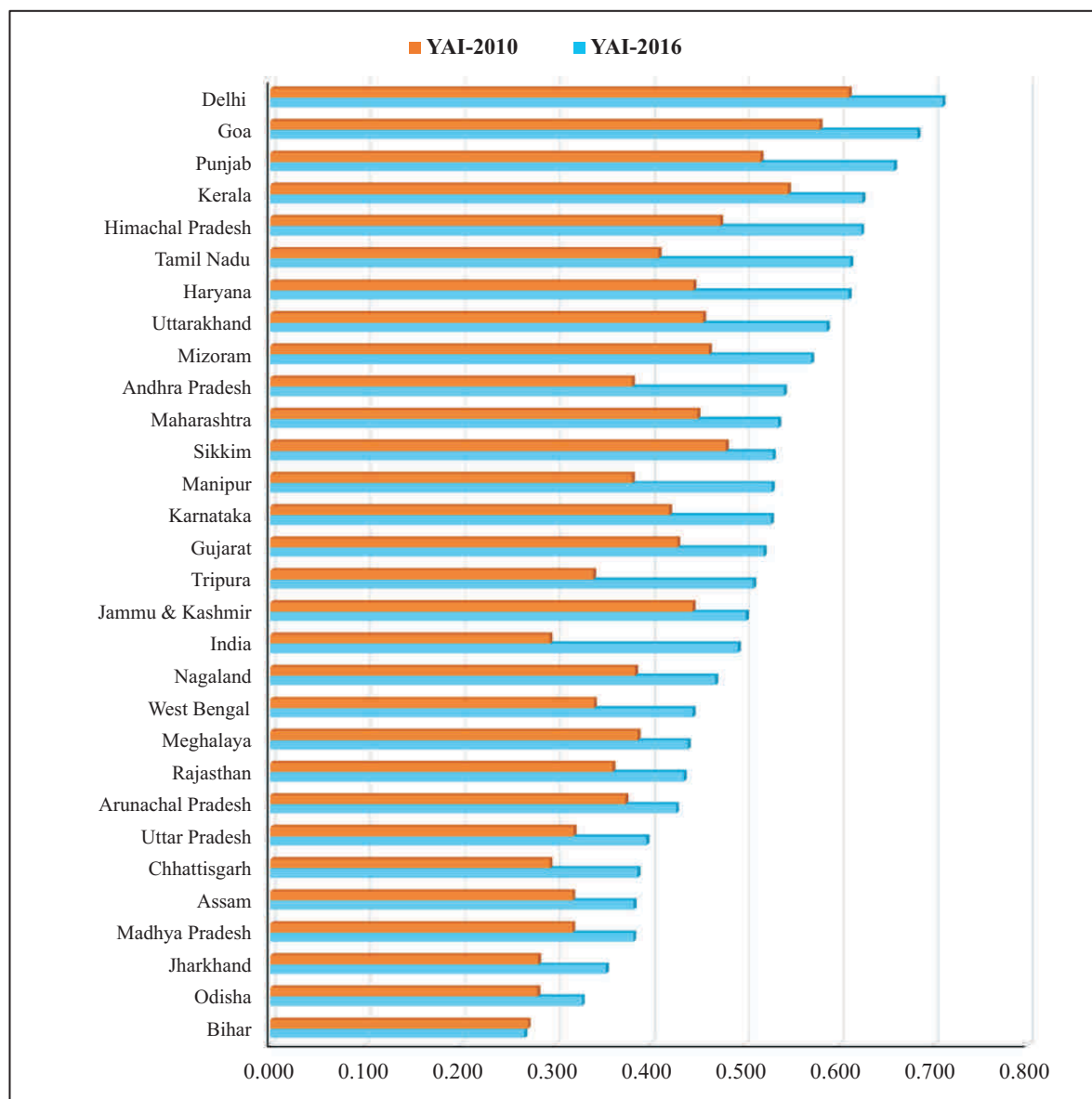
Table 3.22 Youth Amenities Index for India and States

States	2016			2010		
	YAI	YGAI _{sr}	Rank	YAI	YGAI _{sr}	Rank
India	0.545	0.528		0.295	0.283	
Andhra Pradesh	0.580	0.580	14	0.382	0.377	17
Arunachal Pradesh	0.496	0.487	20	0.375	0.368	19
Assam	0.458	0.458	23	0.319	0.312	24
Bihar	0.391	0.373	28	0.272	0.259	29
Chhattisgarh	0.393	0.390	27	0.295	0.290	26
Delhi	0.735	0.680	1	0.611	0.545	1
Goa	0.701	0.674	2	0.580	0.565	2
Gujarat	0.598	0.565	12	0.430	0.406	12
Haryana	0.660	0.614	4	0.447	0.408	10
Himachal Pradesh	0.652	0.648	5	0.475	0.464	6
Jammu and Kashmir	0.560	0.529	15	0.446	0.424	11
Jharkhand	0.410	0.398	26	0.283	0.273	27

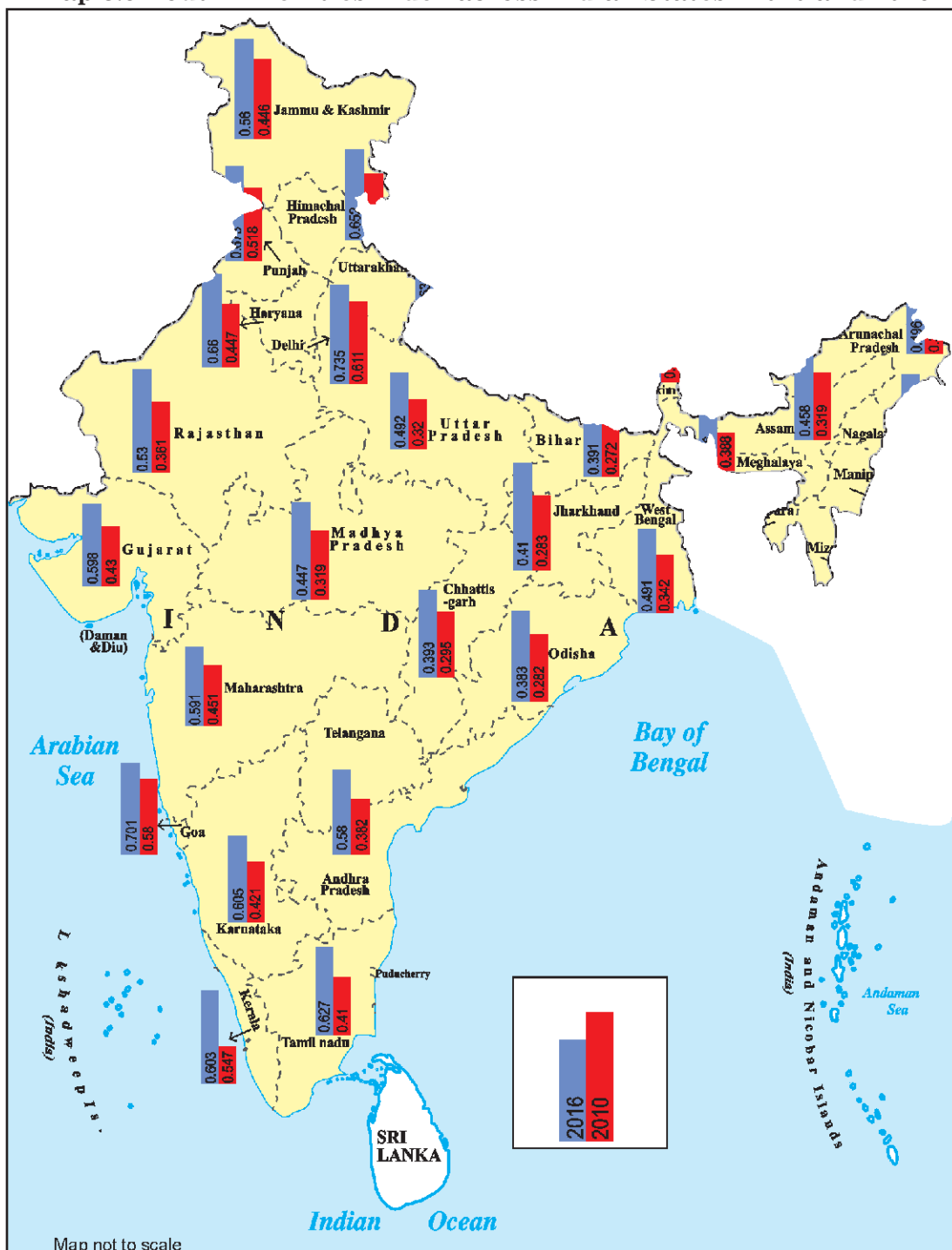
Karnataka	0.605	0.594	10	0.421	0.410	13
Kerala	0.603	0.575	11	0.547	0.536	3
Madhya Pradesh	0.447	0.424	25	0.319	0.301	24
Maharashtra	0.591	0.563	13	0.451	0.422	9
Manipur	0.530	0.526	17	0.382	0.375	17
Meghalaya	0.456	0.455	24	0.388	0.381	15
Mizoram	0.627	0.624	9	0.463	0.454	7
Nagaland	0.533	0.523	16	0.385	0.378	16
Odisha	0.383	0.381	29	0.282	0.281	28
Punjab	0.673	0.634	3	0.518	0.479	4
Rajasthan	0.530	0.505	18	0.361	0.342	20
Sikkim	0.652	0.614	6	0.481	0.472	5
Tamil Nadu	0.627	0.621	8	0.410	0.410	14
Tripura	0.524	0.518	19	0.341	0.335	22
Uttar Pradesh	0.492	0.466	21	0.320	0.298	23
Uttarakhand	0.637	0.633	7	0.457	0.447	8
West Bengal	0.491	0.483	22	0.342	0.332	21

Note: YAI – Youth Amenities Index; $YGAI_{sr}$ – Youth Gender Amenities Index, adjusted by Sex Ratio

Figure 3.8 Youth Amenities Index for India and States (2010 and 2016)



Map 3.5 Youth Amenities Index across Indian States - 2010 and 2016



Note: Data for Andhra Pradesh & Telangana are combined

Table 3.23 Youth Basic and Modern Amenities Indices for India and States – 2016

States	Basic Amenities Index	Rank	Modern Amenities Index	Rank
India	0.669		0.448	
Andhra Pradesh	0.732	15	0.471	15
Arunachal Pradesh	0.700	17	0.354	23
Assam	0.593	23	0.350	24
Bihar	0.421	29	0.361	21
Chhattisgarh	0.590	24	0.246	29
Delhi	0.916	1	0.635	1
Goa	0.875	3	0.597	2
Gujarat	0.772	9	0.480	13
Haryana	0.816	6	0.556	4
Himachal Pradesh	0.837	5	0.536	6
Jammu and Kashmir	0.659	20	0.479	14
Jharkhand	0.481	28	0.346	25
Karnataka	0.735	12	0.508	10
Kerala	0.732	13	0.507	11
Madhya Pradesh	0.586	25	0.336	26
Maharashtra	0.732	14	0.487	12
Manipur	0.673	18	0.421	18
Meghalaya	0.626	21	0.329	27
Mizoram	0.785	8	0.518	9
Nagaland	0.741	11	0.392	19
Odisha	0.489	27	0.293	28
Punjab	0.865	4	0.557	3
Rajasthan	0.611	22	0.460	16
Sikkim	0.877	2	0.524	8
Tamil Nadu	0.729	16	0.547	5
Tripura	0.761	10	0.370	20
Uttar Pradesh	0.534	26	0.453	17
Uttarakhand	0.804	7	0.526	7
West Bengal	0.670	19	0.360	22

The calculated Youth Modern Amenities Index (YMAI) score for India is 0.488, which is less than the YBAI score of 0.669 by 18.1 percent points. The YMAI score is less than YBAI score for India and all the states as well. Delhi ranks 1st in YMAI score closely followed by Sikkim and Goa. It is seen that states with higher YBAI scores have relatively higher YMAI scores (Table 3.23). It is also noted that there exists wide inequality in YMAI.

Conclusion

India, with its unprecedented demographic dividend can seize the opportunity of capitalising the youth resource not only for making India a global power but also for building national integration and global consensus. India can achieve such a goal, provided right policies are in place for enhancing youth skills, harnessing their energy and encouraging their participation in the local and global economy. To fulfill the needs and aspirations of the youth, we need evidence so as to ensure appropriate interventions. This can be pursued through the formulation of Youth Development Index (YDI).

Following the 'India Youth Development Index - 2010', the present 'India Youth Development Index - 2016' has been constructed along with gender specific YDIs for India and all the states. It has used the same methodology, the same definition of youth, and more or less the same set of indicators to construct these indices for strict comparison. These indices are used to assess the status of youth at the national and state levels to identify the potential areas for policy intervention and to improve the 'Access' and 'Outcome'. The YDI - 2010 has used the data on various indicators in and around 2005, while the YDI - 2016 has used the data in and around 2011. However, this report refers them as YDI - 2010 and YDI - 2016 with the time gap of 6 years between 2010 and 2016.

Youth Development: All India Trends

India YDI has shown improvement from 0.451 in YDI - 2010 to 0.552 in YDI – 2016 by about 10 percent between 2010 and 2016. While in aggregate, the youth development has improved at all India level, the progress of most of the states is relatively low as compared to some Indian States with top scores like Himachal Pradesh (0.669), Goa(0.624) and Delhi (0.622).

There are sharp differences in youth development between male and female in India. The YDI score for male (0.61) is higher than the YDI for female (0.49) with the difference of 12 percentage points. Further, it is observed that YDI for male has increased by 11.9 percent, while that of YDI for female increased by 8.2 percent over the last six years. There is a clear evidence of differential youth development in favour of male than female in the country. There is every likelihood of gender inequality to become widened if the same trend continues. Therefore, need of the hour is to formulate suitable policies so as to eliminate gender inequality.

Among the sub-indices, the Youth Education Index (YEI) has the lowest score of 0.509 reflecting the poor status of secondary and tertiary education in the country. As primary

education alone cannot equip youth for constructive engagement in economic and social spheres, the policy focus needs to be extended to secondary and higher education. However, it is noted that the YEI - 2016 score has improved by about 9.6 percent over the YEI -2010 score. Although the rate of progress is encouraging at the national level, still it is not satisfactory. Between 2010 and 2016, the Youth Health Index (YHI) score increased from 0.521 to 0.598, showing 7.7 percent improvement and the Youth Participation Index (YPI) score increased from 0.540 to 0.574, registering an improvement by 3.4 percent.

The Youth Amenities Index (YAI) score has improved significantly from 0.295 in 2010 to 0.545 in 2016, recording nearly 25 percent increase. The progress is mainly due to improvement in the Youth Basic Amenities Index (YBAI - 2016) by 0.669. Since the YMAI - 2016 score is low (0.448), more efforts are needed to improve the modern amenities score. If youth are to be equipped to face the challenges of modernisation and use the emerging opportunities, it is necessary that they need to be provided with appropriate facilities.

Declining Youth Work Index (YWI - 2016) from 0.684 in 2010 to 0.608 in 2016, (by 7.6 percentage points) is the major issue with regard to youth development. This is the only index which shows decline in the index score. The decline in YWI can be accounted for jobless growth. However, the increasing interest among young people in higher education may be the reason for declining participation in labour market. As substantial number of youth are pursuing higher studies, the work participation rate for this group might have declined. Nevertheless, the declining trend of this magnitude (YWI 2016) is a disturbing phenomenon which deserves policy attention.

Another major issue is the existence of gender disparities in the sub-indices too. The Youth Health Index for female (YHI_f) has improved from 0.525 in 2010 to 0.610 in 2016 and that of Youth Health Index for male (YHI_m) has improved from 0.517 to 0.586. Thus during the last 6 years, the male score improved by 6.3 percent, while the female score by 8.5 percent. It is an encouraging sign and however, more efforts are needed to improve the health status of male youth in India. Likewise, the YEI - 2016 score for female is 0.463 and for male is 0.551 with the difference of 8.8 percent among them.

The Youth Work Index for male (0.828) is observed to be higher than the Youth Work Index for female (0.374) with the difference of 45.4 percent. In addition, the decline was steeper in case of the Youth Work Index for female (0.107) than in the Youth Work Index for male (0.043) during the last 6 years. Thus, there is not only a huge gender difference in the youth work index, but also the scores of both indices declined over the years. This is a major area of concern where policy focus is required.

Youth Development: Trends in Indian States

Along with gender disparity, regional inequality also exists in the levels of youth development. Among 29 Indian states, Himachal Pradesh (0.669), Goa (0.624) and Delhi (0.622) are the top three States in YDI - 2016, while Bihar (0.443), Jharkhand (0.464) and Assam (0.442) are the states at the bottom. The difference between the states at top and bottom is 22.6 percentage points, highlighting large gap in the youth development across Indian states. There has been a positive relation between the YDI and the per capita income across the states, implying the significance of economic well-being for overall growth and development.

As per the estimates of YDI- 2016, 13 states have shown improvement in their performances over 2010 with the highest gainer being Chhattisgarh (10.6 percent) followed by Sikkim (10.6 percent) and Tripura (9.8 percent). The least improvement was witnessed in Kerala (3.1 percent) followed by Nagaland (3.2 percent) and Meghalaya (3.3 percent). Although there was no fall in the YDI - 2016 score in any state over 2010, the inequality has widened across regions in youth development.

Gender disparity in youth development strongly prevails across the states. Himachal Pradesh has the largest YDI - 2016 score for female (0.659), followed by Sikkim (0.581) and Goa (0.567), while Bihar (0.344), Assam (0.418) and Odisha (0.435) have the lowest scores. Delhi ranks 1st in the YDI score (0.701) for male, but it ranks 12th in the YDI score for female. There is also a progressive reduction in the value of YDI when corrected for gender disparity and sex ratio.

In the case of sub-indices also, wide variations and rising inequality are the disturbing trends across the states. In Youth Health Index, Jammu & Kashmir (0.706), Maharashtra (0.641) and Himachal Pradesh (0.664) are the top performers, whereas, Nagaland (0.473), Arunachal Pradesh (0.512) and Meghalaya (0.513) are the poor performers. The difference between Jammu & Kashmir and Nagaland is 23.3 percent.

The Coefficient of Variation (CV) measure also highlights that inequality has been widening over the years with gender variation. Kerala (72.4%) ranks 1st in YHI for female, while Jammu & Kashmir (70.7%) ranks 1st in YHI for male. Nagaland obtains the lowest rank in both YHI for female (0.487) as well as male (0.460).

Kerala ranks highest in YEI - 2016 with the value of 0.663, followed by Delhi (0.649) and Himachal Pradesh (0.638), while Bihar ranks lowest (0.372) followed by Jharkhand (0.386) and Rajasthan (0.455). Out of 29 states, 12 states fall below all India level and the difference between the highest (Kerala) and lowest (Bihar) scores is 0.291 points (i.e., 29.1 percent), which reflects significant disparity in youth education across the states of India. Among the Youth Education Index for male, Kerala (0.662) ranks first while Jharkhand (0.431) ranks last and the difference between them is 23.1 percent. Kerala (0.664) again ranks first in the Youth Education Index for female, while Bihar (0.300) achieves the last rank and difference between them is 36.4 percent. Thus, there exists striking gender disparities among the states in youth education development.

In the Youth Work Index (YWI), 16 out of 29 states fall below the national YWI. Sikkim has the highest score of 0.782, while Nagaland has the lowest YWI score of 0.431 and the difference between them is recorded to be around 35 percent. Sikkim and Tripura are the only states with improved YWI scores, while other states showed declined YWI. Further, the work index for male is much higher than female in all the states for both 2010 and 2016. Bihar has the highest difference (0.618 point) between male and female for YWI - 2016, followed by Uttar Pradesh (0.553), Assam (0.547), and Jharkhand (0.533). The states with lower scores need policy attention.

As observed in sub-indices, huge disparity exists across Indian states in Youth Amenities Index (YAI). Delhi ranks first and Orissa ranks last in YAI score and the difference between them is 0.352 point (i.e., 35.2 percent). Tamil Nadu (21.7 percent) recorded highest improvement in the YAI – 2016 as compared to YAI – 2010, followed by Haryana (21.3 percent) and Karnataka (18.4 percent). The least improvement was observed in Kerala (5.6 percent), Meghalaya (6.8 percent) and Chhattisgarh (9.8 percent). The estimated coefficient of variation for YAI - 2010 series is 4.55 and that for YAI (2016) series is 5.61, clearly indicating the widening inequality in youth amenities development across Indian states.

As indicated earlier, Youth Development has improved since 2010 at the national level as well as in all the states. Trends in sub-indices for India and states are also positive except in a few cases. The major challenge observed is widening gender disparity and inequality in youth development across the states.

There has been an improvement in education sector over the years, yet it remains less than the desired level as compared to many developing as well as developed countries. Despite a faster pace of convergence in the youth literacy rate across the gender and social groups, SC/ST youth lag far behind in their educational development as compared to the other social groups. Much of the deficits on the front of educational development are primarily due to the discontinuation of a large segment of youth after their primary schooling because of their poor economic conditions and other backbreaking household chores. This is more so in poorer states. Hence, the major challenge is to improve the educational attainment of youth.

Since education enhances the probability of getting better jobs, efforts are needed to ensure the higher transition of youth to technical / vocational education, and also to higher education. Although the measures towards educational development of SCs/STs, such as the grant of scholarships and free uniform, provision of coaching for competitive examinations, and reservation in educational institutions have improved their participation in education at various levels, these need to be scaled up and strengthened further. An alarming aspect is the increasing deficit of quality education and skill training. Public educational institutions, at both the school and higher levels need to be strengthened and made accountable for their quality and relevance. Private educational and training institutions also need to be monitored closely for the quality of education and their fee structure. The current measures of skill development under the National Skill Development Mission need to be pegged up in a big way in order to address the skill shortages being faced by the Indian industry. Unlike in the past, today's youth is more informed and keen to be a part of the IT revolution. They are justifiably asserting their concerns for a decent employment and dignified life. Policy-makers must, therefore, come forward in a big way to facilitate the overall development of youth in the country and ensure decent employment opportunities for them.

Persistent unemployment among youth may lead to conflicts and social upheaval. Therefore, the challenge is to create a large number of remunerative employment opportunities with adequate social security for youth in the coming years. Various policies and programmes for creating employment opportunities had less than desired impact on ameliorating unemployment situation among youth. This calls for the measures to enhance the investment climate in the labour-intensive sectors, especially in the industrially backward and remote

areas, with a focus on congenial atmosphere for business development, infrastructure development, safety, good governance, sound corporate social responsibilities and ethical practices on the part of industry. It is thus imperative to intensify policy options to promote enterprise development, particularly among SCs/STs, in a big way. As most of the new employment offer is contractual by nature with low level of wages and without any social security, the employers of such labour need to realise that such practices would not help them in long term to improve their growth and competitiveness. These measures would definitely help India to attain its target of SDGs by 2030.

As the youth in the contemporary society possess considerable economic potential, the government should capitalise on this. There is a huge opportunity for improvement in the productivity of the youth through programmes targeted towards education, skilling, entrepreneurship development and health care. GoI is currently spending approximately rupee 2,710 on every young person through various Ministries, of which rupee 1,100 is through targeted programmes. In order to capitalise on this opportunity, the government needs to invest more on youth across the various priority areas as identified above.

The government should aim at leveraging the vast number of stakeholders that are already working towards youth development by expanding its own reach and access to the youth through the networks of these organisations. All the stakeholders should review their strategies in line with the priorities for youth development identified in this report as well as in the National Youth Policy - 2014. They should prepare action plans, design programmes in specific areas and monitor and evaluate their impact on the youth in the priority areas as indicated above.

It is hoped that the findings of this report would enable the stakeholders to identify the appropriate interventions for youth development so as to reap the maximum potential of the country's demographic dividend.

SECTION - C STATUS PAPERS

HEALTH STATUS OF YOUTH IN INDIA: EVIDENCE, BEHAVIOURS AND PROGRAMMES





CHAPTER IV

HEALTH STATUS OF YOUTH IN INDIA: EVIDENCE, BEHAVIOURS AND PROGRAMMES

SECTION - C STATUS PAPERS

Introduction



Adolescents and youth comprise about 30 percent of India's population. Engaging this youth population productively is critical for ensuring India's socio-economic development. Youth represents the socio-economic and political future of India, forming an important part of its labour force, skills, human capital, and the country's ability to harvest the demographic dividend. While today's youth are more educated, more healthier, and more

mobile compared to their previous generations, nevertheless they face a number of social, economic and health vulnerabilities. So far, the health status of adolescents and youth has received very little attention in India, and there is much ambiguity in the health care policies addressing the needs of this crucial segment of the country's population. The major concerns pertaining to health of the youth in India are related to their sexual and reproductive behaviour, and life styles. Wide range of factors determine the health condition of the youth, such as education, not only of theirs but also of their parents, financial resources available, food security of their households, and nutrition intake, as well as the housing and living conditions.

Various international agreements like the International Conference on Population and Development (ICPD-1994), and United Nations Conference on Population and Development (2012), emphasise the right to health of young people, including access to counselling and health services for sexual and reproductive health which are sensitive to the needs of adolescents and youth. The national level policies in India, such as the National Youth Policy-2014, National Population Policy - 2000, National Health Policy - 2002, and National Policy for empowerment of Women-2001, have all recognised the need to address the health and well-being of the country's young population and to enable them to realise their full potential to make informed and responsible decisions related to their health and sexual rights. Despite all these, the health requirements of adolescents and youth has largely remained neglected, and large number of youth in the country are unable to make a healthy transition to adulthood.

Limitations of Data on Health Status of Youth

Most health policies and programs in India lack a comprehensive understanding of the health requirements of adolescents and youth. This is partly because of the lack of comprehensive data on the health status of youth. Most of the country's national level demographic and health surveys such as National Family Health Survey (NFHS), District Level Household and Facility Survey (DLHS) and Annual Health Survey (AHS) focus on reproductive health of married women aged 15-44 years. Practically no information is available on the health status of young men and also unmarried young women. In this scenario, many public health programs are not youth oriented, and hence large majority of young people rarely seek sexual and reproductive health care services from government facilities.

In the light of this insufficient data on the health status of Indian youth, the review in this paper attempts to portray the scenario by using available data / information from multiple sources such as Census, national level sample surveys, official health statistics, and micro-level studies. The paper first provides a brief picture of the population composition of youth in India. Second section deals with health scenario in terms of access to basic amenities. This is followed by a discussion on the age at marriage and its linkage to the health status of youth. The fourth section addresses teenage pregnancy, reproductive health, and fertility scenario of the young in the country. This section also discusses the sexual behaviour of adolescents and youth, and their awareness about safe sex practices and sex education. The fifth section provides information about causes of death, suicide, and mental health of the youth, as well as their lifestyle and health hazards. The youth and disability is discussed in the next section. The final section summarises the emerging scenario and important findings.

India's Adolescents and Youth

As per the Census of 2011, the total population of India is 1210.6 million. Out of this, the rural population is 833.5 million and the urban population 377.1 million. In absolute numbers, out of the total increase of 182 million added in the last decade (2001 to 2011), the contribution of rural and urban areas is equal (91 million each). In percentage terms, the rural population constitutes 68.8% and Urban population 31.2% of the total population. There has been an increase of 3.4% in the proportion of urban population in the last decade.

Table 4.1 Population distribution of India by age, sex and place of residence, 2011.

Age-group	Total			Rural			Urban		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
0-4	9.35	9.44	9.25	9.99	10.10	9.88	7.94	8.01	7.86
5-9	10.52	10.68	10.36	11.29	11.46	11.12	8.82	8.97	8.65
10-14	11.00	11.18	10.81	11.65	11.85	11.45	9.56	9.72	9.38
15-19	9.99	10.30	9.66	10.10	10.46	9.72	9.75	9.97	9.51
20-24	9.24	9.27	9.20	8.89	8.95	8.83	10.00	9.98	10.03
25-29	8.41	8.27	8.55	7.95	7.83	8.08	9.41	9.23	9.60
30-34	7.34	7.19	7.50	6.97	6.79	7.16	8.17	8.07	8.27
35-39	7.06	6.91	7.21	6.75	6.60	6.91	7.74	7.60	7.89
40-44	6.00	6.05	5.96	5.73	5.76	5.69	6.62	6.66	6.56
45-49	5.17	5.18	5.16	4.90	4.90	4.90	5.76	5.79	5.72
50-54	4.07	4.16	3.97	3.86	3.94	3.77	4.53	4.65	4.41
55-59	3.24	3.13	3.36	3.11	2.94	3.29	3.54	3.55	3.52
60-64	3.12	3.01	3.24	3.17	3.03	3.30	3.03	2.96	3.10
65-69	2.19	2.08	2.31	2.28	2.16	2.40	2.01	1.92	2.10
70-74	1.59	1.55	1.63	1.66	1.64	1.69	1.44	1.37	1.51
75-79	0.77	0.72	0.81	0.77	0.73	0.81	0.76	0.71	0.81
80+	0.94	0.85	1.03	0.95	0.88	1.02	0.90	0.78	1.04

Source: Census of India, 2011

The age group of 15-19 constitutes approximately 10 percent and the age group 20-24 years constitutes about 9.24 percent of India's total population. The age group 25-29 accounts for 8.41 percent of the population (Table 1). About 28 percent of India's total population is in the age group of 15 to 29 years, and in actual number, this is one of the largest youth population in the world.

The Table-2 shows the marital status by young age groups for both males and females. In the early age group among youth, i.e. 15-19 years, 95 percent of males and 80 percent of females, in 20-24 age group approximately 69 percent of males and 30 percent of females, and in 25-29 age group 32 percent of males and 9 percent of females were never married. Most females are married when they reach about 29 years of age, whereas among males nearly 32 percent yet to get married by that age. The divorced / widowed/ separated persons is very negligible among the youth. As is evident, the adolescent girls and young women in India get married much earlier ages than their male counterparts. This has implications for their education, employment and health conditions.

Table 4.2 Marital Status of Youth by Age and Sex: India, 2011

Age Category	Never Married		Currently Married		Divorced / widowed / separated	
	Male	Female	Male	Female	Male	Female
15-19	95.21	80.16	4.68	19.47	0.17	0.39
20-24	69.18	30.40	30.43	68.49	0.41	1.10
25-29	32.26	8.78	66.90	89.08	0.81	2.13
Less than 18	98.98	97.56	0.96	2.33	0.06	0.10
Less than 21	97.46	91.44	2.46	8.38	0.08	0.18

Source: Census of India, 2011

Health Scenario of Youth in India: A Synoptic Picture

Access to Basic Facilities

It is important to have access to basic facilities such as safe drinking water, sanitation, electricity, clean cooking fuel, etc to ensure minimum health status of the population. The access and utilisation of these basic amenities provide us some idea about the health condition of the people. We do not have any data /statistics about the access of youth specifically to these basic amenities. However, it is safe to assume that facilities available/accessible to households will naturally be accessible to the youth living in those households. Keeping this in mind, this section discusses the availability / access to these four basic requirements at household level. For this purpose, the latest information from National Family Health Survey (NFHS-4) conducted in 2015-16 has been used here (though information from 2011 Census is available on some of these household amenities, considerable changes have taken place with regard to availability of water, sanitation facility and electricity etc. in recent years). So it was felt to use recent NFHS-4 data for this purpose and try to compare with the situation in the previous round of NFHS which was done in 2005-06.

Table 4.3 Percentage of households with an improved source of drinking water by State/UT, NFHS-4 (2015-16), and the percent change since NFHS-3 (2005-06)

States/UTs	Households with improved drinking water source ¹				
	Urban	Rural	Total	NFHS-3	% change
States					
Andhra Pradesh	70.7	73.6	72.7	na	na
Bihar	97.8	98.2	98.2	96.1	2.2
Goa	97.8	93.7	96.3	79.9	20.5
Haryana	88.0	94.3	91.7	95.6	-4.1
Karnataka	89.8	88.9	89.3	86.1	3.7
Madhya Pradesh	96.8	79.5	84.7	74.2	14.2
Maharashtra	97.7	85.6	91.5	92.7	-1.2
Manipur	47.1	38.0	41.6	52.1	-20.2

Meghalaya	85.2	62.9	67.9	63.1	7.6
Sikkim	99.3	96.8	97.6	77.6	25.8
Tamil Nadu	86.9	94.5	90.6	91.4	-0.9
Telangana	80.1	75.6	77.6	na	Na
Tripura	97.7	82.8	87.3	76.1	14.7
Uttarakhand	98.9	89.5	92.9	87.4	6.3
West Bengal	93.5	95.1	94.6	93.7	1.0
Union Territories (UTs)					
Andaman and Nicobar Islands	100.0	89.9	94.3	na	Na
Puducherry	93.8	99.0	95.4	na	na

¹ Piped water into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, and community RO plant.

Note: na = not available. The information was not yet available for the remaining states from NFHS-4 at the time of preparing this paper.

Table 4.4 Percentage of households using an improved sanitation facility by State/UT, NFHS-4 (2015-16), and change since NFHS-3 (2005-06)

States/UTs	Households using improved sanitation facility ¹				
	Urban	Rural	Total	NFHS-3	%change
States					
Andhra Pradesh	77.4	43.1	53.6	na	na
Bihar	54.9	20.7	25.2	14.6	72.6
Goa	76.8	80.8	78.3	60.9	28.6
Haryana	81.7	77.4	79.2	40.0	98.0
Karnataka	77.3	42.6	57.8	33.5	72.5
Madhya Pradesh	66.6	19.4	33.7	18.7	80.2
Maharashtra	59.8	44.2	51.9	31.6	64.2
Manipur	47.8	51.3	49.9	30.2	65.2

Meghalaya	67.9	58.1	60.3	37.6	60.4
Sikkim	76.0	94.2	88.2	60.7	45.3
Tamil Nadu	69.7	34.0	52.2	22.4	133.0
Telangana	64.4	38.9	50.2	na	na
Tripura	65.1	59.6	61.3	51.5	19.0
Uttarakhand	73.3	59.6	64.5	44.4	45.3
West Bengal	62.0	45.5	50.9	34.7	46.7
Union Territory (UT)					
Andaman and Nicobar Islands	87.4	64.4	74.3	na	na
Puducherry	73.4	46.1	65.0	na	na

¹ Flush to piped sewer system, flush to septic tank, flush to pit latrine, ventilated improved pit (VIP)/biogas latrine, pit latrine with slab, and twin pit/composting toilet, which are not shared with any other household.

Note: na = not available. The information was not yet available for the remaining states from NFHS-4 at the time of preparing this paper.

Table 4.5 Percentage of households with electricity by State/UT, NFHS-4 (2015-16), and percent change since NFHS-3 (2005-06)

States/UTs	Households with electricity				
	Urban	Rural	Total	NFHS-3	% change
States					
Andhra Pradesh	99.6	98.4	98.8	na	na
Bihar	88.2	54.1	58.6	27.7	111.6
Goa	99.8	99.9	99.8	96.4	3.5
Haryana	99.6	98.3	98.8	91.5	8.0
Karnataka	99.0	97.0	97.8	89.3	9.5
Madhya Pradesh	97.9	86.4	89.9	71.4	25.9
Maharashtra	95.1	90.0	92.5	83.5	10.8
Manipur	95.9	90.1	92.4	87.0	6.2
Meghalaya	99.0	89.2	91.4	70.4	29.8
Sikkim	99.0	99.6	99.4	92.2	7.8
Tamil Nadu	99.2	98.3	98.8	88.6	11.5
Telangana	99.5	97.2	98.2	na	na
Tripura	99.0	90.0	92.7	68.8	34.7
Uttarakhand	99.4	96.5	97.5	80.0	21.9
West Bengal	97.2	92.0	93.7	52.5	78.5
Union Territories (UTs)					
Andaman and Nicobar					
Islands	99.7	95.0	97.0	na	na
Puducherry	99.8	99.2	99.6	na	na

Note: na = not available. The information was not yet available for the remaining states from NFHS-4 at the time of preparing this paper.

Table 4.6 Percentage of households using clean fuel for cooking by State/UT, NFHS-4 (2015-16), and change since NFHS-3 (2005-06)

States/UTs	Households using clean fuel ¹ for cooking				
	Urban	Rural	Total	NFHS-3	% change
Andhra Pradesh	89.7	49.7	62.0	na	na
Bihar	63.8	10.8	17.8	9.9	79.8
Goa	91.0	72.0	84.1	61.3	37.2
Haryana	84.9	28.9	52.2	29.9	74.6
Karnataka	83.8	32.1	54.7	29.3	86.7
Madhya Pradesh	74.8	9.9	29.6	18.3	61.7
Maharashtra	87.1	33.7	59.9	43.9	36.4
Manipur	63.3	28.0	42.1	34.9	20.6
Meghalaya	65.7	9.3	21.8	21.1	3.3
Sikkim	93.0	42.4	59.1	42.4	39.4
Tamil Nadu	87.4	58.0	73.0	31.4	132.5
Telangana	90.1	48.2	66.8	na	na
Tripura	68.6	16.0	31.9	17.7	80.2
Uttarakhand	86.6	31.1	51.0	36.3	40.5
West Bengal	61.8	11.3	27.9	16.8	66.1
Union Territories (UTs)					
Andaman and Nicobar					
Islands	85.0	47.2	63.5	na	na
Puducherry	91.6	69.4	84.8	na	na

¹ Using electricity, LPG/Natural gas, or biogas.

Note: na = not available. The information was not yet available for the remaining states from NFHS-4 at the time of preparing this paper.

Early Age at Marriage and its Implications for Youth

Early marriage has severe repercussions for young people, affecting their personal freedom, education, health status, life expectations, etc. The United Nations Conventions on the Rights of the Child (1989) defines any marriage or union between two people where one or both of the partners is under the age of 18 years, as child marriage. In India, the Prohibition of Child Marriage Act-2006, states that a girl cannot marry before the age of 18 years, and a boy before the age of 21 years. Despite legislations and universal condemnation, child marriages continue to persist where over six million young girls in the country are married off before the age of 18 years (Census of India, 2001). Millions of girls and boys in India are betrothed so young, that they are forced to spend majority of their adolescent years as 'husband and wife'. The younger they are married, more the health risks they face. Though the implications of early marriage, particularly on health, are negative for both boys and girls, it has more devastating impact on girls.

The consequences due to early marriage and child-bearing have harmful health outcomes. Higher infant, child and maternal mortality rates are attributable to early marriage. Evidences also suggest that the prevalence of domestic violence is higher for those who have been married at an early age. Boys and girls subject to early marriage are, also, often forced to drop out of schools and take up menial jobs to support their families. This situation also perpetuates the cycle of poverty and a violation of their fundamental rights.

Early marriage has been reported in many national surveys. According to NFHS-3, 27 percent of women aged 20-49 years were married before age 15, and 58 percent were married before the age of 18 years (IIPS & Macro International, 2007). The State level variations are significant, with Bihar, Jharkhand, Rajasthan, West Bengal and Uttar Pradesh having the most dismal figures wherein more than one-fifth of women aged 15-17 years are married (IIPS & Macro International, 2007). The figure is particularly high in Bihar (38 percent) and in Jharkhand (36 percent). However, the scenario is different in states like Kerala, Goa,

Tamil Nadu, Nagaland, Manipur, Punjab, Delhi and Jammu and Kashmir, where less than 5 percent of women aged 15-17 are married. With regard to men, 7 percent of men in India are married by 20 years of age. More than one in every five men aged 15-20 years are married in Rajasthan, followed by Bihar (15 percent), Jharkhand (13 percent), and Uttar Pradesh (11 percent). According to an analysis based on NFHS-3 data, it was observed that women in wealthier households are much less likely to be married early than women in poorest households, even after controlling for education and residence (Parasuraman, *et al.*, 2009). Higher the education, lower the odds that a women aged 15-17 years would be married. Also, when all other predictors are being controlled for, the odds of being married early are much higher for rural women than their urban counterparts.

As per the latest National Family Health Survey (NFHS-4, 2015-16), the age at marriage for both boys and girls have gone up considerably in India and in its states. But surprisingly some states have shown an increase in the percentage of boys getting married before the age of 21 years. For example, in Goa 10.6 per cent of the men in the age group of 25-29 years were married before 21 years of age, as compared to 7.2 percent in the previous NFHS survey (2005-06). Even in Tamil Nadu, the percentage of the men now marrying before the age of 21 is around 17 percent. Madhya Pradesh is another state where 30 percent of the women (20-24 years) were married before reaching 18 years of age as compared to 40 percent of the men (25-29 years) were married before reaching 21 years (Table-7). Interestingly, in the states of Bihar, Haryana, Madhya Pradesh, Goa, Tamil Nadu, Uttarakhand, Meghalaya and Sikkim, the proportion of boys getting married before attaining the legally prescribed age at marriage (21 years) is higher than the girls getting married below 18 years (Mukherjee and Sekher, 2017).

As per the 2011 Census, the calculated singulate mean age at marriage of boys in India is 25.4 years as compared to 21 years of girls, with vast differences between the states and rural-urban set up. Though there are no discussions about boys dropping out from schools due to marriage reasons, but it is true that states reporting early marriages of boys also have higher number of school dropouts among them (National Family Health Survey-3, 2005-06). Studies

have suggested that boys reporting family reasons/pressures and their necessity to work and take up household responsibilities as one of the major causes of school dropouts in higher secondary classes (Gouda and Sekher, 2014; Chugh, 2011; PROBE Report, 1999).

The institution of marriage in India has been greatly affected by the rapid increase in urbanisation, educational opportunities, and socio-economic changes taking place. Increasingly more number of girls and boys participate in decision making in their marriage process (Jejeebhoy and Halli, 2006). Higher proportions of parents from Tamil Nadu (76 percent), Andhra Pradesh (66 percent) and Maharashtra (60 percent) have sought the opinion of their children about timing of marriage as compared to those of Rajasthan (16 percent), Bihar (20 percent) and Jharkhand (31 percent). Considerable number of married men in Rajasthan (30 percent), Bihar (25 percent) and Jharkhand (24 percent) reported that their parents had initiated marriage related discussions at the age of 17 or below (IIPS and Population Council, 2010). These are also the states having high prevalence of early marriages and school dropouts.

Table (a) and 1(b) show the percentage of girls and boys who were married below the legally prescribed minimum age at marriage. It considers the marriages that occurred during the reference period of the survey; that is between 2004- 2008. The percentage of girls getting married at very young ages is very high as compared to the boys but nonetheless they cannot be ignored. Marriages below 18 years are reported to be 24 percent for girls and almost 6 percent for boys. When these figures are converted to numbers, the scenario could be disturbing. Universally the legal age at marriage is set to be 18 years for both boys and girls but in India it is 21 years for boys. That means, 25 percent of the boys are still getting married below the legal age of 21 years with considerable variations across the states. Boys married below the age of 21 years in Rajasthan were 48 percent followed by Uttar Pradesh and Bihar with 43 percent during 2004-08.

Table 4.7 Percentage of women age 20-24 years married below age 18 years and men age 25-29 years married below age 21 years, 2015-16

States	Women			Men		
	Urban	Rural	Total	Urban	Rural	Total
West Bengal	27.7	46.3	40.7	19.7	26.5	24.0
Bihar	26.9	40.9	39.1	27.2	42.6	40.0
Andhra Pradesh	26.3	35.5	32.7	13.5	28.3	23.5
Tripura	25.6	34.8	32.2	9.6	25.8	22.2
Haryana	19.6	17.8	18.5	25.7	35.8	31.3
Karnataka	17.9	27.0	23.2	8.5	12.5	10.9
Madhya Pradesh	16.6	35.8	30.0	24.6	46.2	39.5
Sikkim	16.1	13.6	14.5	18.8	18.1	18.5
Telangana	15.7	35.0	25.7	14.5	32.3	23.9
Goa	14.8	2.7	9.8	17.3	0.0	10.6
Tamil Nadu	13.0	18.3	15.7	18.4	15.2	17.0
Uttarakhand	12.2	14.8	13.9	15.3	25.6	20.9
Meghalaya	7.8	19.3	16.5	8.5	22.4	19.6

Note: The information was not yet available for the remaining states at the time of preparing this paper.

Source: National Family Health Survey-4, 2015-16, IIPS.

Table: 4.8 Scenario of early marriages among Adolescents and Youth in India

(a): States having highest percentage of girls married below 15 and 18 years in India			
STATES	% Married below age 15	STATES	% Married below age 18
Rajasthan	14.5	Bihar	46.2
Bihar	12.7	West Bengal	41.3
West Bengal	8.4	Rajasthan	41.1
Uttar Pradesh	8.2	Jharkhand	36.0
Jharkhand	6.6	Uttar Pradesh	33.1
India	4.9	India	24.1
(b): States having highest percentage of boys married below 18 and 21 years in India			
STATES	% Married below age 18	STATES	% Married below age 21
Rajasthan	19.2	Rajasthan	48.4
Bihar	12.8	Uttar Pradesh	43.3
Uttar Pradesh	12.4	Bihar	43.0
Madhya Pradesh	10.1	Madhya Pradesh	40.5
Gujarat	7.8	Gujarat	34.6
India	5.7	India	25.3

Source: District Level Household and Facility Survey -3, IIPS.

Table 4.9 Age Specific Fertility Rates among Youth by Residence, 2011 and 2013, India

<i>Age Specific Fertility Rates</i>						
Age Category	Rural		Urban		Total	
	2011	2013	2011	2013	2011	2013
15-19	35.3	31.7	16.5	16.5	30.7	28.1
20-24	216.8	212.8	143.8	142.2	196.7	194.3
25-29	163.7	159.9	129.6	125.6	153.4	149.7

Sources: Census of India, 2011 & Sample Registration System , 2013

Teenage Pregnancy, Reproductive Health and Fertility Performance among Youth

Since a considerable proportion of adolescent females get married by 19 years, many of them are either pregnant or mothers in their teen ages. According to the available data from the recent NFHS-4 of 2015-16, women aged 15-19 years who were already mothers or pregnant constitutes considerable proportion in many states- West Bengal (18.3), Assam (13.6), Andhra Pradesh (13), Telengana (13.8) and Bihar (12). However, in Goa, Sikkim and Uttarakhand, it is less than 3 percent (IIPS, 2016).

The age-specific fertility rates (ASFR) among the youth population is presented in Table-9 from two sources. In the age group of 20-24 years, it is 197 births per 1000 women in 2011, and it is 153 for the age group 25-29 years. However, considerable rural-urban differentials can be seen in ASFR in all age groups. The ASFR is more than double in rural areas in the age group of 15-19, compared to urban areas.

Adolescents are a heterogeneous group with varied needs, based on their age, gender, marital status, occupation and economic categories. Despite many policies and programs, adolescents still face considerable barriers in accessing reproductive and sexual health services. Most of the available research in India focuses on pregnancy and reproduction among married women. Very little information is available on sexual behaviour of unmarried youth and, also about their pre-marital affairs. Adolescents today are exposed to media, technology and wide ranging information and ideas. At the same time, they are also restricted in their mobility and sexual behaviours, due to the prevailing traditions and socio-cultural conditions of the society, more so in rural areas.

Adolescence is a transition phase through which a child becomes an adult, and they undergo rapid physiological and psychological changes during this period that needs special attention. But, adolescent health is not a main stream component of health care services in India. However, adolescent health has been incorporated as a component of reproductive health package (RCH) program of Government of India recently. Most of the health care providers have no idea or training in sexuality and reproductive health care needs of adolescents and youth. Accessibility and availability of sexual and reproductive health care services are limited to this segment of the young population, particularly in rural and remote areas.

It is a fact that significant proportions of youth in India experience adverse reproductive health outcomes, and face risky and unwanted sexual activity. Evidences from various national surveys and studies indicate that young people continue to face a wide array of unmet needs with regard to reproductive and sexual health services. Many of them get married at an adolescent age and then enter into sexual life without much awareness and ability to take decisions. It is well documented fact that very low level of awareness existing among youth regarding sexual and reproductive health matters. According to Youth in India study (IIPS and Population Council, 2010), 11 percent of young men and 5 percent of young women aged 15-24 had engaged in pre-marital sex in adolescence (before age 20). Among sexually experienced unmarried young men and women, 25 percent and 21 percent respectively, had engaged in sex with more than one partner. It was found that 18 percent of the young women and 3 percent of young men had been forced to engage in sex. Youth study also shows that only 28 percent of young married women (aged 15-24) were using contraception. Married young women are more likely to face sexual violence, perpetrated by their husbands (Table 10).

As a consequence of early marriage, child bearing is initiated early and multiple pregnancies characterise the life of many young women (Jejeebhoy and Santhya, 2011). One-in-five young women (aged 20-24) had their first baby before they were 18 and one-in- eight young women (aged 20-24) had three children. Both maternal and neonatal mortality are higher among young women. According to NFHS-3, 14 and 18 percent of births to adolescent mothers and young mothers respectively were unplanned (IIPS and Macro International, 2007). Some studies indicate that the proportion of adolescent abortion seekers constitute about one-third or even more among the abortion seekers (Chhabra *et al*, 1988; Ganatra and Hirve, 2002). Young women were as likely as adult women to report sexually transmitted infections (STIs) or symptoms of STIs (IIPS and Macro International, 2007). Youth constitute a large chunk of HIV infections in India. With regard to malnutrition, it was found that 17 and 11 percent among young women and men respectively were moderately or severely anaemic (Parasuraman *et al*, 2009). Despite the youth being a huge segment of the population, the special needs of them are rarely addressed by the health and family welfare programs in India. Early marriage, teenage pregnancy, higher fertility rates, high risk of HIV/STI, and poor nutritional status continue to be the major health problems of youth in India. Based on the data available from various national level surveys, the sexual and reproductive health profile of young men and women is presented in Table-10.

Table: 4.10 Sexual and reproductive health profile of Young People, India

	Young men	Young women
Entry into sexual life		
% young people aged 20–24 married as children, i.e., by age 18 ¹	10.0	47.4
% young people aged 15–24 reporting pre-marital sex in adolescence ²	11.0	4.9
Unsafe and unwanted sex		
% married young women aged 15–24 currently practising contraception by self or husband ³	-----	28.0
% married young women aged 15–24 currently using modern non-terminal methods by self or husband ³	-----	11.0
% married young women aged 15–24 who had experienced sexual violence within marriage ²	-----	32.2
% young people aged 15–24 who had pre-marital sex reporting multiple partnerships ²	24.5	21.4
% young people aged 15–24 who had pre-marital sex reporting ever use of condoms ²	27.0	7.0
% young people aged 15–24 who had pre-marital sex reporting consistent condom use ²	12.7	2.5
% young people aged 15–24 who had pre-marital sex reporting forced sexual experience ²	3.0	18.0
Pregnancy and childbirth		
% 20–24 year-old young women who had given birth before age 18 ¹	-----	16.9
% married young women aged 15–24 with three or more children ¹	-----	25.3
Neonatal mortality rate among adolescent mothers (per 1,000 live births) ¹	-----	9.4
Unintended pregnancy and abortion		
% births in the last five years to mothers aged 15–24 that were unplanned ¹	-----	16.9
% unmarried abortion-seekers delaying abortion into the second trimester ⁴	-----	25.3
% married abortion-seekers delaying abortion into the second trimester ⁴	-----	9.4
Symptoms of genital infection and HIV		
% young people aged 15–14 reporting symptoms of genital infection in the last three months ²	4.5	16.8
% young people aged 15–24 who are HIV positive ³	0.09	0.11
Malnutrition		
% young people aged 15–24 who were moderately or severely anaemic ³	11.1	17.4

Data Sources: ¹International Institute for Population Sciences and Macro International, 2007; ²International Institute for Population Sciences and Population Council, 2010; ³Parasuraman et al., 2009; ⁴Jejeebhoy et al., 2010. ^{*}Cumulative percentages of young people aged 15–24 who experienced first pre-marital sex before age 20, calculated using life table techniques.

Source: Jejeebhoy and Santhya, 2011.

Awareness on Reproductive Health Issues and Sex Education

Family Life Education (FLE), also known as sex education, might help the vulnerable young population to be aware about their sexual rights and empower them to protect themselves from any undesired act of violence, sexual abuse and molestation. India's National Population Policy reiterates the need for educating adolescents about the risks of unprotected sex (Government of India, 2000). The provision of family life education might result into multiple benefits to the adolescent boys and girls. This might include delayed initiation of sexual activity, reduction in unplanned and early pregnancies and their associated complications, fewer unwanted children, reduced risks of sexual abuse, greater completion of education and later marriages, reduced recourse to abortion and the consequences of unsafe abortion, curb the spread of sexually transmitted diseases including HIV (World Health Organisation, 2003).

Recent literature on adolescents have documented that irrespective of being in a relatively healthy period of life, adolescents often engage in a range of risky and adventurous behaviours that might influence their quality of health and probability of survival in both short and long term over the life course (Lule *et. al.*, 2006). These includes early pregnancy, unsafe abortions, sexually transmitted infections (STIs), and sexual abuse and violence. Pregnancy related problems comprise a leading cause of death among adolescents aged 15-19 years, mainly due to unsafe abortion and pregnancy complications (World Health Organisation, 2006). However, the sexual and reproductive health needs of adolescents and youth are poorly understood and grossly under-appreciated owing to limitation of scientific evidence, compounded with the unpreparedness of public health system, which may jeopardise the initiatives to advance the health and well-being of adolescents.

Adolescents and youth in India experience several negative sexual and reproductive health outcomes such as early and closely spaced pregnancy, unsafe abortions, STI, HIV/AIDS, and sexual violence at alarming scale. One in every five woman aged 15-19 years experience childbearing before 17 years of age that are often closely spaced; risk of maternal mortality among adolescent mothers was twice as high as compared to mothers aged 25-39 years (Jejeebhoy, 1998; Santhya and Jejeebhoy, 2003). Importantly, adolescents and youth comprise 31 percent of AIDS burden in India (UNFPA, 2011). Multiple socioeconomic deprivations further increase the magnitude of the health problems for adolescents, limiting their opportunity to learn and access the appropriate health care services. This inadvertent scenario calls for a serious and comprehensive public health initiative to provide Indian adolescents and youth with accurate and age-appropriate essential information and skills for

a responsible lifestyle, that might help in reduction of risky sexual behaviour, early pregnancy, HIV/AIDS and STI, etc.

To analyse the awareness and experiences of youth on sex education, the data from two major surveys of India were used here. The District Level Household and Facility Survey (DLHS-3, IIPS 2010) in 2007-08 is the largest ever demographic and health survey carried out in India with a sample size 7,20,320 households covering 601 districts of the country. The perception and knowledge about family life education, family planning, RTI/STI, HIV/AIDS and reproductive health issues were collected in this survey. About 1,60,551 unmarried women (15-24 years) were interviewed in DLHS-3, using a structured interview schedule.

The second survey is the “Youth in India: Situation and Needs” conducted in 2006-07 in six Indian states (IIPS and Population Council, 2010). The main objective of this survey is to gather evidence on key transitions experienced by youth as well as their awareness, attitudes and life choices. The study was conducted in Andhra Pradesh, Bihar, Jharkhand, Maharashtra, Rajasthan and Tamil Nadu. In all, 50,848 married and unmarried young women and men were successfully interviewed, from 1,74,037 sample households. In this survey, 15-24 years of unmarried men and women as well as married women were interviewed, whereas the age for married men respondents was extended to 15-29 years.

Literature suggests that the attitudes and behaviours of youth are usually influenced by socio-economic, cultural and demographic characteristics. The pertinent socio-economic and demographic characteristics are age (15-19 and 20-24 years), type of residence (rural and urban), religion (Hindu, Muslim, Christian and others), caste (Scheduled Castes, Scheduled Tribes, Other Backward Classes and others), education (non-literate, 1-5 years of schooling, 6-9 years, and 10 years or above), economic status of the household (as presented by wealth index) and employment status (not working, agriculture, manual, non-manual). Awareness about contraceptives has been computed based on modern methods (sterilisation, pills, condom, IUD, etc.) and traditional methods (rhythm, withdrawal, abstinence, etc.).

Table-11 presents the composite picture concerning the perceived importance of family life education (FLE) and the perception of youth regarding at what age and standard it should be introduced. Nearly four-fifths of unmarried women (15-24 years of age) perceived that FLE is important. DLHS-3 asked women about their opinion regarding- at what age and at what level in school does the FLE should be introduced? Majority of women reported that FLE should be provided in the age group 15-17 years (38 percent) and initiated from the 8th to 10th standards (55 percent). The information regarding major sources of FLE among unmarried

women who perceived FLE to be important was also collected. Majority of the respondents reported that the main source for providing FLE should be parents (81 percent), followed by teacher/school/college (55 percent), sibling/sister-in-law (50 percent), and friends/peers (30 percent) respectively. On the other hand, health care providers/experts (10 percent), husband/partner (4 percent), youth club/NGO worker (3 percent) were respectively chosen as other preferred sources of information on FLE among unmarried women in India.

Table-12 indicates the proportion of women who actually received FLE and their experiences regarding the same. Around 50 percent of women actually received FLE, overwhelming majority from schools or colleges. The other sources are NGO programmes, youth clubs, government programmes, etc. Among the women who received FLE, majority reported that the teacher/trainee explained it in a way that can be understood and FLE answered/clarified many of their questions. It is important to note that, around 40 percent of women felt embarrassed while attending family life/sex education classes. The prevalence of perceived importance of FLE was relatively high among the youth (81 percent) in India. However, only 49 percent of women actually received FLE (Table-13). The relatively matured unmarried women (20-24 years) residing in urban areas, with more than ten years of education, engaged in non-manual occupations, and coming from better-off families had higher prevalence of perceived importance of FLE as well as that of receiving FLE.

The knowledge and awareness on reproductive health issues among unmarried women were also collected in the DLHS-3. On an average, the women who received FLE had much better awareness on various reproductive health issues like RTI/STI, possibility of finding out the sex of a baby before birth, and knowledge about reducing chances of infecting HIV as compared with women who did not receive any FLE (Table-14). In general, women who received the FLE were relatively more aware about methods of contraception as compared to their counterparts. For instance, among women who received FLE, nearly 98 and 27 percent of women were aware about any modern and traditional methods of contraception respectively. On the other hand, this figure declines to 89 and 12 percent respectively among the young women who do not receive FLE.

Around 83 percent of young men and 78 percent of young women felt that it is important to impart family life/sex education to youth (Table-15). Slightly large proportion of unmarried youth (84 percent of men and 81 percent of women) as compared to married youth (79 percent of men and 75 percent of women) reported that family life/sex

education is important. Majority of young men and women observed that family life/sex education should be provided to adolescents in the age group 15-17 years. Regarding the perception of youth about the best person to impart family life/sex education, the preferences differed among men and women. Majority of young men reported that the best person to provide FLE should be teacher, whereas most young women suggested that parents are ideal persons to provide such education. Around 21 percent of young men and 11 percent of young women reported that the main source of providing family life/sex education can be friends.

According to Youth in India survey, nearly 15 percent of young men and 14 percent of young women actually received family life/sex education. Majority received FLE through schools/colleges. Among those who received formal family life/sex education, majority felt that FLE answered many of their anxieties/queries and the teacher/trainee explained the subject well (Table-16). Twenty one percent of men and 37 percent of women also reported that they felt embarrassed while attending family life/sex education. Adolescent life education program intend to ensure the rights of the large section of adolescents/youth, and to develop them as healthy and responsible members of the family and society.

Only half of the unmarried women actually received any form of family life education. This critical mismatch between the potential demand for FLE and apparent lack of facility might lead to a brigade of untrained, ill-equipped and unmanageable group of risky young population who might indulge in unhealthy life style practices. Another finding that needs special attention relates to the appropriate age and standard at which the FLE should be initiated in schools. The findings based on the opinions of unmarried women 15-24 years suggest that the FLE should be started at the age of 15-17 years and during 8th to 10th standards in schools (Tripathi and Sekher, 2012).

It becomes apparent that FLE need not be only part of formal school curriculum; it should also be equally augmented in the first place by parents at home to eliminate all the misconceptions, inhibitions and doubts of adolescents on various issues of family/sex life. Relatives and friends/peers could also be important avenues that need to be appropriately tapped to help the adolescents learn about the basic issues/rules of family/sex life skills safely and comfortably either at home, school or neighbourhood.

In the era of globalisation and modernisation, there still persist steep socioeconomic divide in the knowledge, attitudes and perception of youth. The same holds true with regard to benefits of FLE. Whether it relates to the perceived importance of FLE, or actual prevalence of FLE among unmarried women in India, we found substantial differentials across socio-economic groups. This indicates that even after more than six decades of planned

development efforts in India, large proportion of population continue to lag behind when it comes to the adoption of modern attitudes and healthy sexual behaviour.

There exists a wide gap between the proportion of women who perceive FLE is important and those who actually received any sex education. It was also true that women who received family life education had better knowledge and awareness on reproductive health issues than their counterparts (Tripathi and Sekher, 2012). The level of awareness and knowledge regarding Family Life Education is more among the educated, economically better-off sections and those living in urban areas. The growing population, changing life styles and increasing incidences of HIV/AIDS is a great challenge. In order to prepare the youth to face these challenges, introducing sex education is an important step. The nation-wide surveys clearly illustrate that overwhelming majority of young women and men are in favour of introducing family life education.

Table 4.11 Awareness and perception regarding family life/sex education among Unmarried Women (15-24 years) (percentages)

Perceptions	Unmarried Women
Perceived family life/sex education to be important	80.9
Family life/sex education should be provided at age (years)*	
Below 12	7.4
12-14	33.2
15-17	37.3
18 or above	17.7
Family life/sex education should be provided from standard*	
Below 8	22.7
8-10	54.9
Above 10	15.0
The best person to impart family life/sex education* (multiple responses)	
Parent	81.3
Sibling/sister-in-law	49.9
Spouse/partner	3.9
Teachers in School/College	55.1
Friends/Peer	29.5
Health care provider/expert	9.6
Youth club/NGO worker	3.5
Total number of women interviewed in the survey	1,60,550

*Note: *Among Women who perceived family life education to be important.*

Source: IIPS, 2010

Table 4.12 Experiences of Unmarried Women (15-24 years) who received family life/sex education (percentages)

Experiences	Unmarried Women
Received family life/sex education	48.5
Source of family life/sex education	
School/College	78.9
Youth club	6.7
Government program/camp	5.4
NGO program/camp	3.7
Others	24.4
Opinion about family life/sex education received	
It answered many queries	79.6
Teacher/trainer explained well	83.7
Respondent felt embarrassed	40.8
Number of women who received family life/sex education	74,475

Source: IIPS, 2010

Table 4.13 Perception and actual experience of family life/sex education among unmarried women (15-24 years) by their background characteristics (percentages)

Background Characteristics	Perceived family life education is important	Received family life education	Number of Women
Age Group			
15-19	78.7	45.9	120,586
20-24	86.8	55.7	39,965
Residence			
Rural	77.4	43.4	117,428
Urban	85.1	54.8	43,123
Present level of Education of			
Non Literate	50.8	16.0	15,269
1-5 years	61.8	21.1	19,226
6-9 years	79.5	42.9	59,900
10 years or above	92.0	65.5	66,156

Employment Status			
Not working	82.5	51.3	113,977
Agriculture	71.3	34.6	25,462
Manual	75.3	38.0	13,612
Non-manual	88.3	60.0	7,500
Religion			
Hindu	81.1	48.5	113,754
Muslim	77.9	42.6	20,812
Christian	81.3	57.4	12,817
Others	83.3	51.9	13,168
Caste/Tribe			
Scheduled Caste	79.3	44.9	26,577
Scheduled Tribe	73.9	44.8	32,669
Other Backward Classes	79.7	46.7	56,703
Others	87.3	55.0	44,602
Wealth Index			
Lowest	61.2	25.1	17,955
Second	70.2	32.8	23,948
Middle	75.8	40.6	32,823
Fourth	82.6	50.2	40,748
Highest	90.1	61.9	45,077
India	80.9	48.5	160,550

Sources: IIPS, 2010; Tripathi and Sekher, 2012.

Table 4.14 Knowledge and Awareness on Reproductive Health Issues among Unmarried Women (15-24 years), with and without FLE (percentages)

Reproductive Health Issues	Women received family life/sex education	Women did not receive family life/sex education
Awareness regarding RTI/STI	46.0	20.9
Possible to know the sex of the baby before the baby is born	67.8	57.4
Knowledge about how to reduce the chances of infecting HIV*	79.9	49.8
Knowledge on contraceptives		
Any modern method	97.6	89.8
Any traditional method	26.7	12.2

*Note: *Knowledge about how to reduce HIV/AIDS transmission includes the awareness of the respondents on any of the ways to reduce the chances of getting HIV/AIDS such as abstain from sex, using condoms correctly, limit sex with one partner/stay faithful to one partner, limit number of sexual partners, avoid sex with sex workers, avoid sex with persons who have many partners, avoid sex with homosexuals, avoid sex with persons who inject drugs, use tested blood, use only new/sterilised needles, avoid IV drip, avoid sharing razors/blades, avoid pregnancy when having HIV/AIDS.*

Source: IIPS, 2010uu

Table 4.15 Perceptions of Youth (aged 15-24 years) regarding Family Life Education (percentages)

Perceptions	Men	Women	Married Men	Married Women	Unmarried Men	Unmarried Women
Perceived family life/sex education to be important	82.5	78.1	79.5	75.5	83.7	81.0
Family life/sex education should be provided at age (years)						
Below 12	2.8	2.6	3.3	3.2	2.7	2.1
12-14	12.1	23.6	10.7	22.6	12.6	24.7
15-17	47.5	42.6	41.7	41.5	48.7	43.7
18 or above	35.4	25.5	41.4	25.6	34.3	25.2
The best person to impart family life/sex education is						
Parent	5.9	33.8	7.4	36.7	5.7	30.4
Sibling/sister-in-law	0.4	5.6	0.4	6.5	0.4	4.8
Spouse/partner	0.2	2.4	0.3	4.2	0.2	0.3
Teacher	44.8	27.3	36.7	20.2	47.7	34.9
Friend	21.2	11.4	23.7	11.6	20.2	11.3
Health care provider/expert	23.2	14.5	27.1	14.7	21.9	14.2
Youth club/NGO worker	0.9	0.4	0.9	0.3	1.0	0.4
Total sample	14,281	31,274	8,052	13,912	11,522	17,362

Source: IIPS & Population Council, 2010

Table 4.16 Perceptions of Youth (aged 15-24 years) regarding Family Life Education (percentages)

Source/Experiences	Men	Women	Married Men	Married Women	Unmarried Men	Unmarried Women
Those who received family life/sex education	15.3	14.6	7.8	7.3	17.4	23.0
Source of family life/sex education received						
School/College	80.0	87.9	64.5	77.1	81.6	91.8
Government programme/camp	16.3	11.8	26.2	21.2	15.3	8.3
NGO programme/camp	6.4	5.1	13.6	8.9	6.1	3.7
Opinion about family life/sex education received						
It answered many queries	87.4	90.0	89.7	91.7	87.1	89.3
Teacher/trainer explained well	89.8	91.2	84.8	91.0	89.6	91.3
Respondent felt embarrassed	21.3	36.6	19.3	36.7	21.1	36.6
Total number of youth who received family life/sex education	2,061	4,219	651	968	1,884	3,251

Source: IIPS & Population Council, 2010.

Mortality among Youth and Lifestyle Hazards

Table-17 illustrates the Age specific mortality rates (ASMR) for male and female youth with rural and urban differentials for two time periods (2011 and 2013). For males, there is not much rural-urban differentials but as the age increases from 15 years to 29 years, the ASMR has shown an increasing trend in both rural and urban areas. In 2011, it was 1.2 deaths per 1000 men and 1.0 deaths in 2013 for the age group 15-19 years as compared to 2.1 deaths per 1000 males in 2011. For females, slight change in the ASMR rates has been observed but has decreased overall from 2011 to 2013 and slightly increased across the age-groups from 1.4 and 1.1 deaths in 15-19 age-group, 1.6 and 1.5 deaths in 20-24 age group and 1.5 and 1.6 deaths in 25-29 age group in 2011 and 2013 respectively. Among the age specific groups, 20-24 age group has recorded the highest age specific mortality rates out of the three age groups among female youth for the rural (1.8 deaths in 2011 and 1.6 deaths in 2013) and also in urban areas.

Table 4.17 Age specific mortality rates among youth by sex and residence, 2011 to 2013

Age-Group	Rural		Male Urban		Total	
	2011	2013	2011	2013	2011	2013
15-19	1.3	1.0	1.0	0.9	1.2	1.0
20-24	1.8	1.9	1.4	1.3	1.7	1.7
25-29	2.3	2.2	1.8	1.9	2.1	2.1
	Female		Urban		Total	
	2011	2013	2011	2013	2011	2013
15-19	1.5	1.2	1.3	0.9	1.4	1.1
20-24	1.8	1.6	1.0	1.1	1.6	1.5
25-29	1.6	1.9	1.3	0.9	1.5	1.6
	Total		Urban		Total	
	2011	2013	2011	2013	2011	2013
15-19	1.4	1.1	1.2	0.9	1.3	1.0
20-24	1.8	1.7	1.2	1.2	1.6	1.6
25-29	1.9	2.0	1.5	1.4	1.8	1.8

Sources: Census of India, 2011 & Sample Registration System, 2013

Suicide Deaths among Indian Youth

WHO estimates that about 1,70,000 deaths by suicide occur in India every year (WHO, 2004). However, according to an estimate based on the Million Death Study in India, about three percent of the surveyed deaths in individuals aged 15 years and above were due to suicide. For Suicide deaths at ages 15 years or older, 40 percent of suicide deaths in men (45,100 of 114,800) and 56 percentage of suicide deaths in women (40,500 of 72,100) occurred at ages 15-29 years (Patel, *et al*, 2012). Most suicide deaths occur in rural areas. The age-standardised suicide death rate per 100,000 people at ages 15 years or older varied substantially between states and was generally higher in southern states (Table-18). The suicide death rate among men varies from 6.3 in Bihar to 66.3 in Kerala. For women, it varies from 2.2 in Punjab to 39.7 in Tamil Nadu. About half of the suicide deaths were due to poisoning (mainly ingestions of

pesticides). Another source of suicide statistics in India is the estimates based on the data of National Crime Records Bureau (NCRB). The reliability of NCRB data is questionable and usually an underestimate, because they are based on police reports. Suicide was the second leading cause of deaths among young people (both for males and females) in India (Table-19). The stage of life at which most individuals commit suicide coincides with time when these young men and women enter challenging life stages such as marriage and economic independence. Among women, it was observed that the suicide death rate peaked when they were youth (at the ages of 15 to 29 years) and decreased thereafter.

Table 4.18 Suicide-attributed deaths and estimated national totals by age, sex and region, India, 2010

	Study Deaths (2001-2003)			All India (2010)			
	Numbers attributed to suicide / All Deaths	Proportion of suicide Deaths (%) ^a	Two coders immediately agreed	All Deaths/ Population (millions)	Estimated Suicide Deaths ^π	Suicide Death rates per 100000 Population (lower bound-upper bound) ^β	Cumulative Risks(%) [∞]
Men/Boys							
0-14 years	28/645	<0.5	23(82%)	1.0/195	2300	1.19(1.0-1.2)	0.02
15-29 years	637/4725	13	556(87%)	0.4/177	45100	25.5(22.3-26.5)	0.40
30-44 years	486/6817	7	417(86%)	0.6/13	35700	27.4(24.0-29.7)	0.81
45-59 years	307/11731	2	257(84%)	1.0/86	22400	26.2(21.4-29.3)	1.20
60-69 years	98/12120	1	77(79%)	0.9/28	6600	23.7(18.6-27.6)	1.44
70+ years	71/18732	<0.5	60(85%)	1.5/17	5000	30.2(24.2-35.4)	1.71
Men aged 15 years or older							
Southern States	724/13430	5	671(93%)	1.0/94	50600	52.9(48.9-54.6)	3.51
Rest of India	875/40695	2	696(80%)	3.4/344	64200	18.7(15.0-20.3)	1.16
Rural	1392/43927	3	1194(84%)	3.3/303.3	95100	31.5(27.0-33.2)	2.05
Urban	207/10198	2	173(86%)	1.1/134.7	19700	14.4(12.1-15.6)	0.81
All India	1599/54125	3	1367(86%)	4.4/438	114800	26.3(22.5-28.4)	1.69

Women and Girls							
0-14 years	29/13447	<0.5	23(79%)	1.1/179	3000	1.68(1.3-1.7)	0.03
15-29 years	667/4394	15	585(88%)	0.3/162	40500	24.9(21.6-25.7)	0.40
30-44 years	252/4055	6	222(88%)	0.3/121	19200	15.9(13.8-16.6)	0.64
45-59 years	85/6402	1	73(86%)	0.6/81	6800	8.4(7.2-9.2)	0.77
60-69 years	54/9016	1	43(80%)	0.7/29	3800	13.2(10.4-14.5)	0.85
70+ years	27/17343	<0.5	27(100%)	1.5/20	1800	9.1(9.0-9.7)	0.99
Women aged 15 years and older							
Southern States	457/10236	5	425(93%)	0.8/97	29500	32.2(29.6-32.9)	1.76
Rest of India	628/30974	2	525(84%)	2.6/316	42600	13.3(11.1-13.9)	0.70
Rural	931/33793	3	820(88%)	2.6/293	57800	20.4(17.5-20.6)	1.08
Urban	154/7417	2	130(85%)	0.8/120	14300	12.0(9.6-12.4)	0.60
All India	1085/41210	3	950(88%)	3.4/413	72100	17.5(15.2-18.4)	0.96
Total (Men and Women)	2684/95335	3	2317(86%)	7.8/851	186900	22.0(18.9-23.5)	1.32

a Compared with all deaths, weighted by state and residence (urban vs rural). π Obtained by multiplying the UN estimated total deaths in 2010 by the weighted proportions from this study. β Suicide death rates for individuals aged 15 years or older are age-standardised to the 2010 estimated Indian population. δ Cumulative risk for ages =15 years was calculated by summing the risk for ages 15–79 years, yielding the probability of death from suicide if there were no other causes of death—cumulative risk = $(1 - \exp(-\sum \text{Rate}_i))$, where i =age group in 5-year age groups. Southern states are Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Puducherry, Lakshadweep, and Andaman and Nicobar Islands. Rural areas are those with population of less than 5000 or population density of less than 400 per sq.km or more than 25% of the male working population engaged in agriculture.

Source: Patel et.al; 2012

According to the Million Death Study, the five leading causes of death among male youth are transport accidents, suicide, other unintentional injuries (drowning, falls, snake bites, etc), tuberculosis and cardiovascular diseases. Among female youth, they are maternal disorders, suicide, tuberculosis, unintentional injuries (fires, transport accidents, snake bites, etc), and cardiovascular diseases. Considering the gradual decrease in maternal mortality in recent decades, suicide will probably become the leading cause of death among young women in India (Patel et.al, 2012). According to a nationally representative youth survey, mental health disorders were reported by one in seven young men and women in India (IIPS & Population Council, 2010).

Table 4.19 Leading five causes of death among Youth (aged 15-29 years) from the first phase of the Million Death Study and their contribution to total mortality in 2010

	Estimated Deaths in 2010	Contribution of each cause to
		overall mortality *(%)
Men		
Transport Accidents	48000	14
Suicide	45000	13
Other Unintentional Injuries **	40000	11
Tuberculosis	34000	10
Cardiovascular Diseases	25000	7
Total	192000	54
Women		
Maternal Disorders	46000	16
Suicide	40000	14
Tuberculosis	30000	11
Unintentional Injuries **	29000	10
Cardiovascular Diseases	20000	7
Total	165000	56

*Note: * Percentage to overall mortality was calculated after application of sample weights to adjust urban–rural differences for each state in the sample deaths.*

*** In men, other unintentional injuries include drowning (11%), falls (7%), and snakebite (7%); In women, unintentional injuries include fires (29%), transport accidents (18%), and snake bites (15%).*

Source: Patel et.al; 2012

NCRB data provides details for the reasons cited for suicide deaths. Among the youth aged 18 to 30 years, the prominent reasons mentioned are family problems, illness, marriage related issues, love affairs and mental illness (Table-20). Gender differentials persist among youth with regard to suicides, where more cases are reported from males. Table-21 provides state-wise details of accidental deaths among youth in 2014. Maximum number of accidental deaths are reported from Maharashtra, Madhya Pradesh, Rajasthan, Uttar Pradesh and Gujarat. Accidental deaths among male youth are more than three times higher than the female youth.

**Table 4.20 Age and Gender-wise Distribution of Suicide Deaths in 2014
(Cause-wise), India**

States/ Union Territories (UTs)	14 to 18 Years			18 to 30 Years			Total (all ages)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bankruptcy or Indebtedness	14	3	17	432	41	473	2098	210	2308
Marriage Related Issues	109	178	287	1075	2934	4009	2362	4411	6773
Non-settlement of marriage	30	51	81	284	373	657	490	606	1096
Dowry related issues	0	32	32	19	1707	1726	39	2222	2261
Extra-marital affairs	6	8	14	114	134	248	227	249	476
Divorce	0	10	10	55	88	143	150	183	333
Others	73	77	150	603	632	1235	1456	1151	2607
Failure in examination	582	539	1121	655	407	1062	1358	1045	2403
Impotency/ Infertility	5	11	16	54	100	154	127	205	332
Other family Problems	625	716	1341	5541	4221	9762	18623	9977	28600
Illness	428	496	924	3756	2299	6055	16078	7663	23741
AIDS/STDs	0	0	0	35	8	43	184	48	232
Cancer	8	0	8	51	38	89	407	175	582
Paralysis	2	1	3	23	9	32	301	105	406
Sanity/Mental Illness	169	174	343	1400	729	2129	4761	2341	7102
Other Prolonged Illness	249	321	570	2247	1515	3762	10425	4992	15417
Death of dear person	13	26	39	169	126	295	658	323	981
Drug addiction/ Addiction	51	5	56	967	24	991	3555	91	3646
Fall in social reputation	7	15	22	85	55	140	361	129	490

Ideological causes/ Hero worshipping	2	0	2	21	8	29	43	13	56
Love affair	346	511	857	1581	985	2566	2441	1727	4168
Poverty	9	8	17	358	91	449	1419	280	1699
Unemployment	48	9	57	838	125	963	1965	242	2207
Property Dispute	15	5	20	201	63	264	874	193	1067
Suspected/ Illicit Relation	4	23	27	100	83	183	253	205	458
Illegitimate Pregnancy	0	10	10	0	34	34	0	56	56
Physical Abuse (Rape etc.)	0	20	20	3	29	32	6	68	74
Professional/ Career Problem	33	8	41	244	61	305	792	111	903
Causes not Known	748	750	1498	3657	1909	5566	11308	4955	16263
Other Causes	1643	1215	2858	7606	3932	11538	24808	10617	35425
Total	5219	5222	10441	32174	22760	54934	107569	54593	162162

Source: Accidental deaths and suicides in India (National Crime Records Bureau, 2014)

Table 4.21 Age and Gender-wise Distribution of Accidental Deaths among Youth, 2014 (States/UTs)

States/ Union Territories	14 to 18 Years			18 to 30 Years			Total (all ages)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Andhra Pradesh	499	139	638	3478	814	4292	13244	3104	16348
Arunachal Pradesh	13	9	22	112	23	135	405	63	468
Assam	645	203	848	1488	387	1875	4687	1166	5853
Bihar	1058	333	1391	2739	788	3527	8602	2300	10902
Chhattisgarh	952	573	1525	4421	1642	6063	15724	5721	21445
Goa	16	3	19	209	24	233	734	127	861
Gujarat	1187	646	1833	7484	2564	10048	28412	8046	36458
Haryana	840	205	1045	4097	707	4804	13488	2190	15678
Himachal Pradesh	127	47	174	832	203	1035	3080	616	3696
Jammu & Kashmir	116	54	170	566	174	740	1821	481	2302

Jharkhand	828	256	1084	1361	480	1841	4863	1472	6335
Karnataka	1237	516	1753	6852	1907	8759	25170	6664	31834
Kerala	370	97	467	1657	255	1912	10151	1961	12112
Madhya Pradesh	4054	1630	5684	9518	3693	13211	32082	11655	43737
Maharashtra	1983	843	2826	11788	4094	15882	52135	14880	67015
Manipur	6	5	11	117	19	136	391	56	447
Meghalaya	46	11	57	121	24	145	350	83	433
Mizoram	2	2	4	79	17	96	254	52	306
Nagaland	0	1	1	17	9	26	43	16	59
Odisha	991	497	1488	2856	1053	3909	9745	3479	13224
Punjab	534	133	667	2212	439	2651	8907	1581	10488
Rajasthan	1614	572	2186	8785	2205	10990	26909	6513	33422
Sikkim	9	9	18	50	19	69	247	68	315
Tamil Nadu	1490	532	2022	6610	1771	8381	27480	7082	34562
Telangana	592	129	721	3800	823	4623	13450	3245	16695
Tripura	84	28	112	179	83	262	732	262	994
Uttar Pradesh	2334	653	2987	8545	2185	10730	26679	6403	33082
Uttarakhand	104	30	134	375	67	442	1012	231	1243
West Bengal	1171	684	1855	3978	1432	5410	15075	5699	20774
Total	22902	8840	31742	94326	27901	122227	345872	95216	441088
Union Territories									
A&N Islands	14	3	17	21	19	40	175	68	243
Chandigarh	15	3	18	92	24	116	388	64	452
D & N Haveli	15	4	19	36	7	43	123	27	150
Daman& Diu	3	2	5	47	10	57	113	23	136
Delhi	320	356	676	2093	536	2629	6561	1481	8042
Lakshadweep	1	0	1	1	0	1	4	2	6
Puducherry	15	10	25	172	50	222	1337	197	1534
Total (UTs)	383	378	761	2462	646	3108	3754	6862	10616
Total (India)	23285	9218	32503	96788	28547	125335	349626	102078	451704

Source: Accidental deaths and suicides in India (National Crime Records Bureau, 2014)

Tobacco use among Indian Youth

Tobacco usage is a major preventable cause of premature death and disease. Currently Leading to over five million deaths overall each year worldwide and expected to rise a greater in number in subsequent years. Developing countries are the major victims of this practice and related mortality and morbidities. Globally tobacco is consumed in some form like chewing and smoking. It is also considered to be a part of socio-cultural milieu in various societies especially in the Eastern, Northern and North Eastern parts. India is second largest tobacco consumer in the world.

To find out the level of consumption in India, Global Adult Tobacco Survey (GATS) (2009-10) was undertaken. It is a standard household survey for collecting data on key tobacco control indicators and assist the countries in the formulation, tracking and implementations of effective tobacco control interventions and international comparison for policy implementation. In India, the sample collected for the survey is 72,000 households.

Among the youth aged 15 to 24, nearly 18 percent are current tobacco users. It is 27 percent among males and only 8 percent among females (Table 22). Majority consumes smokeless tobacco like *gutkha*, *chutta*, *gul* etc. (13%). Among male youth (15 to 24), 18 percent consumes smokeless tobacco, four percent use smoking ones and 5 percent consumes both types of tobacco. Among female youth, those who uses smoking tobacco is very negligible in India.

Percentage distribution of age at tobacco initiation among males and females shows that mean age of starting tobacco consumption is 17.8 years. For males, it is slightly higher (18 years) than the females (17 years). Among males and females, 40 percent of them have their tobacco consumption initiation, when they are in the age group of 20 to 34. Around 25 percent of them also started using tobacco when they were at 15 to 17 years (Table 23).

Table 4.22 Current Tobacco Users among Youth by age (15-24) and sex, India

Age	Current tobacco users	Type of current tobacco use				Total
		Smoked only	Smokeless only	Both smoked and smokeless	Non-user	
All ages	34.6	8.7	20.6	5.3	65.4	100
15-24	18.4	2.3	13.1	3	81.6	100
Male						
All ages	47.9	15	23.6	9.3	52.1	100
15-24	27.4	4.3	17.7	5.4	72.6	100
Female						
All ages	20.3	1.9	17.3	1.1	79.7	100
15-24	8.3	0.1	8	0.3	91.7	100

Source: GATS, 2009-10

Table 4.23 Age at Tobacco Initiation among Male and Female in India

	Age at tobacco initiation				Total	Mean Age
	<15	15-17	18-19	20-34		
Persons	15.7	24.7	19.3	40.3	100	17.8
Males	13.2	25.2	21.2	40.4	100	18.0
Females	25.8	22.4	11.5	40.2	100	17.1

Source: GATS, 2009-10

Youth and Disability

According to 2011 Census, India has 26.8 million disabled persons, about 2 percent of total population. Rural areas reported more disability compared to the urban areas. Among the male population, 2.4 percentage is disabled, whereas it is much lower among females - 1.87 percent. Among the youth population (10-29 years) in India, 8.8 million are suffering from one or other forms of disability that constitutes 1.89 percentage of youth in the country (Table 24). The disability rate (number of disabled per 100,000 population) for the country works out at 2130. This is 2369 for males and 1874 for females in 2011. Among the general population, disability in seeing emerges as top category (48.5 percent), followed by movement (30 percent), mental (10.3 percent), in speech (7.5 percent) and in hearing (5.8 percent). The percentage of disabled persons in India has increased both in rural and urban areas during the last decade.

Among the youth, disabled are almost two-times higher in rural areas than the urban population. Male disabled population in the rural and urban areas is almost equal. Among the female youth, urban share of the disabled is slightly higher (1.77%) than rural share (1.65%). But the prevalence is much less among females compared to males, both in rural and urban areas.

Among the total disabled population, in movement disability is highest (20.28%), followed by in hearing (18.92%), in seeing (18.77%) disabilities. The youth disabled population (10-29 years) also shows similar trends. But among the urban disabled, the highest disability is reported in hearing. Least is for mental illness (2.45%) (Table 25).

Among the male disabled in the age group 10-29 years, in movement disability has highest share (20.71%). Among the female disabled in the age group of 10-29 years, maximum disability is any other (20.22%), followed by in hearing (19.87%), in seeing (16.71%) and in movement (16.11%).

For the sex ratio (number of females disabled per 1000 males disabled) in each category, in movement category have the lowest i.e. 613. Among visually disabled, the sex ratio is 907 females per 1000 males. Among the hearing disabled, it is 894 females per 1000 males.

Table 4.24 Percentage of disabled by gender among total population and youth in India, 2011

Place of residence	Total Disabled Population			Disabled Youth (10-29 years)		
	Total	Male	Female	Total	Male	Female
Total	2,68,14,994	14988593	11826401	88,07,805	50,30,157	3777648
<i>percentage</i>	2.21	2.40	2.01	1.89	2.08	1.69
Rural	1,86,36,358	1,04,10,559	82,25,799	60,02,248	34,55,658	25,46,590
<i>percentage</i>	2.24	2.43	2.03	1.87	2.07	1.65
Urban	81,78,636	45,78,034	36,00,602	2805557	1574499	1231058
<i>percentage</i>	2.17	2.34	1.98	1.93	2.08	1.77

Source: Census of India, 2011

Table 4.25 Type of disability among youth in India, by gender and residence, 2011

Type of disability	Youth (10-29 years)						
	Percentages among disabled (all ages)	Total	Rural	Urban	Male	Female	Sex Ratio (female per 1000 male)
In Seeing	18.77	15.85	15.14	17.38	15.20	16.71	907
In Hearing	18.92	18.36	17.32	20.57	17.22	19.87	894
In Speech	7.45	9.09	8.93	9.45	8.93	9.32	780
In Movement	20.28	18.73	20.71	14.51	20.71	16.11	613
Mental Retardation	5.62	8.16	8.18	8.11	8.35	7.90	729
Mental Illness	2.70	2.57	2.63	2.45	2.70	2.40	739
Any Other	18.38	19.34	18.76	20.56	18.68	20.22	806
Multiple Disability	7.89	7.90	8.33	6.97	8.21	7.49	820

Source: Census of India, 2011

Concluding Observations

Although adolescent and young age considered as most 'healthy years' of a person's life, many social and behavioural factors make the youth vulnerable to 'unhealthy' situations. Large number of youth in India are prone to life style factors, injuries, accidents, substance abuse, suicides, sexually transmitted infections, and unwanted pregnancy. In general, most health policies and programs focus on specific diseases, thus lack a comprehensive approach in prevention of diseases and morbidities. This is particularly true with regard to health problems of youth. We need to address health promotion policies as well as healthy life styles.

Lack of adequate and nationally representative data on the health status of youth was a major challenge in preparing this chapter. Even where some data was available, they usually portray youth as a one category, ignoring the considerable variations among different segments among the youth such as poor, disabled, migrants, and sexual minorities. Given this scenario, it is important to undertake comprehensive health survey of youth, investigating their vulnerabilities towards life style diseases and unsafe behaviours.

It is a well documented fact that major portion of deaths and disease burden among adults are resulting from the health conditions and behaviours initiated in their young ages such as high risk sexual behaviours, alcohol and drug abuse, etc. Available evidences indicate that youth are prone to health impacting conditions due to personal choices, environmental influences, life style changes and injuries (Singh and Gururaj, 2014).

Youth are vulnerable to double burden of nutrition. According to National Family Health Survey-3, 56 percent of adolescent and young women are anaemic. At the same time, about ten percent of adolescent boys and girls are over-weight and three percent found to be obese.

Violence is another factor which have significant influence on the health of young people. Interpersonal violence among youth have resulted in premature deaths, injury and disability. More than half of the disabled in India are under 30 years. Overall incidences of deaths due to injuries are substantial and adolescents and youth account for a major share of these 'avoidable' mortality. Nearly one-third of married young females experienced physical, sexual and emotional violence from their spouses (NFHS-3). Though most incidences of domestic violence go unreported, but they have serious and long-lasting repercussions for the physical and mental health of young women victims.

Teenage pregnancy, high risk of STIs, sex selective abortions, and malnourishment are major health concerns of youth today. Youth years are the peak of childbearing ages in India constituting nearly half of India's fertility. Adolescents and young women aged 15 to 24 years account for 46 percent of maternal deaths. Son preference is deeply rooted in Indian culture and manifest in various forms including female foeticide. Large number of young married women, under the pressure from family and community, forced to undergo sex-selective abortions, often against their own wishes.

Lack of health and sex education also complicates the situation. Many young people have no access to service providers to seek attention to their health problems and particularly on sexual and reproductive needs. We need to design and implement health education programs focusing on the felt needs of adolescents and youth. Mass health communication campaigns are required to engage youth directly, those who are part of formal educational institutions, as well as many who are outside of schools.

Many of the health programs did not yield the desired results due to poor implementation and lack of inter-sectoral coordination. We also need to enforce laws which are required for a healthy society. In brief, most of our health programs and policies lack a comprehensive approach to the health of young people. It is high time we recognise the diverse and increasing health needs of youth and adolescents, and their right to health and access to adequate and sympathetic health care.

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DEVELOPMENT OF YOUTH EDUCATION IN INDIA: PATTERN AND PROSPECTS





CHAPTER V

DEVELOPMENT OF YOUTH EDUCATION IN INDIA: PATTERN AND PROSPECTS

SECTION - C STATUS PAPERS

Introduction

Household investment in children's education is of central importance to policy makers in both developing and developed countries. India signifies with the bulging youth for another four decades. To fully exploit the demographic dividend, India's youth need to be educated, skilled and forward looking. The youth generation is among the largest ever that can become an engine of growth if India can provide them with appropriate and adequate opportunities. Further, globalisations, liberalisation along with ICT revolution establish that countries with high levels of education can reap the benefits of rapid technological growth. All these culminated in a rapid increase in the social demand for education. But many are not being adequately prepared for this role. Unequal access to quality education locks many

young people, particularly from poor and marginalised households, into a life of disadvantage. The huge inequalities between people in different regions and across social and racial categories are one of the most pressing challenges for public policy in the 21st century.

Human capital theory elucidates that human capital is embodied in human beings in the form of skill and knowledge, and fosters productivity of an individual. This capital is in substantial part is an investment though much of it is called consumption. Direct expenditures on education, health and internal migration take advantage of better opportunities. Schultz (1961) describes five ways through which investment in human capital lead to higher productivity, *viz.*, health facilities and services which improve life expectancy

"Give me just one generation of youth, and I'll

at birth; on-the-job training; formal education; study programmes for adults such as extension programmes; and migration of individuals and families to adjust to changing job opportunities. Investment in secondary and higher education yields considerable social and private benefits or returns, offering young people the chance to acquire attitudes and skills. This in turn enables youth to develop job-oriented skills, participate fully in society, take control of their own lives and



continue learning (Alain and Tan, 1996). It is because effective secondary schooling introduces them to formal reasoning, abstract problem solving skills and critical thinking as well as its occupationally relevant content. It promotes the development of a skilled and knowledgeable citizenry with access not only to the national but also to the global economy (Lewin and Caillods, 2001).

On similar lines, the Global Monitoring Report (GMR, 2012) subtitled 'Youth and Skills: Putting Education to Work', focused on skills for employment – sometimes also called 'livelihood skills' – that could be considered 'foundation', 'transferable' or 'technical and vocational skills'. Foundation skills are those needed to obtain work or continued training and include literacy and numeracy skills. Transferable skills are the broader range of skills that can be transferred and adapted to different work environments and allow people to retain employment. They also include the capabilities to analyse problems, reach creative solutions, communicate ideas, and exercise collaboration, leadership and entrepreneurship. Skills include what are sometimes called 'socio-emotional' and non-cognitive competencies that can be acquired both through experience and education. In a broader sense, such skills also can be seen as life skills. These livelihood skills and three types of foundational, transferable and vocational skills are somewhat akin to the human capital theory.

Development since the late 1980s is defined in terms of human development. Human development is the end and the economic growth the means. It entails enlargement of choices that development is an end in itself (Sen, 1999). Literacy and education have a direct role in human development and are intrinsic and instrumental in facilitating other achievements. They matter in and of themselves and are also closely interlinked. It attempts to assess whether economic growth has been effectively translated into improvements in various aspects of life and then propose to measure development by results or achievements in different spheres of life such as the acquisition of knowledge, enjoyment of a healthy and long life. It was believed in the initial stages that economic growth will have a trickle-down effect on reducing poverty. Later, it was realised that poverty reduction may not be possible if we rely only on a trickle down approach. The human development approach emphasised ensuring the rights and entitlements for building capabilities in improving the basic human choices for living a dignified life.

From the human rights perspective, article 13 and 14 of the International Convention on Economic, Social and Cultural Rights (1966) aptly states that “Secondary education in its different forms, including technical and vocational secondary education, shall be made generally available and accessible to all by every appropriate means, and in particular by the progressive introduction of education”. At the same time, the Education Commission (1966) in India recognise the role of education in nation-building, human capital formation and overall growth of human capabilities. Later, article 28 of the Convention on the Rights of the Child (1989) declares that “encourages the development of different forms of secondary education, including general and vocational education, make them available and accessible to every child, and take appropriate measures such as the introduction of free education and offering financial assistance in case of need”. The 2013/14 GMR reported the evidence of the

positive impact of secondary education attainment on other important attitudes and values – for example, tolerance for diversity and support for democratic institutions, etc. Evidence show that literacy and educational attainment have positive externalities on political efficacy, democracy, crime reduction and civic engagement (McMahon, 2004).

The most important indicator of progress in opportunities to acquire foundation skills is access to secondary school. This chapter describes policies supporting secondary school access as well as socio-economic inequality. It attempts to understand the size, nature, trend patterns and distribution of education across youth population of India. The near universal elementary education has resulted in a significant increase in gross enrolment in secondary education in developing countries. Also, an indirect demand for secondary education is generated due to the increasing demand for highly skilled labor force in the globalised economy. Secondary education is crucial for economic growth as it provides the foundation skills and knowledge needed for economic growth, including further learning and training of professionals such as technicians, scientists and entrepreneurs. Apparently, the developed and high-income countries report universal secondary enrolment ratios over more than a decade. But, a high-risk group of countries consists of Sub-Saharan Africa with 43 per cent gross enrolment ratio (GER) followed by South Asia with 66 percent GER in secondary education even in 2013 (Table 5.1). Similarly, low-income countries report the lowest that is 44 per cent GER, among the BRICS, India reports the lowest GER, 69 percent in 2013.

Table 5.1 Gross Enrolment Ratios in Secondary Education across Regions

Regions	2000	2005	2007	2009	2010	2011	2012	2013
World	59.4	63.8	66.5	69.1	71.0	72.6	73.9	75.2
Developed countries	99.6	100.8	100.1	100.7	101.2	101.2	101.4	105.4
Developing countries	52.3	58.0	61.3	64.4	66.5	68.4	69.8	70.8
Sub-Saharan Africa	26.2	32.5	34.8	38.7	40.7	41.8	42.4	43.0
Western Asia	62.8	72.8	75.2	72.9	74.8	77.2	76.7	80.0
Eastern Asia	59.3	65.2	72.1	79.7	83.5	86.8	89.1	92.3
South-Eastern Asia	55.9	62.0	67.0	69.8	71.0	72.6	73.7	74.2
Southern Asia	45.5	51.6	55.1	57.6	60.5	63.3	66.0	66.1
Based on Income.								
Low IC	30.2	34.6	37.3	40.7	42.2	43.4	44.6	44.6
Lower middle IC	47.5	54.3	57.4	59.6	62.2	64.6	66.6	66.6
Middle IC	56.8	62.7	66.2	69.5	71.8	73.9	75.4	76.8
Upper middle IC	67.5	72.4	77.1	82.5	84.9	87.1	88.4	92.1

High IC	97.7	97.9	97.3	98.2	99.2	99.7	100.5	104.2
India	45.1	54.2	57.5	59.8	63.3	66.4	69.2	68.9
China	61.0	68.5	72.6	80.6	84.9	89.1	92.1	96.2
Russian Federation	..	82.9	83.0	85.0	..	92.1	96.2	98.8
South Africa	87.3	88.9	91.7	90.2	90.3	91.1	92.0	98.2

Note: No data available on Brazil; IC -income countries. Countries are classified based on per capita income groups by the World Bank.

Source: <http://data.uis.unesco.org/> downloaded as on 16.4.2016

Global demand for new products and services and greater access to communication technologies can enable the country to attract knowledge-based industries and services. Further, countries attempt to explore the potential of developing industries based on their untapped resources. Though, secondary education facilitates the semi-skilled workers to easily adapt the basic training skills but do not fully help to successfully participate in jobs that require more advanced skills. Higher levels of education would be essential to seize these opportunities. Hence, it is interesting to compare the profile of GER in higher education across different regions and countries. Apparently, the developed regions exhibit the highest GER of 74 per cent and also consistent almost over a decade. The least performer is the poorest region of Sub-Saharan Africa with a mere 8 per cent GER. The next lowest level of GER is reported among the south Asian countries, where India belongs to (Table 5.2).

Table 5.2 GER in Higher Education across Regions

Regions	2000	2005	2007	2009	2010	2011	2012	2013
World	19.0	24.1	25.8	27.9	29.3	31.0	32.3	32.9
Developed	54.9	66.6	68.6	71.3	73.6	75.2	75.4	73.6
Developing	12.3	16.8	18.8	21.0	22.5	24.3	25.7	26.7
Sub-Saharan Africa	4.5	6.2	6.7	7.5	8.0	8.2	8.3	8.5
Western Asia	19.5	25.0	27.8	30.4	34.0	36.2	40.7	44.9
Eastern Asia	10.8	20.8	22.2	24.0	25.5	26.6	29.0	32.0
South-Eastern Asia	18.0	20.8	22.2	25.5	26.9	28.7	30.3	30.7
Southern Asia	8.7	10.4	12.8	15.6	17.4	21.4	22.8	22.8
Based on Income								
Low IC	4.2	5.3	6.2	7.6	8.4	9.0	9.1	9.1
Lower middle IC	11.9	14.0	15.7	17.9	19.1	21.8	23.0	23.2
Middle IC	13.4	18.7	20.8	23.2	24.7	26.7	28.4	29.5

Upper middle IC	15.1	23.7	26.1	28.7	30.4	31.9	34.2	36.6
High IC	56.1	66.4	67.8	70.3	72.9	74.6	75.0	73.5
India	9.5	10.7	13.2	16.1	17.9	22.9	24.4	23.9
China	7.7	19.3	20.8	22.5	23.9	24.9	27.2	30.2
Russian Federation	55.8	72.6	74.1	75.4	..	76.5	76.1	78.0
South Africa	..	..	..	..	..	..	19.0	19.7

Note: No data available on Brazil; IC -income countries. Countries are classified based on per capita income groups by the World Bank.

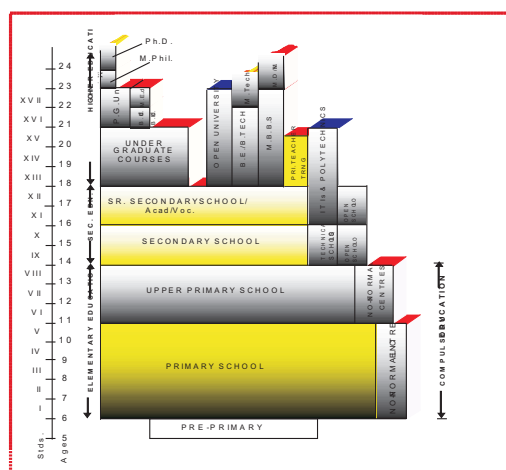
Source: <http://data.uis.unesco.org/> downloaded as on 16.4.2 016

The high-income countries report the highest GER of 74 percent. On the contrary, the low-income countries report around nine per cent GER. Among the BRICS, India happens to be one of the least performers. In accordance with the attainment levels in basic education; composition of the young population, the rate of growth of population; socio-economic development; resources availability for education and the commitment of the state determine the significance assigned to secondary and higher education. In this light, the present chapter attempts to examine a various developmental aspect of youth education in India. Hence, it would be appropriate to describe the structure of the of the Indian education system here.

Structure of Indian Education

The education system in India consists of a sequential schooling with broadly three levels of education, *viz*, elementary, secondary, higher education (see Figure 5.1).

Figure 5.1 Educational Structure in India



Source: GoI (2007)

Elementary education comprises of two sub-levels, primary and upper primary education, covering children from age 6 to 10 and 11 to 13 respectively. There is no detention policy at the elementary level¹. The Constitution of India in 1950 and the Right to Free and Compulsory Education of the Children Act, 2009, mandates the provision of free and compulsory elementary education of children in the age group of six to fourteen years. Once children complete eight years of schooling, the majority of them are enrolled in secondary sections/schools in grade IX. A small share of eligible children goes to technical schools. Dropped out or never enrolled get a second chance to open schools. The National Institute of Open Schooling (NIOS) formerly known as National Open School (NOS) was established in 1989 as an autonomous organisation in pursuance of the National Policy on Education, 1986 by the Ministry of Human Resource Development (MHRD), Government of India. It provides a number of vocational, life enrichment and community oriented courses besides general and academic courses at secondary and senior secondary level. It also offers elementary level courses through its Open Basic Education Programmes. NIOS initiated Open Educational Resources specifically for vocational programmes that are offered at secondary and senior secondary levels, including stand alone programmes. These courses are offered in partnership with state level institutions and organisations (www.nios.ac.in).

For academic courses beyond the basic level, there are close to 4,000 study centers run by accredited institutions and just under 2,000 accredited vocational institutions. Enrolment figures and the number of certified learners have risen steadily over the years. NIOS is often called the world's largest open school. Besides, technical and vocational skills or the occupational skills are acquired through various informal ways. Informal labor markets in India comprise of a large segment of poorly educated and or unskilled labor force and it has been growing in the recent decades. However, there is no information about such informal training taking place outside the formal systems. Also, such skills quite often become obsolete in the changing global, national and local markets.

The secondary education cycle consists of broadly two sub-levels, secondary and senior secondary. National or state boards of examinations conduct examinations at each sub-levels of secondary education. The official age group of these children is from 14 to 17. The vocational education is provided in two ways, as part of the stream of senior secondary education and in vocational education through Indian Institutes of Industrial Training and Polytechnics. Students who pass out from the senior secondary examinations become eligible to apply for higher education. However, a good academic record evaluated in terms of marks obtained facilitates to secure a place in higher educational institutions.

¹The present Government tries to revert it though.

Higher education in India is quite diversified (see Figure 5.1). The structure of higher education in India consists of universities, research institutions, deemed to be universities which are at the highest level. The next level is the colleges by disciplines such as general arts and science, professional including engineering, management, medical, agriculture and law colleges. This can be broadly grouped as undergraduate courses (UG) in arts, science and commerce colleges, commonly known as non-professional courses. These courses are of three years duration to acquire a bachelor degree, while the duration of professional/technical UG courses is medicine, engineering, law and education vary from two to six years, depending upon the discipline and course. Besides this regular system of higher education, students can enroll in open universities. Once students succeed their UG courses, many join the labour force. This is more common among the professional courses. A small share of them continues with post-graduate education. Once students complete their post-graduation, the options are either join the labour force or continue to do the research courses leading to doctoral degrees. The official age group of higher education range from age 18 to 23².

Role of Centre and States

Education falls under the concurrent list implicating the responsibility of catering to the educational needs become the joint responsibility of center and respective state governments. The central government is primarily responsible for Centrally Sponsored Schemes (CSS) in the case of elementary education; centrally managed and financed secondary schools and higher educational institutions in the case of secondary, higher and technical education respectively. For instance, the central government incurs expenditure in elementary education on various CSS like Teachers training (strengthening of Teachers Training Institutions), Sarva Shiksha Abhiyan (SSA), Mid-Day Meal scheme, etc.

While state governments are largely responsible for school education including secondary, central government under the special scheme for transferable central government employees has been managing a number of schools known as Kendriya Vidyalaya (Central Schools). Similarly, in order to take care of rural talented students, the central government has launched pace-setting schools, known as Jawahar Navodaya Vidyalayas (JNVs) established in almost every district. In addition, Central Tibetan Schools Administration (CTSA) and Indo-Mongolian Schools are funded and managed by MHRD. GoI attempts to make secondary education of good quality available, accessible and affordable to all young persons in the age group of 14-18 under the scheme Rashtriya Madhyamik Shiksha Abhiyan (RMSA). RMSA subsumes a number of central schemes (details in Box 5.1).

²However, the NSSO on Participation in Education in its 64th and 71st round considered the age group up to 29.

Box: 5.1 RMSA

RMSA aims to increase the enrolment rate to 90% at secondary & 75% at the higher secondary stage, by providing a secondary school within reasonable distance of every home. It also aims to improve the quality of secondary education by making all schools conform to prescribed norms, removing gender, socio-economic and disability barriers, and providing universal access to secondary education by 2017.

The integrated RMSA includes Girls Hostel, Vocational Education, ICT in Schools and Inclusive Education for the Disabled as a holistic and convergent programme committed to universalising quality secondary education. It follows the funding pattern of 75:25 between Centre and States (90:10 for Special Category and NE States),

Physical Facilities	Quality Oriented]	Equity Related
Additional classrooms; Laboratories; Libraries; Art and crafts room; Toilet blocks Drinking water provisions; Residential Hostels for Teachers in remote areas	Appointment of additional teachers to reduce PTR to 30:1; Focus on Science, Math and English education; In-service training of teachers; Science laboratories; ICT enabled education; Curriculum reforms; and Teaching learning reforms	Special focus in micro planning; Preference to Ashram schools for up gradation; Preference to areas with concentration of SC/ST/Minority for opening of schools; Special enrolment drive for the weaker section; More female teachers in schools; and Separate toilet blocks for girls

Source: Based on <http://rmsaindia.org/>

In addition, the 12th plan goals are to reduce dropout rate to less than 25 percent by 2017; Ensure quality secondary education with relevant skills including basic competency in mathematics, science, languages and communication; Implement common curricula and syllabi of nationally acceptable standards for Science, Maths and English in all schools and develop life skills including skills of critical and constructive thinking, organisation and leadership skills, and community services. So, RMSA attempts to boost foundational and life skills.

Unlike secondary education, the role of central government in higher education is quite substantial in terms of both establishing and maintaining the world class institutions like Indian Institute of Science (IISc), Indian Institutes of Technology (IITs), Indian Institute of Management (IIMs) and Central Universities. Besides MHRD, Ministry of Health and Family Welfare, Ministry of Agriculture, Ministry of Atomic Energy, Defence Ministry, Ministry of Science and Technology etc have their own managed and funded institutions of specialised and skill oriented higher learning. Recently like RMSA, Rashtriya Uchchatar Shiksha Abhiyan (RUSA), a CSS, has been launched in 2013 (Box: 5.2).

Box: 5.2 RUSA

It aims at providing strategic funding to eligible state higher educational institutions. The central funding (in the ratio of 65:35 for general category states & 90:10 for special category states) to be norm based and outcome dependent. It flows from the central ministry through the state governments/union territories to the State Higher Education Councils before reaching the identified institutions. The funding would be made on the basis of a critical appraisal of State Higher Education Plans, which is expected to describe each state's strategy to address issues of equity, access, and excellence in higher education. The objectives of RUSA are primarily accessed, equity and quality related, besides the reforms in state higher education system.

Access Related	Quality Oriented	Reforms Related
Expand the institutional base by creating additional capacity in existing institutions & establishing new institutions, to achieve enrollment targets; Correct regional imbalances in access to by setting up institutions in un-served & under served areas. Improve equity by providing adequate opportunities to SC/STs and socially & educationally backward classes; promote inclusion of women, minorities, & differently abled persons.	Improve overall quality of state institutions by ensuring conformity to prescribed norms & standards & adopt accreditation as a mandatory quality assurance framework. Ensure adequate availability of quality faculty in all higher educational institutions and ensure capacity building at all levels of employment; Create an enabling atmosphere to devote themselves to research & innovations.	Usher transformative reforms in the state higher education system by creating a facilitating institutional structure for planning and monitoring at the state level, promoting autonomy in State Universities and improving governance in institutions. Reforms in affiliation, academic and examination systems.

Source: Based on <http://mhrd.gov.in/rusa>

RUSA envisages creating new universities through up-gradation of existing autonomous colleges and conversion of colleges in a cluster. It would create new model degree colleges, new professional colleges and provide infra-structural support to universities and colleges. Faculty recruitment support, faculty improvement programmes and leadership development of educational administrators are also an important part of the scheme. In order to enhance skill development, the existing central scheme of Polytechnics has been subsumed within RUSA. A separate component to synergise vocational education with higher education has also been included in RUSA. Besides these, RUSA also supports reforming, restructuring and building the capacity of institutions in participating state.

As discussed, in a federal system, financing of education at all levels of education is shared by both center and states. It can be noted that over time, the role of center in financing education at all levels has been increasing steadily. At elementary education, the share of central government expenditures in the 1990s was around 8 percent and increased to 22percent during the first decade of the new millennium (see Table 5.3).

Table 5.3 Expenditures on Education by the Center and States by Levels of Education (in % Share)

	Expr. on Elementary Edn.		Expr. on Secondary Edn.		Expr. on Higher & Technical Edn.		Expr. on General Edn. + other depts	
	Centre	States	Centre	States	Centre	States	Centre	States
1990-91	2.8	97.2	7.0	93.0	25.6	74.4	11.8	88.2
1995-96	7.9	92.1	7.4	92.6	23.4	76.6	14.5	85.5
1990s (avg)	7.9	92.1	6.1	93.9	26.5	73.5	13.9	86.1
2000-01	10.5	89.5	5.9	94.1	28.9	71.1	12.4	87.6
2005-06	23.4	76.6	6.3	93.7	26.3	73.7	22.9	77.1
2007-08	25.9	74.1	7.1	92.9	31.5	68.5	25.6	74.4
2008-09	24.7	75.3	7.9	78.5	42.0	58.0	25.4	74.6
2009-10	21.1	78.9	9.2	90.8	42.2	57.8	26.5	73.5
2010-11	24.5	75.5	9.5	90.5	37.9	62.1	27.5	72.5
2012-13(BE)	22.4	77.6	10.3	89.7	39.8	60.2	25.5	74.5
2011-12(RE)	23.5	76.5	10.0	90.0	42.2	57.8	27.1	72.9
Avg (2000-12)	22.0	78.0	8.3	91.7	37.4	62.6	24.5	75.5

Note: BE - Budget Estimates; RE - Revised Estimates

Source: Analysis of Budgeted Expenditures on Education, various years

Similar increase can be found across secondary education³ but it is only marginal. However, central expenditures at higher and technical education has been around 26.5 per cent during 1990s and further increased to 37.4 per cent during 2000s. This 11 percentage point increase is on account of the boost for higher education in the 11th five year plan in terms of setting up many centrally funded institutions.

Management Type of Institutions

Apart from the center or state funded education, another rapidly growing education provider is the private sector. Private participation in providing secondary education has a long tradition in India, dating back to the pre-independence period. Secondary education was largely managed by the private agencies but was funded by the government under grant-in-aid system. The basic philosophy behind the grant-in-aid system was to motivate the local effort and cooperation in managing secondary education. Over the years, state governments had increased the size of grants and financed almost all the expenditures of the private aided schools. In other words, the system of grants-in-aid contributed to the growth of a large number of private aided secondary schools. In many states like Gujarat, West Bengal, Uttar Pradesh and Maharashtra, 90 percent of the total secondary schools are the private aided schools. Thus, educational institutions in India are categorised into three groups based on provision and funding: (i) government institutions set up and funded by the state (centre, state or local governments); (ii) private-aided institutions under private management but receive 90% of their expenses from the state; and (iii) privately managed and self-financed institutions which do not receive any funding from government. Until the middle of the 1980s, government and private aided institutions dominated the field. The latter were set up and managed by religious, charitable and philanthropic organisations.

The education structure in India is indeed complex consisting of different layers, levels, types of governments (local, state, centre and various Central Ministries and State Departments), and the private providers getting government aid and no aid, as well private providers or often called the non-governmental organisations (NGOs) for charity with non-profit motives and self-financing or commercial educational institutions, etc.

³The expenditures on higher and technical education is not fully accounted as other professional higher education such as Medicine, Nursing, Pharmacy, Agriculture, Law, Veterinary sciences, etc are not included.

Data and Methodology

The chapter uses secondary data relating to education from Selected Educational Statistics, *viz.*, Analysis of Budgeted Expenditure on Education, Education in India, Secondary Education Management Information System (SEMIS), Selected Statistics on Higher and Technical Education, and All India educational surveys of NCERT. The chapter also uses data sources such as Statistical Tables Relating to Banks in India, published by Reserve Bank of India; Economic Surveys of India published by Ministry of Finance, and Central Statistical Organisation. Further, it uses the survey data from Indian Human Development Surveys I and II, NSSO data in its 52nd, 64th and 71st round data on Social Consumption on Education. The period of study is from 1990-91 to 2014-15. It makes a comparative analysis of 14-17 and 18-23 age groups or development of secondary and higher education. An attempt is also made to highlight the trends in the interstate disparity in educational development using box plots⁴.

Approach Adopted

Building schools and recruiting teachers is expected to create demand for education, which is however influenced by a number of factors such as socio-economic background including incomes of parents, the cost of schooling, income forgone, expected earnings, quality of schooling, and other school-related factors. In a demand and supply framework, this chapter attempts to explore what are the trends in the expansion of the capacity in secondary and higher education sector due to supply side interventions; how the changes in the macroeconomic and education policies led to increasing participation of private sector in both secondary and higher education. Though difficult to measure quality satisfactorily, yet the disenchantment with the quality of public supply gets reflected in the increasing demand for private education in India. So, what are the mechanisms through which quality of public supply gets reflected? Does this size and nature of provision cater to the demand for education of all? who is left out? and the extent and nature of demand-supply gap are the questions addressed here.

Given this background, the rest of the chapter is organised to cover various supply side interventions *viz.*, the trends in the expansion of educational institutions, provision of supply by different management types, teachers recruited and pupil-teacher ratio over a period and resource allocation towards youth education. Further the chapter examines the quality of

⁴It is a graphical representation of data that shows a data set's lowest value, highest value, median value, and the size of the first and third quartile. In addition, coefficient of variation is estimated.

education in terms of input, process and outcomes namely internal efficiency and performance of students in public examinations at secondary and higher levels of education. The demand side responses in terms of access and equitable provision of good quality education for all is also analysed. Subsequently the demand-supply gap is explained besides policy implications.

Supply Side Interventions

The aspects covered here include the capacity of the institutions across levels of education using the indicator of educational institutions per 100,000 of eligible age group population. However, an important development since the early 1990s has been the expansion of private sector in the provision of education more so in secondary and higher levels of education. So, we examine the size and distribution of delivery mechanism in secondary and higher education. Yet another critical input to the education system is teachers. We look at the growth of teachers in secondary and higher education. In order to establish and operate the education system, it is equally important to examine the investment on education. We examine inter and intra-sectoral allocation of resources for education besides estimating the per student expenditures by levels of education.

Expansion

The expansion of secondary schools cannot be seen in isolation as it has both forward and backward linkages with other sub-sectors of education, especially the lower levels of school education. More importantly, achievement in elementary education is a pre-requisite for the growth of secondary education besides various other factors, such as accessibility, availability, affordability and social demand etc. The capacity of educational institutions as measured per 100,000 population at the elementary level was 424 in 1990-91 increased to 681 by 2013-14 that is almost after two and half decades with mission mode programmes like SSA (Table 5.4). That the capacity has not even doubled as per the growth in the population at the national/aggregate level. Across states, this indicator would tell a different story as some of the states with surplus schools rather states experiencing declining child population like Kerala, Himachal Pradesh and Tamil Nadu are closing down schools (Geetha Rani and Shukla, 2016). The average annual growth rate during this period is at 3.2 percent lowest among other levels of education.

Table 5.4 Educational Institutions Per 100,000 of Eligible Age Group Population in India

Year	Elementary (Age 6-13)	Secondary (Age 14-17)	Higher \$ (Age 18-24)	Feeder Sec. Schools\$	Feeder Sr. Sec Schools\$	Feeder HEIs\$
1990-91	424	98	5	--	--	--
1995-96	426	114	6	10.7	2.6	3.3
2000-01	445	139	7	9.6	2.3	3.7
2006-07	506	187	17	9.7	2.0	2.8
2007-08	511	189	20	9.8	1.9	2.5
2008-09	520	201	23	9.4	1.9	2.3
2009-10	546	207	23	9.9	1.7	2.5
2010-11	533	215	27	9.1	1.8	2.1
2011-12	596	220	22	9.7	1.5	2.4
2012-13*	680	223	22	10.9	1.5	2.4
2013-14*	681	228	23	10.7	1.5	2.4
GR^	3.19	4.91	9.00	--	--	--

*Note: *SEMIS; \$ Feeder schools expressed in Ratio; GR^ - average annual growth rates between 1990-91 to 2013-14; \$ Higher education institutions include vocational and technical schools*

Source: Selected Educational Statistics, various issues; Census 1991, 2001 ad 2011

The capacity of secondary education per 100,000 age group population was mere 98 schools in 1990-91 and increased to 228 by 2013-14. It has increased on an average around 5 per cent per annum. This better growth rates could be on account of many reasons: (i) the successful completion of elementary education raising the demand for secondary education. (ii) the increase in the aspirations and awareness among people as access to information was more easily and less expensively available, etc. Though, secondary education facilitates the semi-skilled workers to easily adapt the basic training skills but do not fully help to successfully participate in jobs that require more advanced skills. Hence, one could note the highest average annual growth rates as 9 percent per annum. But the point to be noted is, it is still only too few institutions that 23 higher educational institutions per 100,000 eligible age group population. This trend analysis indicates that entry to higher educational institutions is highly selective and competitive. It may be noted that higher educational institutions reported in Table 3 include the number of vocational courses, skill oriented diploma courses, industrial training institutions that are employment oriented.

Feeder senior secondary school is the ratio of senior secondary schools over secondary schools. It indicates the access and growth of next level of institutions. Feeder schools at the secondary

level remained more or less stable, while at the senior secondary and higher levels, it actually declined, though marginally. It can be construed from table 2 that the enrolment pyramids would be steeper indicating a more inequitable distribution above ten years of schooling. In other words, the structure of post basic education could be unequal.

Expanding Private Sector

Following the introduction of macroeconomic policies that included stabilisation and structural adjustment policies, a fiscal squeeze was experienced in all social sector investments in many developing countries, including India in the beginning of 1990s. As a follow-up of the economic reform packages, expenditure compression trickled down to public expenditure on education. As a result, many state governments not only refrained from opening new schools but also discouraged the practice of grant-in-aid. New economic policy consisting of Structural Adjustment Programme (SAP), liberalisation, globalisation of the economy and the opening of markets not only affected the economy but also the society in general and education in particular. These new policies brought with them improved access and choices for consumers, a higher level of income that resulted in a burgeoning of the middle class with enhanced purchasing power. The consumer choice and enhanced income level coupled with state policies on 'no-grant-in-aid' and declined investment on secondary education led to the growth of the private unaided sector in education (Table 5.5).

Table 5.5 Secondary Educational Institutions by Management Type in India

	Secondary				Hr. Secondary			
	Govt*	Private Aided	Private Unaided	Total	Govt*	Private Aided	Private Unaided	Total
1990-91	44.9	41.8	13.2	60591	41.0	49.6	9.3	18087
1995-96	46.1	34.0	19.9	72305	42.0	44.3	13.7	24647
2000-01	42.5	34.0	23.6	87763	42.5	34.0	23.6	38410
2005-06	40.9	27.9	31.2	106024	34.5	30.8	34.7	53643
2006-07	39.4	27.2	33.4	112165	34.3	29.7	36.0	57403
2007-08	39.3	26.1	34.6	113824	35.3	30.3	34.4	59166
2008-09	39.8	24.5	35.7	122081	34.8	29.2	36.0	64229
2009-10	40.6	22.1	37.2	118363	44.3	21.4	34.3	70606
2010-11	39.5	24.0	36.5	126990	34.8	27.4	37.9	70928
2011-12	40.6	21.8	37.6	124096	34.0	25.8	40.3	83015
2012-13^	47.6	17.3	35.1	131314	45.0	14.0	41.0	87543
2013-14^	45.2	17.3	37.5	135968	44.4	15.4	40.2	90645
GR	3.2	0.5	8.7	3.74	7.3	2.9	15.4	7.53

Note: Govt* includes government and local body managed and funded schools; ^SEMIS

Source: Education in India Vol.1(S); Selected Education Statistics; Selected School Statistics, various issues.:

The share of government provided and funded schools was around 45 per cent in 1990-91 that declined to 39 percent by 2009-10. However, it commenced to improve on account of the RMSA, wherein new government schools have been established. On the contrary, the private aided schools once enjoyed its hey time with 42 per cent share in 1990-91 declined drastically to 17 percent by 2013-14. The share of private unaided schools has seen a remarkable jump from 13.2 percent in 1990-91 to 37.5 percent by 2013-14. It can also be noted that the average annual growth rates during these 24 years have been minimal at mere 0.5 per cent per annum among private aided schools, 3.7 percent among the government schools and a whopping nine per cent among private unaided secondary schools (see table 5.5). Almost a similar pattern and trend is observed at the senior secondary level of education across the share of government and private aided schools. On the other hand, the share of private unaided schools grew from mere nine per cent in 1990-91 to an enormous 40 percent share by 2013-14. The average annual growth rates have been almost doubled or more than doubled the growth rates of government secondary and senior secondary schools. As the levels of education improve, there has been a deepening of the private sector participation.

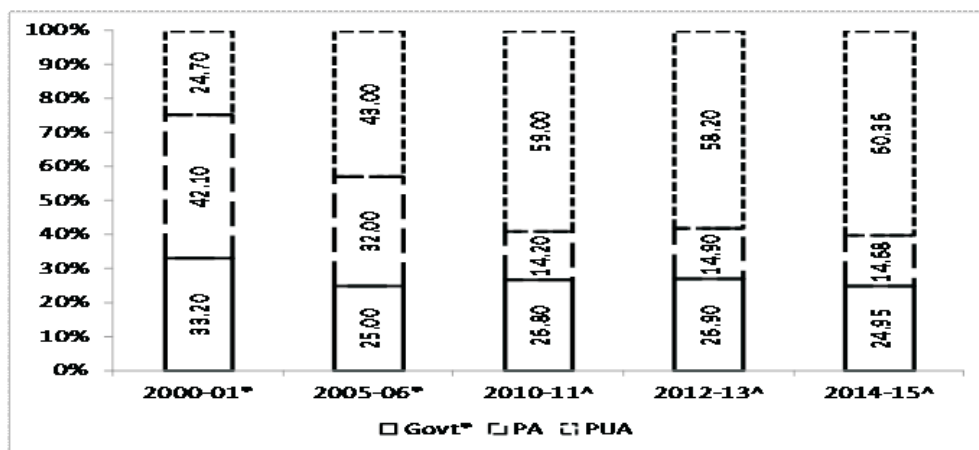
Since the National Policy on Education, 1986 the role of private sector in education has been increasing as evidenced above. It is being further deepened as it can be noted from the 12th five year plan document, "the role of the private sector in secondary schooling can be further strengthened through right policies, proper regulation, innovative public-private partnerships and a variety of demand-side financing measures that improve accountability and enhance parental choice, thereby achieving all three objectives of access, quality and equity in secondary education. This would require an easing of entry barriers with the dismantling of multiple licensing systems and procedures and the State Governments should revisit norms including the requirement of land for setting up institutions" (Planning Commission, 2013). It may be noted that across many nations, school education up to ten to twelve years of schooling is compulsory and provided by the state.

Private higher education is one of the most dynamic and the fastest-growing segment of post-secondary education at the turn of the 21st century. A combination of unprecedented demand for access to higher education and the inability or willingness of governments to provide the necessary support has brought private higher education to the forefront. Private institutions, with a long history in many countries, are expanding in scope and number and are becoming increasingly important in parts of the world that have relied on the public sector (Altbach, 1999). This transition process in higher education is primarily on account of the new goals, policies, and practices of neo-liberal market principles. There has been a paradigm shift in the

attitude towards the role and efficiency of the State per se and financing of any public services (including higher education) in particular. India is no exception to this global transformation.

Although higher education in the eleventh and twelfth five-year plans in the new millennium is boosted, the private sector has been contributing to the growth of higher education in a big way. The private unaided category has become increasingly important from the 1990s especially in professional education because the government and government-aided institutions have been unable to meet the rapidly growing demand for higher education. In other words, growing social demand for higher education is often met by private higher educational institutions⁵, wherein the cost of higher education is higher. That share of institutions by private unaided sector was 33 per cent in 2000-01, the beginning of the new millennium, which is almost doubled within about 15 years (Figure 5.2). On the other hand, the share of government institutions in 2000-01 was 33 percent and declined to 25 percent by 2014-15, while the share of private aided was 42 per cent and has plummeted to 15 percent during the same period.

Figure 5.2: Distribution of Higher Educational Institutions by Govt. and Private Sector in India



Source: * Agarwal (2009); ^ All India Higher Education Surveys.

⁵Ownership of private institutions ranges between a spectrum of weaker to strongest commercial institutions. These are often chain of institutions from kinder-garden to higher levels of education by well-known business groups. Following the Supreme Court judgment in 1993, growth of commercial higher education in the name of capitation fee or self-financing colleges is mushrooming. Neither the Department of Education nor the University Grants Commission have collected, compiled and published information on the size and growth of institutions and enrolments in the rapidly growing private higher education prior to 2010-11.

Another dimension implicit in the structure of management type is towards creating inequality in educational opportunity. That participation of students in these three types of management of institutions is determined by its access, availability and affordability. However, the mere availability of places does not ensure the children's participation. More than schools, motivated teachers play a vital role in imparting education. Teachers provide a service of increasing importance for the development of societies. The role of teachers is more multi-faceted, as it increasingly incorporates social, behavioral, civic, economic and technological dimensions. Teachers are the cornerstone of educational development and that as the Delor's Commission puts it, 'good schools require good teachers' (UNESCO, 1996). Teachers are at the forefront of the process of educational reform since the quality and effectiveness of any education system ultimately depends on the quality and nature of the interaction that occurs between learners and their teachers.

Table 5.6 reports the expansion of teachers in secondary education⁶ from 1991-92 to 2013-14. Overall the average annual growth rate has been less than two per cent. As research evidence suggests the presence of female teachers facilitates the girls to continue education. The share of female teachers was around 34 percent in 1991-92 and improved to occupy 42 percent by 2013-14. So the average annual growth rate has also been more among female teachers (2.6 per cent) than male teachers (1.3 percent). Almost a similar trend can be found at the senior secondary level, but the magnitude of improvement has been significant. That the share of female teachers at the beginning of the 1990s was mere 31 per cent jumped to almost 50 percent by 2013-14. Accordingly, the average annual growth rates of male and female teachers have been four and seven per cent respectively. PTR is a crude quality indicator. It has remained around 30 at the secondary level over the decades at the national level. But at the senior secondary level, the PTR ranged between 31 and 40. However, the interstate or inter-district and at the micro or school level would present a very different picture given the surplus children and deficit teachers across states.

⁶Each state has its own academic and professional standards for teachers in government schools, although a university degree plus a Bachelor of Education (B. Ed) degree is the minimum requirement for secondary education. The required qualification for a Senior secondary teacher is a post graduate degree in the specialised subject and a degree in Master of Education (M. Ed.).

Table 5.6 Share of Teachers by Gender and Pupil-Teacher Ratio in Secondary Education

	Secondary			Senior Secondary			PTR Sec	PTR Sr. Sec
	Male	Female	Total*	Male	Female	Total*		
1991-92	66.3	33.8	819	68.8	31.2	490	32	31
1995-96	64.8	35.2	912	67.5	32.5	581	29	35
2000-01	65.0	35.0	1006	70.2	29.8	756	31	35
2005-06	62.0	38.0	1123	61.8	38.2	1032	32	34
2007-08	62.0	38.0	1175	63.3	36.7	952	33	37
2008-09	62.6	37.4	1194	62.4	37.6	1024	32	38
2009-10	61.5	38.5	1185	61.4	38.6	1145	30	39
2010-11	62.2	37.8	1247	60.7	39.3	1261	30	34
2011-12	60.2	39.7	1163	60.1	39.9	1303	32	33
2012-13 (P)	59.1	40.9	944	52.2	47.8	1799	30	40
2013-14 (P)	57.5	42.6	1286	50.9	49.1	1785	28	40
GR	1.27	2.64	1.78	4.39	7.24	5.46	--	--

*Note: * Total in thousands; PTR - Pupil-Teacher Ratio*

Source: Selected Educational Statistics, Selected School Statistics, various issues; for 2012-13 and 2013-14 from SEMIS.

Yet other important concern is teacher qualifications, lack of science and maths teachers, also gender imbalance among mathematics and science teachers and the governance of teacher recruitment. The most important management issue in the education sector is teacher recruitment, given that teacher salaries consume the largest share of education budgets and the quality of teaching is the most important factor in student achievement. Common problems are centralised hiring, insufficient objectivity, shortage of qualified candidates and number of court cases of disputes on selection. Government teachers are hired through state-level commissions, after which they are assigned to schools, with no input from the principal, community or local authority (Sujatha and Geetha Rani, 2011). The job security of a graduate or post graduate teacher in either government or private aided schools can lead to corruption, such as the sale of teaching posts (a study indicated Rs.100,000 – 200,000, per position in private aided schools is common), (World Bank, 2009). Yet another concern is to attract and retain young people as teachers in secondary education particularly in subjects like mathematics, sciences, and technology. Higher education graduates are restrained to consider becoming a teacher and teaching as a career option. Teaching was once considered a

noble profession. One of the contributing factors being the expected future earnings is enhanced for higher education graduates in the private sector. This has resulted in an excess demand for higher education which was met through the private unaided sector (Figure 2). It is important to look at whether this rapid institutional growth has been matched with growth in teachers and other infrastructure. The average annual growth rate of all teachers has been seven percent per annum during the study period (see Table 5.7).

Table 5.7 Distribution of Teachers by Designation in University Departments and University Affiliated Colleges

Year	Professors	Readers	Sr. Lecturers	Lectures	Tutor/ Demonstrators	Total (in 000s)
1990-91	2.85	5.84	10.80	76.19	4.31	263.13
1995-96	2.93	6.00	10.72	76.05	4.31	310.57
2000-01	5.28	6.95	36.55	52.21	1.66	353.84
2005-06	8.10	25.72	15.02	47.84	3.12	488.00
2007-08	8.05	26.83	14.85	47.60	2.68	521.84
2009-10	8.80	22.99	13.58	51.73	2.90	699.46
2011-12	8.83	22.63	11.59	53.86	3.09	933.76
2012-13^	8.29	13.76	68.36	4.02	5.58	1337.73
2013-14^	9.17	13.36	66.70	4.28	6.49	1367.54
2014-15^	8.76	12.93	67.37	4.20	6.74	1418.39
GR	13.41	14.15	12.14	-1.79	7.30	6.94

Sources: *UGC Annual Reports*, ^ *AIHS*, various years

There has been an unofficial ban on the recruitment of teachers in higher education for more than two decades, being reflected in the negative growth rate of lecturers. The sanctioned positions remain vacant in both central and state managed and funded higher educational institutions. For instance, 25 percent of faculty positions were vacant in Universities in 2007-08 (as quoted in UGC, 2008). On the contrary, the growth rate of professors and senior lecturers has been substantial. This indicates that those who are already in the system got promoted but the recruitment at the entry level has been neglected. Recruiting good quality teachers are mandatory as teachers being the backbone of the good and sustainable education system. However, over the decades, the mechanism of recruitment of teachers and ensuring accountability among the teachers and in the overall public system has been deteriorating.

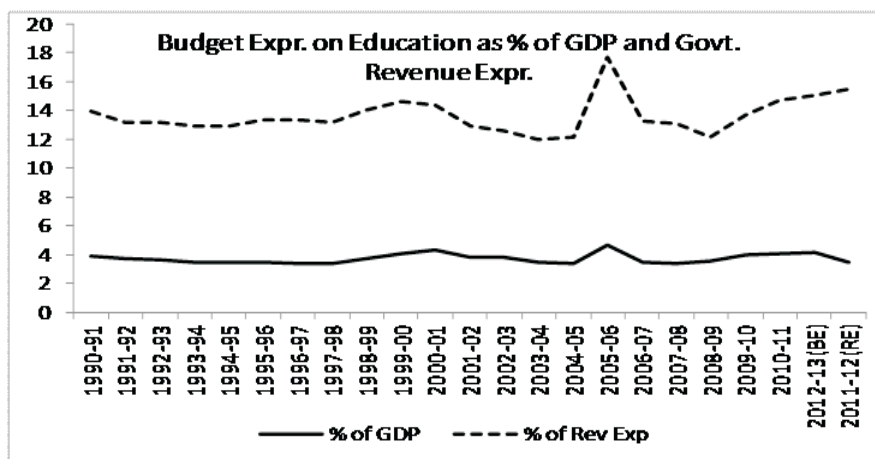
Quality of Delivery: Internal Efficiency

It is recognised that service delivery is poor at all levels of government in India (Singh, 2007). The level of service quality can be assessed by measurement, though it could be fraught with difficulties as education delivers multi-products. First, it can be reviewed based on inputs and processes of government provision of education, such as overall spending patterns, dropout rates, and teacher absenteeism. Alternatively, it can be recognised by knowing from performance and outcomes, like levels of learning, the level of transition from upper primary to secondary education. Lastly, the response of citizens can be identified through the exit from the system by use of private alternatives and their voting behavior. This can be examined by reviewing the allocation of resources, transition rates, dropout rates and the choice of students and parents of private education over public education.

Allocation of Resources

Investing in the next generation and preparing youth as the architects of the future benefits all generations. Education and investment in human capital are regarded as one of the most important factors for economic development across countries. At a macro level, education allows individuals to gain better skills and knowledge that enhances economic growth. Hence, adequate public provisioning for education is a major factor in contributing towards equity and efficiency. We report the trends in the allocation of resources with a couple of standard indicators: allocation of resources to education vis-à-vis other sectors referred as the inter-sectoral allocation of resources and intra-sectoral allocation of resources or allocation to different levels of education. The share of education expenditure in GDP reflects the relative priority given to education in the economy. Expenditure on education as a percent of Gross Domestic Product (GDP) increased from 3.59 percent in 1990-91 to the tune of 4.64 percent in 2005-06, the highest share India has ever allocated (Figure 5.3). Even then it has yet not reached the six per cent of the GDP goal recommended by the Kothari Commission (1966) five decades ago. It declined to 3.45 in 2012-13. This may be on account of repercussions of the global recession and its impact on declining growth rates of GDP in India too.

Figure 5.3 Inter-Sectoral Allocation of Resources on Education in India (in %)



Note: RE - Revised Estimates; BE - Budget Estimates

Source: Analysis of Budgeted Expenditure on Education, MHRD, various issues; Central Statistics Office, New Delhi.

Intra-sectoral allocation indicates stages of educational development and portrays a degree of state commitment across levels of education. Within the education sector, the relative priority assigned to secondary and higher education has almost been stagnant (Table 5.8). The share of expenditure on secondary education registered a sharp decline during 2007-08. However, it improved to maintain its previous levels. Despite that the average share of expenditures on secondary education in the 1990s was more than the average during 2000s. With macroeconomic reforms resulting in severe cuts to the education budget, on the one hand, to accomplish the long cherished goal of universal elementary education, on the other hand, the government has directed the shift of resources from higher education. The share of higher and technical education was the lowest in 1990-91. However, it fluctuated during the 2000s and barely maintained the same share. The share from the 1990s to 2000s has improved a bit at technical education. It is being increasingly realised that public budgets cannot adequately fund post-basic levels of education for expansion, particularly when sectors of basic education are starved of even bare needs. On the other side, the needs of the secondary and higher education system have been growing rapidly. More than two decades of adjustment policies are with clear compression in both higher and secondary education budget. Hence, the need for experimentation with several alternatives such as student fees, student loans, and privatisation is intensified at higher levels of education. Moreover, this privatisation has trickled down to school education as discussed earlier.

Table 5.8 Intra-Sectoral Allocation of Resources in Education in India (in %)

	Elementary	Secondary	Higher	Technical	Total Expr on Edn*
1990-91	45.0	29.9	10.7	2.6	20491
1995-96	48.3	32.8	12.3	4.1	38178
Avg 1990s	47.1	32.8	12.4	4.0	--
2000-01	47.6	31.6	14.7	4.0	82486
2005-06	53.1	29.4	11.7	3.9	157320
2007-08	54.8	28.4	11.4	3.7	155797
2008-09	51.7	29.8	12.2	4.8	189069
2009-10	50.3	31.3	12.0	4.9	241256
2010-11	51.2	30.2	12.5	4.6	293478
2011-12(RE)	50.6	30.6	12.3	4.9	351146
2012-13(BE)	50.4	30.0	13.1	5.0	323850
Avg (2000-12)	51.1	30.5	12.4	4.3	--
GR	14.33	13.01	13.49	14.65	13.98

*Note: * total Rs. In 10 million; RE - Revised Estimates; BE - Budget Estimates*

Source: Analysis of Budgeted Expenditure on Education, MHRD, various issues.

Yet another widely used indicator is per student expenditures on education. The unit cost of government subsidy on education is an important efficiency indicator as it relates the input with an output. The trends in per student budgeted expenditures show an increasing trend in current prices over the last two decades across levels of education. However, as expected the average annual growth rates have been highest among the elementary and lowest among the higher education per student expenditures (see Table 5.9). The same, when estimated in 2004-05 prices, indicate that growth rates in elementary education have been halved; it declined from eight to two per cent in secondary education; while it was a negative growth rate of 1.5 percent in higher education.

Table 5.9 Per Student Government Expenditure on Education by Levels of Education in India

	Elementary	Secondary	Higher	Elementary	Secondary	Higher
	Current Prices			At 2004-05 Prices		
1991-92	6438	29240	62562	14397	65391	139912
1995-96	10605	41543	80650	16506	64660	125530
2000-01	19186	68315	122113	23113	82296	147103
2005-06	27377	72408	102590	26066	68941	97678
2006-07	32309	79386	106300	28890	70984	95049
2007-08	36163	79972	110284	30618	67709	93373
2008-09	41014	98281	139846	31964	76594	108988
2009-10	49783	122621	154903	36576	90092	113810
2010-11	61557	137064	144883	41460	92315	97581
2011-12(RE)	70887	157201	167008	43899	97352	103425
2012-13(BE)	83640	178358	198495	49455	105459	117366
GR	11.93	7.83	4.40	6.06	1.77	-1.47

Note: RE - Revised Estimates; BE - Budget Estimates; GR - average annual growth rates

Source: Based on Selected Educational Statistics; Selected Statistics on Higher and Technical Education; Analysis of Budgeted Expenditure on Education, MHRD, various issues.

Expenditure compression referred as resource constraint of the government on account of economic reforms led to the financial privatisation of higher education in various forms such as reduced allocation to higher education as percent of the Gross Domestic Product; introduction of cost-recovery measures within public institutions and direct and indirect policy measures toward privatisation of higher education⁷. Though there have been deliberations on the private sector initiatives in higher education in different forums, there is no clear perspective on the issue. Yet, other important concerns are deteriorating quality of the higher education and governance over time, besides access and equity of the socially and economically weaker students. Access, expansion and qualitative improvement of education cannot be realised without adequate budgetary allocations for education. Government resources form an integral part in the growth and development of the education system in

⁷The Government of India introduced the Private Universities Establishment and Regulation Bill in 1995. The bill is still pending in the Parliament because the private sector was not interested in several clauses in the bill - primarily on the clause on the provision of scholarship for the economically and socially backward sections of the population.

India. This is all the more important when India is enjoying the demographic dividend or the window of opportunity. It is found that many first generation learners now enter in secondary and higher education. Given this, are they able to complete the education cycle successfully? Also, has the system equipped itself to deliver the first generation learners? Hence, it is important to examine the pattern of transition, dropout and pass out rates.

Transition and Dropout Rates

Transition rate refers to the percent of students joining from one level to the next level of education. Here, in the present study, transition rates indicate how many students are enrolled at the secondary level out of the total enrollment at the elementary level. The extent of transition rate to secondary level would reflect the demand for secondary education, besides the quality and performance at the elementary levels of education. Formal secondary schooling is the most effective way to develop the skills needed for work and life. The expansion of primary schooling over the past decade is now being reflected in higher enrolments at the next level of education. The transition rates from Grade VIII to Grade IX have risen from 83 to 92 percent during the last two decades, a substantial improvement and equally among girls. Almost a similar encouraging and improving trend of transition observed from Grade X to Grade XI over the years (Table 5.10). Various reasons that can be put forth are: supply related aspects include the provision of access to schooling, affirmative action, quality of inputs etc; state policy on non-detention and promotion influences the transition rate though it can have a negative impact on internal efficiency in schools.

Table 5.10 Transition Rates across Levels of Education

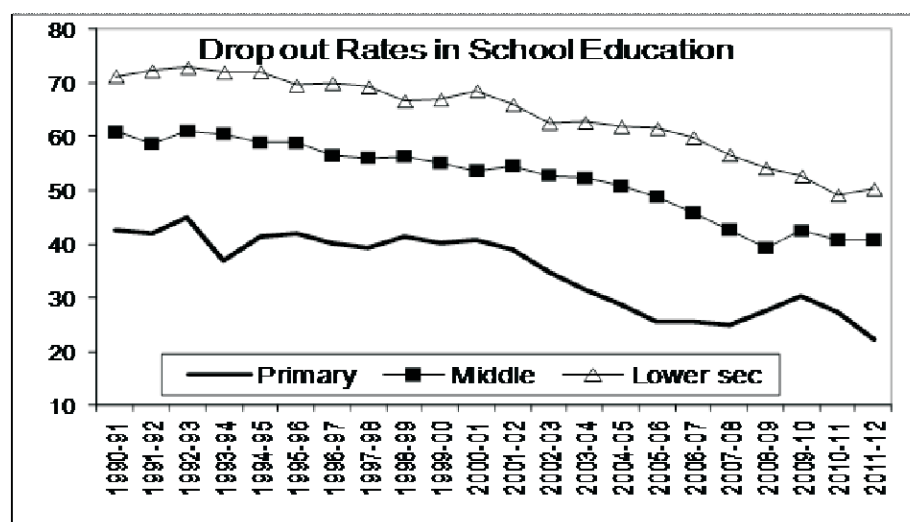
	Elementary to Secondary			Secondary to Sr. Secondary		
	Boys	Girls	Total	Boys	Girls	Total
1991-92 [^]	84.9	79.6	83.0	0	0	0
1997-98	86.5	81.0	84.4	45.5	47.1	46.1
2000-01	81.7	81.0	81.4	45.7	46.8	46.1
2005-06	88.3	83.9	86.4	61.2	63.1	61.9
2007-08	91.3	87.8	89.7	68.1	70.5	69.1
2008-09	87.7	85.4	86.7	63.4	63.4	63.1
2009-10	90.9	89.0	90.1	65.3	66.4	65.8
2010-11	92.0	88.1	90.2	71.1	69.4	70.4
2011-12	94.7	89.8	92.4	73.8	72.3	73.1
2012-13*	92.1	93.0	92.5	64.1	67.0	65.4

Note: *SEMIS; [^]no class-wise data available at Sr. Secondary level

Source: Calculated using Education in India and Selected Educational Statistics.

Many states provide either free or charge a very nominal fee in government or private aided schools. Tuition-free education, however, is not adequate to encourage the transition to secondary education where direct and indirect costs of education are significant. School education cripples with high dropout rates, largely because of poverty and unsatisfactory quality of schooling. Dropout rates leave millions of young children to face life without the foundation skills that they need to earn a decent living. The ability of an educational system to minimise the number of dropouts is a strong indication of its development and growth. The cumulative drop-out rates starting with around 60 per cent in 1990-91 improved to 40 percent by 2011-12. But even with programs like SSA, Right to Education, etc, the gap in drop-out rates between primary and upper primary levels of education remained stagnant, indicating alack of serious initiatives to reduce dropout rates. There has been a learning crisis at all levels of education in India. Millions of children who go to school do not learn the basics (ASER Reports). A large number of students take private tuition in India across levels of education (Mehtab, 2015). The situation in secondary education is that the dropout rates were 70 percent at 1990-91 improved to 60 percent by 2011-12. When 60 percent of the children drop out by the time they reach Grade X, enrolment by itself loses its meaning, except as a frame of reference (see Figure 5.4).

Figure 5.4 Cumulative Dropout Rates in School Education in India



Source: *Education in India, Selected Educational Statistics, various issues.*

Smaller gap in dropout rates between upper primary and high school suggests that if children are able to complete elementary education, the chance for them to enter into secondary education is better. But at the elementary level dropout rate is around sixty per cent, which wastes valuable human, physical and financial resources. The cost of such high drop outs is inconsiderate for young people, that they are relegated to poorly paid, insecure and often risky work. And the country is deprived of the kind of skills that could have driven economic growth. Ensuring all young people achieve a good quality school education is vital. They require a second chance in good quality education along with skills training beyond the formal system. Developing youth skills are pathways to a better future in order to reap the demographic dividend.

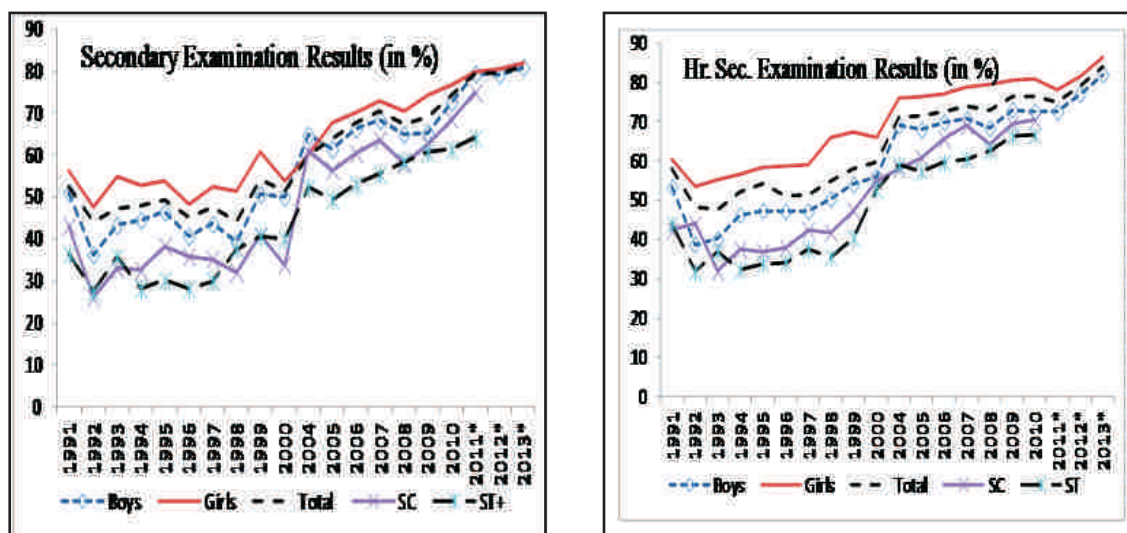
Quality of Delivery: Performance

Public examination system in India and its result owe prominent position. Examinations are held to assess the ability and competency of a student. No recent, reliable, large-scale learning assessments at the secondary level exist. Students in the school system appear at public examination, both at the completion of Grade X and Grade XII. All schools in principle are affiliated to either national or state boards for the conduct of public often called board examinations. National and state level bodies are entrusted with the task of conducting these examinations. Central Board of Secondary Education (CBSE) under the purview of MHRD and Council of Indian School Certificate Examinations (CISCE), a private non-governmental education board conduct examinations in schools affiliated to their corresponding boards. Each state has its own State Board of Education to conduct public examination for their affiliated schools as per their prescribed curriculum. National Institute of Open Schooling is yet another board of education for distance education, under MHRD.

Besides these major national or state boards of examinations, there exist international boards of affiliation. These different boards though provide choice and diversity but create layers of hierarchy in certifying learning levels, rather branding. The results of board examinations are detrimental for the choice of courses and institutions for entry into higher learning. At the All-India level, the pass percentage of students⁸ in secondary examination had improved from 53 percent in 1991 to 81 percent during 2013, while at higher secondary level, it improved from 58 to 84 percent during the same time (see Figures 5.5A and 5.5B).

⁸ As measured as per cent of successful students among students appeared in Board Examinations.

Figure 5.5 (A) and 5.5 (B) Examination Results in Secondary Education



Source: Results of High School and Higher Secondary Examinations⁹, MHRD, New Delhi, various issues.

Another interesting trend is over the years, percent of girls have been performing better than the percent of boys in secondary and higher secondary levels. Though the percent of SC and ST students passing out is lesser than total, it is improving over the years, that from 43 percent to 75 percent and 36 to 64 percent respectively during the same time in secondary education. Similar improvements and patterns can be noted among the share of SC and ST students in senior secondary education as well. However, the rate of growth of SC students is faster than the growth rate of ST students.

The percentage of passed out students in the senior secondary are better compared to high schools. It may be due to a fact that the system of board examination at high school level already filtered the students with low levels of competencies. Hence, only the better students enter into the higher secondary schools. Yet the pass out percentage in the higher secondary system needs to improve to a much better level - more than 80 percent. Further, it needs to be noted that it is not the mere passed out students would be able to compete either in the higher education system or the ease with which they obtain the adaptability for any training skills. However, the analysis based on examination results does not necessarily imply that examination is the sole criterion to assess the capabilities of students. A growing body of

⁹It provides information on results by gender and by regular and private candidates. But it does not classify appeared and passed out students by type of management. Students enrolled in government, government aided, private unaided recognised schools appear through regular category via their affiliated boards, while private unrecognised schools and few private students through tuition or coaching centre or study from home appear as private students.

literature discusses the defects of examination system¹⁰ and suggests for alternatives of evaluation and assessment.

Internal efficiency is further examined by looking at the proportion of students appeared for the Board Examinations among the enrolled in high schools. In the last two decades, percent of students appeared among the enrolled has improved from 34 per cent to 55 per cent during 1990-91 to 2010-11 (Table 5.11). The trend pattern is almost similar at senior secondary level. Unlike the better performance of girls found in board, examinations are reverted here. As many girl students enrolled drop out from the system due to various socio-cultural reasons such as early marriage; the practice of not sending girls to co-educated schools; lack of female teachers, reasons of distance, safety and modesty, etc. The common causes of girls' disadvantage in secondary education are different from boys'. Boys' lower enrollment or performance may partly result from poverty, nature of the labor market, direct and indirect cost of schooling, the classroom environment such as disengagement, disaffection with school and a sense of not belonging to school community; and lack of involvement leading to no or lack of purpose in education.

Table 5.11 Percentage of Students Appeared in the Enrolled at Secondary Levels by Gender

	Secondary			Sr. Secondary		
	Boys	Girls	Total*	Boys	Girls	Total*
1990-91	38.35	24.47	33.62	27.53	24.78	26.64
1995-96	37.04	26.85	34.53	25.32	22.43	29.50
2000-01	36.03	27.66	34.78	23.79	19.75	22.62
2005-06	55.89	51.41	54.01	56.59	55.47	56.12
2006-07	54.90	53.02	54.10	62.31	57.03	60.06
2007-08	53.40	50.51	52.03	56.02	52.60	54.55
2008-09	51.82	49.97	51.01	59.30	55.94	57.84
2009-10	58.15	52.71	55.71	61.90	56.31	59.42
2010-11 [^]	55.30	52.76	54.16	55.69	54.23	55.04

Note:* Boys and girls percentage is additive; [^] No information on SEMIS on the number of appeared students after 2010-11.

Source: Based on Selected Educational Statistics, Results of High School and Higher Secondary Examinations, MHRD, New Delhi, various issues.

¹⁰Secondary education boards are often the subject of controversy for leakage of papers, mass-copying, tampering with results and other unethical practices.

These dropped out and failed students join the army of the unskilled labor force. Such students at the senior secondary level are not eligible to enter into the higher education system. Education is a powerful explanatory factor influencing a number of economic phenomena, most notably both participation and success in the labour market (e.g. Card, 1999; Jenkins and Siedler, 2007). There is an urgency of making sure these young people are given a second chance to acquire skills for work. Left unassisted, unskilled youth either add to the increasing number of unemployed or are trapped working for very low pay. The National Skill Development Council attempts to circumvent this to some extent. Yet the exodus of an unskilled workforce, especially from Bihar and Uttar Pradesh, account for 59 percent of migrant workers in the age group 15-32 years (Chandrasekhar and Sharma, 2013).

However, the performance of students in higher education is relatively better with an improvement of ten percentage points. That the overall pass percent is 66 percent in 2006 and remained almost around the same level till 2010 (see Table 5.12). Like secondary education, the share of passed out women students are more than the share of men students across the disciplines. The efficiency levels are the best in Veterinary Science, followed by Education. The lowest pass percentage is found in the discipline Law. In general, the performance level is better across professional courses *viz.*, Engineering/Technology, Medicine, Agriculture, Veterinary Science except for Law.

Table 5.12 Passed Students among Appeared* by Discipline in Higher Education (in %)

	2006		2007		2008		2009		2010	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Arts	64.1	64.6	63.2	64.8	65.4	67.3	66.5	70.1	64.0	67.8
Science	64.4	68.4	64.3	69.2	63.2	69.9	61.0	67.9	60.7	69.4
Commerce\$	60.6	66.2	60.2	65.0	59.8	66.0	60.2	65.9	59.1	67.5
Education	88.3	88.7	88.1	88.6	88.0	91.9	83.2	84.6	80.9	84.1
Engg./Tech.	81.7	83.8	83.3	92.2	81.3	85.4	72.2	80.1	70.5	78.2
Medicine	78.6	83.4	81.4	86.9	80.5	88.5	80.8	86.0	80.8	85.3
Agriculture	66.6	84.5	67.2	84.8	86.4	91.8	84.0	85.9	82.3	83.7
Vet. Science	95.0	96.3	95.6	97.5	92.6	93.5	98.2	97.6	98.1	97.3
Law	64.9	62.8	65.4	63.2	64.3	68.8	57.1	59.7	53.7	57.4
Others	75.3	78.5	77.1	78.2	74.9	79.7	68.1	75.8	68.4	78.1
Total	66.1	67.8	66.0	68.3	66.9	70.7	66.3	71.3	64.7	70.8

*Note: *includes Under Graduate & Post Graduate;\$ includes Management. The above table has been prepared on the basis of data received from 345 Universities / Universities level Institutions (Including back year data in respect of 79 universities) out of 365 Universities / Universities level Institutions during the year.*

Source: University Development In India, Basic Facts, And Figures, Examination Results, various issues.

Growth viewed in the expansion of the education system indicates the growth of increment to the existing system. The analyses so far on the development of youth (secondary and higher) education reveal that institutions and teachers have been progressed. Per student expenditures at the secondary level in 2004-05 prices increased less than two percent while the same was negative in higher education. In terms of delivery of educational services, transition rates have been progressing but the improvement in dropout rates have been gloomy. Though results of public examination improved over time, but almost half of the students enrolled did not appear for the examination. The school education system is presumably improving but the degree and extent of internal inefficiency are at stake. The pass percentage is relatively better in higher education than in school education. But this level of performance has been after filtering the students at secondary and senior secondary levels via the board examinations. The labour market finds the skill gap among the graduates of both school and higher education and hence is not readily employable. It is observed by GMR (2015) that supply side policies aimed at increasing education levels in developing countries have been less successful in promoting human capital development.

Demand Side Responses

With an analysis of supply and the quality of supply of youth education, let us now turn to the demand for education. Successful completion of secondary education is important for employment in a globalised economy and building the foundation for an expanded and diversified tertiary level sub-sector. Moreover, it can be considered a minimum for taking part in a democratic society, where the internationalisation of trade and ICT has made societies increasingly dynamic and complex. Taking part in the learning society requires the basic building blocks of a secondary education. One of the significant factors behind the increased demand for secondary and higher education has been the rising rate of elementary education completion, thus enabling larger cohorts to become eligible for the continued study. This growth can be noted in terms of annual average growth rates across levels of education during the study period, 4.3, 5.7 and 8.9 per cent at secondary, senior secondary and higher education respectively (see Table 5.13).

**Table 5.13 Growth of Enrolment by Gender by Secondary and Higher Education
(in %)**

Years	Secondary			Senior Secondary			Higher		
	Boys	Girls	Total*	Boys	Girls	Total*	Boys	Girls	Total*
1991-92	66.7	33.3	15.0	67.7	32.3	6.2	69.2	30.8	5.2
1995-96	63.7	36.3	16.8	66.7	33.3	8.1	66.3	33.7	6.4
2000-01	61.1	38.9	19.0	61.6	38.4	9.9	64.8	35.2	9.6
2005-06	58.0	42.0	25.0	58.2	41.8	13.4	61.5	38.5	14.3
2007-08	56.4	43.6	28.2	57.1	42.9	16.3	61.6	38.4	17.2
2009-10	55.0	45.0	30.7	55.6	44.4	17.8	59.9	40.1	20.7
2010-11	54.9	44.8	31.9	55.9	44.1	19.5	56.4	43.6	27.5
2011-12	54.5	45.5	34.1	55.2	44.8	21.0	55.5	44.5	29.2
2012-13 *	52.9	47.1	34.6	53.8	46.7	19.9	55.1	44.9	29.6
2013-14*	52.7	47.3	37.3	52.9	47.1	22.3	54.1	45.9	32.3
GR	3.24	5.86	4.29	4.52	7.65	5.71	7.74	10.98	8.93

*Note: GR-Growth rates from 1991-92 to 2013-14; * Total in Millions; Enrolment in higher education includes enrolment in undergraduate courses such as B.A., B.Sc., B.Com., B.E., B.Ed. and MBBS and enrolment in universities and postgraduate courses include Ph.D., M.A., M.Sc., M.E., and M.Com.*

*Source: Selected Education Statistics; *SEMIS; Statistics for Technical and Higher Education, various issues.*

Yet another interesting trend from the table is the gap between the share of boys and girls enrolment across levels of education, tend to decline over the years. This has resulted in higher growth rates of girls' enrolment than boys. This is because, in a patriarchal society like India, where the gender inequality is the highest, we started with a small base. Further, many access-related factors are improved like proximity to secondary schools, improved roads, and transport facility¹¹, and integrating upper primary section with the secondary section. So, the physical proximity of the school to the residence contributes to higher growth rates. In addition, states have reduced the cost of transportation substantially by providing concessions to students. Some such states are Tamil Nadu, Maharashtra, Andhra Pradesh, Kerala, etc. For improving girls' secondary education, free bicycles are provided in Bihar, Tamil Nadu, Andhra Pradesh, etc. Besides, offering monetary and non-monetary incentives such as free tuition, fee waivers, scholarships, free textbooks, free uniforms etc. encourage

¹¹Improved road and transportation facility is on account of the Pradhan Mantri Sadak Yojana implemented in 2000 led to many states improved the roads and hence transportation facility.

more children to enter secondary education. Although there has been rapid progress yet expanding access to different sections of the population remain a challenge.

As defined in GMR (2012), secondary school enrolment ratio implies access to basic skills while tertiary level enrolment ratio paves the way to acquire higher-level skills. The share of tertiary graduates/students in science and technology are the skills which drive economic growth. It is examined by looking at GER in secondary and higher education, enrollment by management types, gender, social groups, regional disparity, economic groups and location.

Youth Participation in Education

Gross enrolment ratio¹² reflects the level of educational development and denotes the increasing variations across levels of education. The combined gross enrolment ratio at secondary level increased from 19 to 66 per cent during 1990-91 to 2014-15 (see Table 5.14).

Table 5.14 GER in Secondary and Higher Education

	Secondary			Hr. Secondary			Second. Combined			Higher Education		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1990-91	--	--	--	--	--	--	33.9	10.3	19.3	--	--	6.0
1995-96	--	--	--	--	--	--	37.1	23.9	30.9	--	--	--
2001-02	--	--	--	--	--	--	38.2	27.7	33.3	9.3	6.7	8.1
2004-05*	57.4	45.3	51.7	30.8	24.5	27.8	44.3	35.1	39.9	11.6	8.2	10.0
2006-07	58.6	47.4	53.5	31.5	26.1	28.9	45.0	36.8	41.1	14.5	10.0	12.4
2008-09	64.8	55.5	60.4	37.5	31.6	34.5	51.0	43.5	47.4	15.8	11.4	13.7
2010-11	69.2	60.9	65.2	42.3	36.2	39.4	55.7	48.5	52.2	20.8	17.9	19.4
2012-13	67.9	67.4	67.7	43.9	43.2	43.6	55.9	55.3	55.6	22.3	19.8	21.1
2013-14	73.5	73.7	73.6	49.1	49.1	49.1	61.3	61.4	61.3	23.9	22.0	23.0
2014-15^	78.1	78.9	78.5	54.6	53.8	54.2	66.3	66.4	66.3	24.5	22.7	23.6

*Note:-- not available; * information on enrolment ratios by secondary and senior secondary is available only from 2004-05 onwards. ^SEMIS for secondary education and AIHS for higher education.*

Source: Education in India; Selected Educational Statistics, Selected School Statistics.

¹²Gross enrolment ratio is defined as the enrolment in a particular level of education as a ratio of the eligible age group child population of the corresponding level of education.

At the secondary level, GER increased from 52 percent to 78 percent by 2014-15, while at senior secondary level, the increase is relatively less that is from 28 to 54 percent. Yet, the target of 12th five-year plan is reaching 90 percent GER at secondary and 75 percent at higher secondary levels by 2017. However, a gender difference in GER has gradually declined at both secondary and senior secondary levels. The GER at higher education increased dramatically from a mere six percent in 1990-91 to almost 24 percent 2014-15¹³. The growing globalised economy has resulted in the demand for skilled labor force and a hence paved way for demand for higher education, which is indirect. Decreasing share of agriculture for income and employment has shifted to service sector that requires change in skills and competency. Though GER across levels of secondary and higher education has been progressing, yet less than one-fourth of eligible age group children are enrolled in higher education. The trend pattern indicates that at each level around 25 to 30 percent children leave the education system.

Besides GER, we can examine the literacy rates of youth population across states. It can be found that overall literacy rates have increased from 74 to 84 percent from 2001 to 2011 census. Though it has improved overall, the divide between educationally advanced and backward states prevails. Kerala reports with cent percent literacy rates among the youth (only 68 percent as per 2001 census) while Bihar with lowest literacy rates of 70 percent (77.6 percent with the sixth position in 2001 census) as per 2011 census. But the situation was quite different in 2001 census that Sikkim and Karnataka were reported with highest youth literacy rates of 79 percent (see table 5.15).

Table 5.15 Literacy Rates among the Youth Population in the Age-Group 15-29 in 2001 and 2011

	2001			2011		
	Persons	Male	Female	Persons	Male	Female
Kerala	68.4	73.1	65.2	99.3	99.3	99.3
Mizoram	67.4	67.6	67.0	96.6	97.6	95.8
Goa	74.8	77.7	72.4	96.6	97.0	96.3
Himachal Pradesh	74.5	74.6	74.4	96.2	97.4	95.1
Tamil Nadu	76.5	83.5	70.9	96.0	97.5	94.6
Sikkim	79.2	79.6	78.7	95.1	96.3	94.2

¹³However, the 12th plan target is reaching 30 per cent GER in higher education by 2020.

Maharashtra	74.9	76.9	71.7	94.0	95.6	91.7
Tripura	70.2	78.4	64.6	93.7	96.3	92.0
Nagaland	71.1	71.9	70.1	93.5	94.2	92.8
Uttarakhand	77.0	77.1	76.6	93.2	94.6	91.3
NCT of Delhi	73.0	74.3	69.5	93.1	93.5	92.4
Manipur	76.0	78.1	73.8	91.7	94.0	89.5
Karnataka	79.0	82.4	75.1	91.4	94.5	88.2
Haryana	78.3	80.6	74.2	89.3	91.8	85.8
Punjab	77.6	84.2	71.8	89.2	91.2	87.0
Gujarat	75.1	82.0	68.0	87.1	92.2	81.0
West Bengal	67.2	73.9	61.7	87.0	90.6	84.2
Meghalaya	69.0	68.6	69.7	86.4	85.8	86.8
Andhra Pradesh	76.5	81.1	71.2	85.2	91.2	79.2
Assam	68.9	69.2	68.3	84.6	88.6	80.9
India	75.4	81.6	68.8	84.3	88.8	79.2
Arunachal Pradesh	74.6	76.8	72.1	84.0	88.2	80.1
Odisha	78.2	80.4	74.9	82.9	90.4	74.4
Chhattisgarh	68.0	68.9	65.8	82.0	89.6	74.0
Jammu & Kashmir	77.0	77.4	76.5	81.7	87.7	75.4
Uttar Pradesh	74.7	77.0	68.6	80.7	85.3	72.4
Madhya Pradesh	75.8	79.5	69.7	78.6	86.9	68.3
Rajasthan	67.3	67.4	66.9	76.3	89.6	61.0
Jharkhand	71.8	72.3	70.6	73.3	82.9	59.9
Bihar	77.6	80.2	71.0	70.1	77.2	58.0

Source: Census, 2001 and 2011

In order to compare and evaluate the development of secondary education in different states given their diversity and disparities, the indicators *viz.* Access (GER), the extent of growth and expansion of institutions, the rate of participation, the extent of enrolment and teachers have analysed. **Inter-state disparities in GER in senior secondary increased over time (Annexure Figure A1), for instance between Bihar and Himachal Pradesh. The increasing disparities in GER are due to vary rates of growth experienced by different states. Few states exhibit a high GER in senior secondary education, above 60 per cent, an arbitrary benchmark (red horizontal line). Himachal Pradesh is the only state where a full box plot is above this benchmark. Few states that peep out the benchmark are Goa, Haryana, Kerala, Punjab, Tamil Nadu, Uttarakhand and UTs. Besides state policies, a number of factors such as poverty, poor quality of**

schooling, poor infrastructure, the high household cost of schooling etc. play a vital role in the development of higher education across states. Added to these, issues relating to governance and management *viz*, lack of teacher accountability, teacher politics and the nexus between teacher unions and politics hinder the appropriate development of education. These set of factors interplay at varying degrees across various states in India, posing major challenges. Such most affected states are the economically and educationally least developed and often populous and geographically larger states *viz*, Bihar, Uttar Pradesh, Orissa, West Bengal, Assam, Jharkhand, which also report less than the national average of 20 percent GER in higher education. On the other hand, Goa and Tamil Nadu report the highest gross enrolment ratio followed by Uttaranchal, peep out the arbitrary benchmark horizontal red line of 30 percent GER (Annexure Figure A2).

Besides the literacy rates of the youth population, it is equally important to examine the rate of growth of enrolment vis-a-vis schools and teachers' growth rates across states over the study period. It can be found that enrollment at senior secondary levels reports double-digit growth in states such as Nagaland, Kerala, Jharkhand, Mizoram, Meghalaya and Chhattisgarh. Jharkhand registers the highest growth rate of 22 per cent per annum (Table 5.16).

Table 5.16 Growth Rates* of Secondary Education across States during 1990-91 to 2014-15

States	Enrolment		Schools^^		Teachers^^	
	Secondary	Hr. Sec	Secondary	Hr. Sec	Secondary	Hr. Sec
Andhra Pradesh	4.47	6.76	6.29	7.82	4.42	9.32
Arunachal Pradesh	6.90	9.45	5.31	3.89	4.66	3.91
Assam	2.69	1.94	0.87	5.51	1.81	2.77
Bihar	4.39	6.37	-2.50	8.12	-3.37	10.30
Chhattisgarh	9.89	10.00	8.84	8.46	7.69	5.79
Goa	0.06	1.94	0.57	2.10	-3.45	1.55
Gujarat	3.16	5.07	2.15	4.40	2.70	0.50
Haryana	4.88	9.90	3.09	12.08	-0.10	8.52
Himachal Pradesh	3.11	7.09	2.59	13.85	0.58	9.28
Jammu & Kashmir	5.06	8.69	3.36	7.29	2.19	6.38
Jharkhand	22.08	13.32	16.90	25.31	-1.21	-0.10
Karnataka	3.57	2.61	5.81	5.81	6.33	0.48

Kerala	0.33	16.68	-0.09	17.72	-1.58	19.23
Madhya Pradesh	5.39	6.14	6.19	3.77	6.23	2.62
Maharashtra	3.15	5.14	3.40	3.93	1.51	2.67
Manipur	2.54	8.12	2.98	5.06	1.78	4.50
Meghalaya	5.06	11.48	4.64	0.00	2.23	14.39
Mizoram	3.18	11.79	4.37	13.80	4.60	12.29
Nagaland	4.21	22.46	3.87	19.15	3.38	32.93
Orissa [^]	1.27	3.94	2.78	2.78	2.36	12.82
Punjab	2.72	6.19	1.83	8.06	-0.29	5.11
Rajasthan	7.34	7.38	8.54	11.30	5.18	6.56
Sikkim	5.11	8.88	4.33	6.37	0.65	-0.94
Tamil Nadu	3.03	5.79	0.70	3.75	-0.33	1.59
Tripura	5.12	5.86	2.11	4.22	2.68	3.75
Uttar Pradesh	6.35	8.54	7.08	5.40	3.01	5.82
Uttaranchal	3.61	7.94	6.36	5.81	10.48	4.17
West Bengal	3.73	6.50	-5.13	8.73	-7.02	4.06
India	4.47	6.60	4.01	7.18	2.10	4.96

Note: *average annual growth rates measured by fitting a trend line; ^ no compatibility between the SES and SEMIS data in Orissa - with -6.05 growth rate hence includes only the SES data which is up to 2011-12. Odisha, Higher Secondary considered as part of Higher Education and hence not covered under U-DISE; ^^Schools and Teachers' growth rate during 1990-91 to 2011-12 as data not compatible with SEMIS or U-DISE due to varying definitions.

Source: Selected Education Statistics; SEMIS

As can be expected from the growth of GER in secondary education, no negative growth rates have been reported in enrolment unlike in elementary education. But unexpectedly we can find negative growth rates of schools in states like Bihar, Kerala and West Bengal. The negative growth rates of schools in Bihar and West Bengal clearly indicate the poor state commitment towards youth education. Growth rates of teachers are found to be negative in as many as eight states *viz.*, Haryana, Punjab, Tamil Nadu, Jharkhand, Kerala, Bihar, Goa and West Bengal. This could be attributable to the state's fiscal position in filling up the teacher vacancies and non-availability qualified graduate and post graduate teachers in many states (see Table 5.15).

With regard to senior secondary education enrolment, states such as Chhattisgarh, Jharkhand, Meghalaya, Mizoram and Kerala report double-digit growth rates. Many states *viz.*, Jharkhand, Nagaland, Kerala, Himachal Pradesh, Mizoram, Haryana and Rajasthan report double-digit growth rates in higher secondary schools. Teachers in senior secondary education as well report double-digit growth in Nagaland, Kerala, Meghalaya, Orissa, Mizoram and Bihar, on the contrary, negative growth rates were reported in Jharkhand and Sikkim. One of the reasons attributable to double-digit growth in teachers is that many states adopted the National school education system of 8+2+2 years of schooling around the mid-1990s. Yet the Gross Enrolment ratio in senior secondary education was a mere 54 percent in 2014-15.

Given the target rate of achieving 30 per cent GER in higher education by 2010, and to examine the forward link of senior secondary education, the growth rates of higher educational institutions (HEI), enrollment therein and teachers recruited are examined across states. The growth of higher education institutions (as reported in Table 5.17) has been found to be the highest among the educationally backward states like Rajasthan, Uttar Pradesh, Andhra Pradesh, Madhya Pradesh and Haryana. Along with these states, Uttaranchal, Maharashtra, Himachal Pradesh and Sikkim also report high growth rates. In many of these states, the high growth can be attributable to the growth of private higher educational institutions. Whether these growths in educational institutions indicate the social demand for higher education in these states can be examined by their participation rates. Overall, this may appear so though not exhibit a one-to-one relationship. Yet there are exceptions with states reporting very high growth rates of enrolment compared to their institutional growth like Arunachal Pradesh, Chhattisgarh, Sikkim, and Orissa. Though, the growth of teachers cannot be strictly comparable with that of institutions and participation gave their variability in the data sources. It can be noted that overall the growth rates during the 2000s had been lower than the post-2000s across states except in Andhra Pradesh, Arunachal Pradesh, Gujarat, Karnataka, Mizoram, Nagaland, Sikkim and Tripura.

Table 5.17 Growth Rates* of Higher Education across States during 1990-91 to 2014-15

States	HEIs	Enrolment (1990-2010)^			Teachers**	
		Boys	Girls	Total	2001-02 to 2007-08	2010-11 to 2014-15
Andhra Pradesh	9.06	9.11	10.93	9.44	9.35	-11.68
Arunachal Pradesh	6.28	10.05	15.37	11.35	9.59	-15.07
Assam	4.19	3.54	4.29	3.59	3.10	15.64
Bihar	-0.79	0.80	3.44	1.34	0.09	0.35
Chhattisgarh	5.66	10.92	10.43	12.28	9.29	10.52
Goa	1.37	2.37	4.08	3.23	2.36	7.44
Gujarat	4.55	5.23	3.85	4.53	4.81	3.70
Haryana	7.14	7.20	9.63	7.86	9.83	24.81
Himachal Pradesh	7.09	9.19	12.69	10.60	7.41	8.92
Jammu & Kashmir	6.86	9.18	6.77	6.72	3.84	17.83
Jharkhand	5.43	--	--	--	2.10	22.98
Karnataka	6.62	5.88	5.94	5.49	4.65	3.63
Kerala	2.28	4.82	6.57	5.68	4.91	11.75
Madhya Pradesh	8.07	7.13	9.76	7.90	6.81	44.77
Maharashtra	2.35	4.33	6.10	4.87	5.46	12.86
Manipur	2.14	2.42	2.53	2.45	-0.31	24.64
Meghalaya	3.24	9.57	11.62	10.42	1.12	18.07
Mizoram	1.91	8.41	9.57	8.79	9.00	6.59
Nagaland	5.04	12.22	13.82	12.67	7.75	0.30
Orissa	4.01	10.55	8.74	9.74	2.88	16.72
Punjab	5.25	6.18	5.48	5.81	9.01	20.25
Rajasthan	10.73	10.47	9.80	9.64	10.34	26.84
Sikkim	8.05	25.14	26.69	24.95	33.64	13.68
Tamil Nadu	6.55	9.49	10.24	9.71	6.89	20.51
Tripura	2.81	5.19	6.89	5.78	5.73	4.01
Uttar Pradesh	9.58	7.46	9.43	7.61	11.15	33.87
Uttaranchal	11.57	5.94	12.67	11.18	5.90	12.59
West Bengal	1.79	6.79	3.67	4.86	2.20	18.68
India	5.32	6.57	4.28	3.86	6.03	14.18

*Note: *average annual growth rates measured by fitting a trend line; ^Data for this period is from Selected Educational Statistics and Statistics for Technical and Higher Education; **Teachers data come from two different sources - 2001-02 to 2007-08 from Selected Educational Statistics and 2010-11 to 2014-15 from All India Higher Education Surveys.*

Source: Selected Educational Statistics, Statistics for Technical and Higher Education, All India Higher Education Surveys (AIHS), various issues

Yet another comparable and more reliable indicator could be the youth population which is currently attending any educational institution. There has been a substantial growth in the currently attending children from 50 to 75 percent from 2007-08 to 2014 in the rural areas in the age group 16-17 (see Table 5.18). However, the rate or extent of growth in urban areas is relatively lesser than urban areas i.e. increased from 65 to 83 percent during the same period. The same trend can be observed at the age 18-24 as well. Yet another noteworthy point is the comparison with the GER in secondary education in 2014 as reported in Table 13 was 75 percent, which is higher than the data reported here (75 percent in urban and 50 percent in rural India). Comparing Tables of 15, 16 and 17, we can say that almost in the same set of states, the growth of participation is more from the household level data as well. However, the important issue observed from this table is the rate at which the participation grows is much faster in rural areas and backward states compared to urban areas and developed states.

Table 5.18 Percentage of Young Students Currently Attending Education by Location and Age Groups in 2007-8 and 2014

States/Age Group	Rural				Urban			
	2007-08		2014		2007-08		2014	
	16-17	18-24	16-17	18-24	16-17	18-24	16-17	18-24
Andhra Pradesh	48.7	11.0	82.1	45.3	68.6	27.2	85.0	56.3
Arunachal Pradesh	75.6	21.6	90.4	59.0	94.4	48.4	86.0	69.4
Assam	50.7	20.3	70.7	36.7	63.6	32.6	86.6	56.8
Bihar	44.1	10.2	74.0	44.4	75.0	37.4	79.9	54.5
Chhattisgarh	56.4	10.6	71.7	42.0	60.5	28.6	82.1	58.1
Delhi	55.8	19.5	87.5	41.5	66.2	22.2	83.3	59.3
Goa	53.9	12.8	92.0	45.0	60.0	32.0	90.0	55.1
Gujarat	33.0	7.7	67.6	34.7	59.3	17.5	82.4	49.7
Haryana	60.1	17.7	81.5	44.5	69.6	27.8	84.4	50.3
Himachal Pradesh	81.0	22.8	90.7	63.2	88.3	44.5	96.3	72.3
Jammu & Kashmir	74.1	33.5	83.7	54.0	86.0	45.4	89.9	61.9
Jharkhand	45.5	14.1	66.3	31.9	73.8	40.5	79.7	54.9
Karnataka	49.1	16.1	74.9	42.8	71.2	21.3	86.1	51.1
Kerala	86.6	28.5	94.4	62.5	81.7	30.6	96.7	63.7
Madhya Pradesh	43.1	10.3	67.0	38.2	63.0	33.4	80.9	51.1
Maharashtra	55.9	15.8	77.5	49.1	64.8	29.0	88.3	56.9
Manipur	72.6	28.5	88.6	61.1	85.6	42.7	95.9	67.7

Meghalaya	71.9	27.0	82.9	40.6	84.1	59.9	89.5	71.3
Mizoram	47.9	6.2	75.4	48.7	81.7	36.0	95.0	54.1
Nagaland	76.1	22.5	88.6	63.1	92.2	40.9	91.7	65.5
Orissa	28.7	7.0	61.1	33.8	61.4	30.0	77.3	50.6
Punjab	52.5	17.8	81.8	49.8	66.1	22.2	89.0	54.1
Rajasthan	51.3	12.1	66.8	42.1	65.6	28.3	77.4	50.6
Sikkim	75.1	27.2	91.0	57.3	64.7	26.4	94.4	66.9
Tamil Nadu	55.8	11.6	82.7	54.8	67.7	22.5	89.5	59.7
Tripura	60.1	15.4	89.3	44.4	84.3	34.7	85.9	62.6
Uttaranchal	63.5	26.7	67.6	38.7	80.6	30.1	70.3	48.1
Uttar Pradesh	51.6	18.6	85.1	44.6	58.1	28.0	92.6	69.7
West Bengal	44.6	11.0	71.4	39.5	62.6	28.0	80.3	56.1
All-India	50.5	14.5	74.9	44.1	65.5	27.1	83.4	55.2

Source: NSS Report No. 532: Education in India, 2007-08: Participation and Expenditure; Based on Unit data from 71st round Social Consumption on Education

So far the chapter implicitly examined the vocational, skill oriented and/or diploma courses, industrial training institutions as part of the higher education system. Given their employment oriented nature, these skill oriented courses are expected to match the demand for skills to the supply of skills. To examine the demand-supply match, we examine the literacy rates among the youth population seeking and or available for work.

Marginal workers are those workers who had not worked for the major part of the reference period (i.e. less than 6 months). Work is defined as participation in any economically productive activity with or without compensation, wages or profit. Table 5.19 reports the trend in literacy rates of youth population by their working status - marginal workers or non-workers seeking / available for work between 2001 and 2011 census. It can be noted that literacy rates of youth population among marginal workers has improved from 2001 to 2011 census across all states. The trend is same across non-workers seeking or available for work. But the rate of increase of literacy is larger among non-workers than marginal workers. If we further disaggregate the data from the census, it is found that much of the educated youth (secondary, senior secondary, and undergraduates) are seeking for work. This indicates that these youth populations does not get work for their educational qualifications. Equally worrying concerns from the employee are that these educated do not owe the required skills to be fruitfully absorbed in the labour market.

Table 5.19 Literacy Rates among the Youth Population among Marginal Workers and Non-workers Seeking or Available for Work in the Age Group 15-29 in 2001 and 2011

	Marginal workers seeking / available for work		Non-workers seeking / available for work	
	2001	2011	2001	2011
Andhra Pradesh	70.0	70.7	77.6	93.1
Arunachal Pradesh	69.8	72.1	79.1	88.7
Assam	62.1	77.5	77.0	88.1
Bihar	79.9	60.4	77.6	79.4
Chhattisgarh	62.5	75.9	80.3	92.4
Goa	57.5	94.0	75.1	97.4
Gujarat	71.2	79.9	75.1	92.3
Haryana	59.5	81.8	81.3	93.1
Himachal Pradesh	66.2	95.0	83.7	97.8
Jammu & Kashmir	73.2	71.9	78.4	86.6
Jharkhand	63.6	64.3	80.2	86.3
Karnataka	65.8	83.1	79.3	95.2
Kerala	59.0	98.7	70.5	99.4
Madhya Pradesh	71.6	69.4	77.7	90.3
Maharashtra	60.7	89.1	80.6	96.1
Manipur	71.3	85.8	76.5	94.5
Meghalaya	67.8	75.9	77.5	91.6
Mizoram	64.2	91.8	79.1	98.4
Nagaland	60.9	90.4	77.5	95.4
NCT of Delhi	69.0	85.7	78.9	94.0
Odisha	61.8	72.7	81.4	92.4
Punjab	69.3	81.1	77.7	91.7
Rajasthan	61.5	66.3	78.3	87.9
Sikkim	74.6	92.4	81.9	96.6
Tamil Nadu	60.8	92.2	76.5	97.1
Tripura	60.6	88.7	71.2	95.9
Uttar Pradesh	60.2	74.5	77.4	85.2
Uttarakhand	71.1	89.8	82.2	95.3
West Bengal	60.6	79.4	67.7	89.9
India	70.6	74.4	75.4	90.5

Source: Census 2001 and 2011

By and large, states with higher endowments of skilled labor benefits from the current technological scene. Evidence from earlier studies suggests human capital positively influences productivity, growth, employment and Foreign Direct Investment. In the Indian context, Maiti and Mitra (2010) argue that with higher levels of education the quality of labour, and thereby their employability in the formal sector of the economy, would be enhanced. The linkage elucidates the quality of final products churned out from a good quality education system that can be absorbed in the labor market at competitive prices.

Unfortunately, the education system in India is undergoing a learning crisis. Indeed, skill gap is one of the biggest challenges India faces now and will continue to face tough corrective measures are initiated. It is because the products that turn out of even from professional and technical courses are only intermediate products and not the final products. An online talent assessment company (Wheebox) estimated and reported in India Skill Report, 2014 that 10 percent of MBA and 17 percent of engineering graduate are only employable in India. The kind of training or apprenticeship required for better absorption in the labor market is a big gap in the Indian higher education system. Also, our higher education system is disjoint with industry and market. India has to achieve the target of skilling/upskilling 150 million people by 2022. So, employment and earnings are directly related to either repayment or default. Borrowers who end up in low paid jobs most probably would turn out to be unlucky borrowers. When they default, the challenge is tracking the students who moved out of their residences, educational institutions and also changing jobs, further the high cost involved in the collection, time and time value of loan amount needs to be taken into consideration.

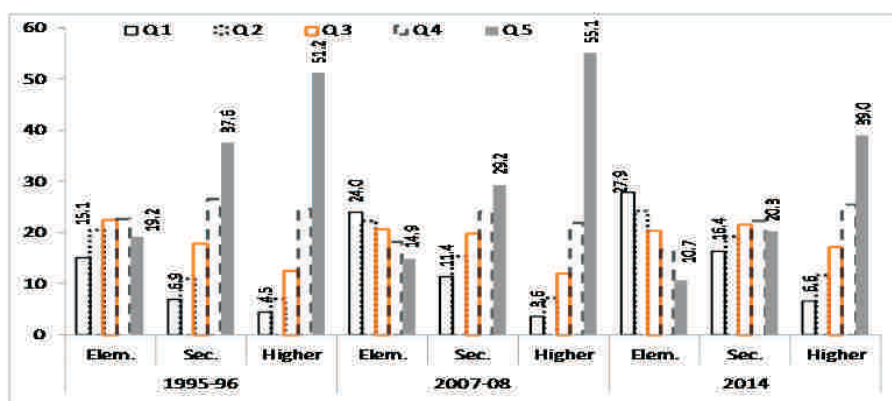
Access and Equity

Equalisation of educational opportunities has been one of the important goals of educational planning in India. This has been reflected in a number of policies, five-year plan documents and series of centrally sponsored schemes *viz*, SSA, RMSA and RUSA. One of the objectives of National Policy on Education is to widen access to cover unserved areas (NPE, 1986). Importance on equalisation of opportunities in secondary and higher education is through a number of incentives and demand side financing measures such as scholarships, fee waivers, etc. Increasing emphasis has been in place to ensure all sections of society, regardless of their socio-economic background, gender, caste, religion or geographical location to get an access to good quality secondary and higher education.

Universally, better off in the society enroll, successfully complete higher education and effectively participate and gain from the labour market. What are the primary reasons? Why do these differences in higher education exist? How do they prevail and persist over time?

Demand-supply, human capital and behavioral economic theory, social and cultural capital theory and empirical research provide ardent support for the socio-economic background exerting a categorical influence on the decisions to enroll in higher education. Next set of factors that influence the decisions to enroll are individual (innate abilities, effort, and preferences including risk aversion); location and regional factors; early schools attended and or achievements¹⁴ (Asplund et al, 2008). We find a similar pattern, positive and progressive relationship between education and income in India (see Figure 5.6). As the household moves from the poorest (quintile 1) to the richest (quintile 5), there is a progressive relationship between education and consumption expenditures. The extent of progressivity is minimal at the elementary level, higher at the secondary level and extremely more at higher levels of education. The relationship is pro-poor at elementary, pro-rich at secondary and higher levels of education. Over time, the gap between the poorest and richest quintiles decline across levels of education. Even then, only seven percent of poorest quintile attends higher education, while it was 39 percent of the richest quintile even in 2014, after almost seven decades of independent India.

Figure 5.6 Current Attendance by Expenditure Quintiles across Levels of Education in the Age Group 5-29 at 1995-96, 2007-08 and 2014 in India



Note: Q - Quintiles based Monthly Per Capita Consumption Expenditure (proxy for income groups)

Source: Based on Unit data from NSSO 52nd, 64th & 71st rounds on Education

¹⁴This is based on the extensive review of access and equity in higher education in European countries

Research evidence suggests that long-term consequences of better family resources (in the form of higher-quality education and better environments) in a child's formative years are far more important for subsequent higher education (Carneiro and Heckman, 2002).

As discussed earlier, service quality can be assessed by choice of management type of institutions. That is the choice of parents who exit from the public system by use of private alternatives. This may be natural and acceptable if there are income effects (e.g., private vs. public transportation) associated with quality of service. Thus, the rich may always choose this route for many quasi-public goods (Singh, 2007). Parents who send their children to private schools tend to be wealthier, better educated and more influential than those who use public schools and hence are not directly replicable in the public sector (Leclercq, 2003).

Exit from the Government School System

Major factors for this shift can be attributable to the state policy on restrictions on recognition or private aided schools that indirectly promote the private unaided sector. Further, the neoliberal market principles do not support the public provisioning of many social goods including education. Two arguments are put forward to justify this move. First, rules for recognition were ineffective, since they could be bypassed through corruption or fictitious enrolment of pupils of unrecognised schools in government schools. Second, privatisation is considered as reducing the burden falling on the public sector, which could thus 'focus' on children whose parents cannot afford private schooling. On the other side, the private school teachers, characterised by the insecurity of tenure, low salaries, and tight control by the employer, seems to have ensured accountability. Further, the mechanisms underlying the accountability of private school teachers to parents is the payment of fees essential to the survival of the school and the dominant social status of parents. The share of enrolment across expenditure quintiles declines as they move to richer quintiles in government schools at 2007-08 and 2014 (Table 5.20).

Table 5.20 Distribution of Children Attending Educational Institutions by Management Type and Expenditure Quintiles by Levels of Education in India

Expenditure Quintiles	Government*				Private Unaided			
	Elemen	Second.	Higher	All	Elemen	Second	Higher	All
1995-96								
Quintile 1	12.0	5.3	2.8	9.5	4.7	2.2	1.1	3.2
Quintile 2	20.8	10.3	6.1	16.9	11.6	5.5	3.7	8.2
Quintile 3	23.8	18.3	12.9	21.4	20.1	12.2	8.0	15.4
Quintile 4	23.8	27.9	26.0	25.1	30.3	26.9	20.9	27.5
Quintile 5	19.5	38.2	52.2	27.1	33.3	53.3	66.3	45.7
N	36292	14032	4753	55077	3502	2443	1218	7163
2007-08								
Quintile 1	27.8	12.7	4.1	23.0	9.4	5.4	1.9	8.1
Quintile 2	24.5	16.8	7.6	21.8	13.4	8.9	5.9	12.0
Quintile 3	21.5	21.2	13.0	20.9	17.9	13.7	9.4	16.5
Quintile 4	16.6	24.6	23.1	18.7	24.3	22.4	17.3	23.4
Quintile 5	9.7	24.7	52.2	15.7	35.0	49.7	65.5	40.0
N	54306	15686	5047	75039	13817	3414	1411	18642
2014								
Quintile 1	34.1	19.3	7.7	24.5	13.5	8.6	4.9	10.0
Quintile 2	26.8	22.2	13.2	22.7	18.5	11.4	9.3	14.3
Quintile 3	20.4	22.6	18.5	20.5	20.4	19.2	15.2	18.7
Quintile 4	12.9	20.8	25.4	17.6	25.5	26.3	25.4	25.6
Quintile 5	5.9	15.1	35.2	14.6	22.0	34.5	45.2	31.4
N	33727	16659	13843	64229	14449	6072	8428	28949

*Note: Quintiles based Monthly Per Capita Consumption Expenditure; *Govt includes local bodies and private aided schools.*

Source: Based on Unit data from NSSO 52nd, 64th, 71st rounds on Education

The reverse pattern of increasing share of enrolment can be observed as children move from poorest to richest quintile across PUA institutions consistently. It clearly indicates, over time, the rich crowd out the government schooling except in 1995-96. Children attending government institutions at elementary level reveal a progressive pattern. However, such a comparison at secondary level provides a mixed pattern that initially, the regressive pattern in 1995-96; the intensity declined in 2007-08 than in 2014. The rich gradually crowd out the government schooling. An unambiguous pattern of children attending higher education from richest quintile is apparent. This pattern is consistent across private unaided management over time. In other words, higher education evidently is an increasingly monotonous function of income.

In the event of such significant changes in the demand for private education more among the middle and rich income groups, it is pertinent to examine the impact of this change on social groups. Stratification based on caste in India is deep rooted. Historically, labor markets in India have been organised along caste lines. A salient feature of these caste networks is that they are the most dynamic among the highly skilled (or white collar) occupations, dominated by high caste. Low caste men and women historically did not participate in the labor market and hence did not benefit from these social networks. This also meant that when low caste men and women chose to enter the labor market, they did not have the caste based apprentice system, adequate development of the non-cognitive or soft skills to rely upon. Despite education being a powerful weapon which is supposed to break this vicious cycle actually promotes these inequalities in various subtle to louder ways (Thorat, 2006).

Table 5.21 exhibits how the changing mode of provision of schools segregates the caste groups over time. There has been a clear shift from the share of children attending government schools to private schools across the caste groups. But the extent of the shift to private unaided school is more among the OBC and other caste groups than the socially deprived sections. In a stratified society like India, social hierarchy persists in accessing education and especially to the different type of schools. The majority of scheduled caste students at secondary and higher levels are enrolled in government educational institutions.

Table 5.21 Distribution of Current Attendance by Type of Management across Caste Groups

Social Gp.	Govt*				PUA			
	Elemen	Sec	Hr	Total	Ele	Sec	Hr	Total
1995-96								
ST	72.6	17.4	4.2	94.2	3.4	1.8	0.6	5.8
SC	71.0	17.8	4.5	93.3	4.4	1.8	0.5	6.7
General	54.4	24.0	8.6	87.0	6.1	4.5	2.4	13.0
Total	58.3	22.5	7.6	88.5	5.6	3.9	2.0	11.5
2007-08								
ST	69.8	16.3	2.9	89.0	8.4	2.3	0.3	11.0
SC	68.0	15.2	4.4	87.7	9.4	2.2	0.8	12.3
OBC	58.8	16.3	4.3	79.4	15.6	3.4	1.7	20.6
Others	46.0	18.3	8.5	72.8	19.6	5.4	2.2	27.2
Total	58.0	16.7	5.4	80.1	14.7	3.6	1.5	19.9
2014								
ST	48.4	21.6	13.8	83.8	7.5	4.3	4.4	16.2
SC	44.9	20.0	12.8	77.7	10.5	4.6	7.2	22.3
OBC	34.6	16.7	13.3	64.6	18.6	7.0	9.9	35.4
Others	28.2	16.6	18.5	63.3	17.7	8.0	11.0	36.7
Total	36.2	17.9	14.9	68.9	15.5	6.5	9.0	31.1

Note:* Govt includes local bodies and private aided schools.

Source: Based on Unit data from NSSO 52nd, 64th, 71st rounds on Education

India is predominantly a rural society, as over two third of her population live in villages. Rural - urban disparity has been at the core of policy debates on education. Scholars argue that the roots of inequalities in access to good quality education lie within academic achievement and attainment at early stages of education. In India, there are obvious rural disadvantages, as more urbanised areas have better quality education systems. It can be noted that the government funded education system is dominant in rural areas over the decades across secondary and senior secondary levels. At the same time, the enrollment share in PUA has been steadily increasing in rural and pervasively in urban areas (Tables 5.22). In 1993-94, the demand for PUA schools was 6.2 percent at secondary level which has increased to 18.1 percent by 2014¹⁵ in rural areas. Yet, the extent of growth has been almost at the same level across rural and urban areas, indicating the spread is faster in rural areas.

¹⁵Table 16 uses data from two different sources - Data from All India Education Surveys (AIES) by NCERT and from NSSO surveys. Strictly speaking, they cannot be compared as AIES is a census, while NSSO is a sample survey.

Table 5.22 Distribution of Enrolment by Management Type in Secondary and Higher Secondary Schools by Rural and Urban Regions in India

	1993-94		2002-03		2007-08 [^]		2014 [^]	
	Govt*	PUA	Govt*	PUA	Govt*	PUA	Govt*	PUA
Secondary								
Rural	93.8	6.2	84.9	15.1	86.0	13.5	81.8	18.1
Urban	88.2	11.8	59.0	41.0	70.1	29.0	62.7	36.9
Total	91.3	8.7	75.4	24.6	81.5	17.9	76.5	23.4
Senior Secondary								
Rural	90.6	9.3	86.6	13.4	82.6	16.4	74.4	25.3
Urban	89.2	10.8	72.2	27.8	74.9	24.1	63.7	35.9
Total	89.8	10.2	78.5	21.5	79.8	19.3	71.0	28.6

Note: *Govt includes local bodies and private aided schools.

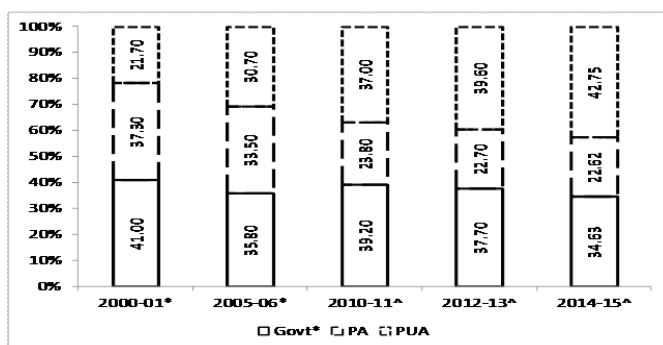
Source: 6th and 7th AIES; [^]Based on Unit data from NSSO 64th, 71st rounds on Education

At senior secondary level, the share of PUA is 9.3 percent in 1993-94, and it increased to 25.3 percent in rural India. On the other side, it rose from 10 percent to 36 percent in urban India, indicating a faster growth in urban than in rural areas. There has been a huge demand for private unaided schools both in rural and urban areas. On similar lines, De et al., (2000) note that a deterioration of the “public” school system (including a decline in the quality of private aided schools, which tend to be very similar in most respects to government schools) has caused private unaided schools to emerge even in areas that already had government or private aided schools. They note that this rapid increasing private unaided school is a phenomenon in the urban India. But the recent trend suggests that it has been spreading in rural areas as well. The gap created by the declining enrolment share of government system has been effectively bridged by the increase in the proportion of enrolment in private unaided institutions both in rural and urban areas. This clearly indicates that though there has been an overall increase in the demand for youth education, the demand has been more conspicuous in the case of the private unaided sector.

Though higher education in the eleventh and twelfth five-year plans in the new millennium is boosted, the private sector has been contributing to the growth of higher education in a big way. In other words, growing social demand for higher education is often met by private

higher educational institutions, wherein the cost of higher education is higher. That enrolment shares of government and government-funded institutions are around 43 per cent of total enrolment (Figure 5.7). Yet another dimension implicit in the structure of management type is towards creating inequality in educational opportunity. That participation of students in different types of management of institutions is determined by its access, availability and affordability.

Figure 5.7 Distribution of Enrolment in Higher Educational Institutions by Management Type in India



Source: * Agarwal (2009); ^ All India Higher Education Surveys.

From the above analysis, it can be evidenced that poor and disadvantaged go to government schools while those who can afford to pay to send their children to private schools. This divided system of school education has contributed to a vertical division in the society on the basis of the economic status of the parents. It is to be realised that these deprived groups would require the states' own and full responsibility of commitment in governance and funding for achieving the target of 75 per cent, 90 per cent and 30 per cent GER in secondary, senior secondary and higher education respectively. In the long run, this would not only jeopardise genuine democratic processes and structures but also become unjustifiable from the equity and human rights perspectives.

The structure of enrolment (discussed in section II) and the analysis in this section on access and equity canvass, the extent of inequality of access at different levels of education for the youth in India. Carnoy (2000), drawing on detailed analyses of the relative effectiveness and efficiency of public and private sector educational provision in the United States and Chile,

found that 'privatisation reform would likely increase educational inequality without improving educational effectiveness. In terms of our core values...privatisation could also leave the educational system worse off than it actually is, despite all its flaws'. Most important is the context in which any form of privatisation takes place and it is vital to ensure that it is one of the accountable services with a long-term and sustainable commitment to public service. Privatisation may contribute very less or indeed distort the existing structures in the long-term unless the state is very careful about maintaining the capacity (the established structure and vast network over many decades) in the public sector.

Before entering into higher education, the kind of child development and quality of schooling children attend are equally important, which is influenced by family backgrounds. It can be implicitly inferred that a huge proportion of children are filtered away at each level of education. Adding to this, the poor face a highly imperfect credit market, in which to borrow against expected higher future earnings to finance their investments in education, an important channel for getting out of poverty is denied to millions of young people. This section highlights this inequality rather the extent of inequality in access to education for the youth. However, these challenges can be materialised only if this huge potential of the working age population is channelised in the right direction, that is, if the labor force can be gainfully skilled and employed. Younger population of India has tremendous potential to export manpower through skill migration particularly when developed countries are facing declining birth rates and increasing life expectancy. Further, the Indian population is projected to grow at a rate of 1.6 percent per annum while GDP is expected to grow at a rate of 8-9 percent per annum. As a result, the per capita income is expected to quadruple by 2020. The Indian middle class is expected to expand by more than 10 times from its current size of 50 million to 583 million people in next 18 years¹⁶.

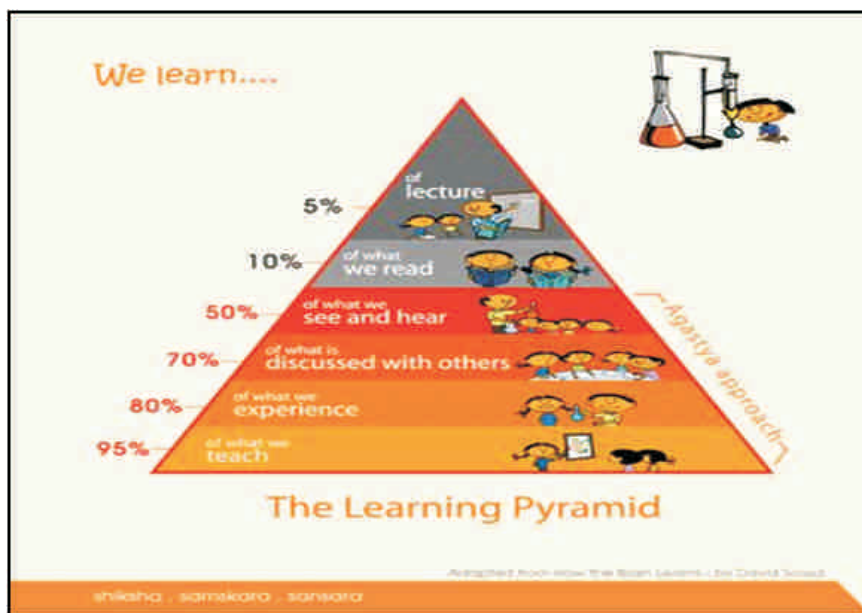
Private Initiatives

Despite a huge growth of commercially oriented PUA, yet few private sector (Azim Premji Foundation) and NGOs (RIVER Satellite Schools, Eklavya, etc) initiatives are noteworthy in this regard in improving the quality of basic education through motivation and training of teachers focusing more on the child-centred pedagogic approaches. One such example is Agastya International Foundation, one of the largest experiments on Science Education. Started in 2000, its mobile labs travel to village schools making children do experiments with their own hands. Those who show exceptional ability to learn are trained by the foundation and then made to teach science to other children. The basic principles are transforming the

¹⁶Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank of India at the Panel Discussion on GenNext Banking at the 4th International Finance and Banking Conference organised by the Indian Merchant's Chamber on November 25, 2009 in Mumbai.

attitudes of teachers and students to learning, viz., 'Yes' to 'Why'; 'Looking' to 'Observing'; 'Passiveness' to 'Exploring'; 'Textbook-bound' to 'Hands-on' and 'Fear' to 'Confidence' (see Box: 5.3).

Box: 5.3 Quality Interventions in Science



- Step 1: Using simple, counterintuitive experiments, models, stories and discussion to create surprise, delight, enthusiasm and joy in learning.
- Step 2: Promoting inquiry, experimentation, exploration, participation and hands-on interaction through kinesthetic, activity- and project-based learning to generate inspiration, recognition, comprehension and creative insight.
- Step 3: Relieving fear and anxiety, ingraining information, improving retention, boosting performance and increasing motivation through fun and humor.

Source: Based on <http://www.agastya.org/what> and *Economic times*, 10.01.2016

Such experiments and educational innovations are pursued in many nooks and corners of India. Also, the Corporate Social Responsibility of many business enterprises pursues such initiatives. However, there is no comprehensive documentation on such initiatives. In a vast country like India, with about 100s of million youth in the age group 14-29 years, these programmes, though well intended, are drops in the ocean.

Course Choice

The programmes in higher education are divided into those of general subjects such as arts which include social sciences, humanities, commerce, etc; professional courses include sciences, engineering, medicine, agriculture, veterinary science, law, teacher education, etc. The growing importance of Science, Technology, Engineering, and Mathematics (STEM) subjects relate to the demand for global markets. Preference of courses by students and family indicate choice, affordability, expected future earnings and labour market signals (Table 5.23). The highest share of students is enrolled in arts or social sciences and humanities subjects that are 40 percent in 1990-91, which has marginally reduced to 37 per cent by 2011-12. The next highest share of enrolment is found among commerce course followed by science subjects. The share of both subjects declined marginally over the last two decades. In terms of average annual growth rates, highest growth is registered as expected among the engineering subjects, followed by science, medicine, arts and education subjects.

Table 5.23 Distribution of Enrolment in Higher Education by Disciplines (in %)

in %	Science	Engg	Medicine	Agri	Vety.Sc	Law	Arts*	Com.	Edn.	Others	Total^
1990-91	19.6	4.9	3.4	1.1	0.2	5.3	40.4	21.9	2.3	0.8	44.25
1995-96	19.6	4.9	3.4	1.1	0.3	5.3	40.4	21.9	2.3	0.8	64.26
2000-01	19.1	5.0	3.5	1.1	0.3	5.2	40.6	21.9	2.3	1.1	81.75
2005-06	20.4	7.2	3.2	0.6	0.1	3.1	45.1	18.0	1.5	0.8	110.28
2006-07	20.5	7.2	3.2	0.6	0.1	3.1	45.1	18.0	1.5	0.8	116.13
2007-08	20.6	7.4	3.3	0.6	0.2	3.1	44.5	18.1	1.5	0.8	123.77
2008-09	19.1	9.6	3.3	0.6	0.2	2.8	43.1	18.2	2.1	1.0	136.42
2009-10	19.3	10.3	3.5	0.6	0.1	2.4	42.0	17.8	2.5	1.5	146.25
2010-11	18.4	16.9	3.8	0.5	0.2	1.9	36.4	17.1	3.4	1.4	169.75
2011-12	18.6	16.0	3.5	0.5	0.1	1.8	37.1	17.6	3.6	1.1	203.27
GR	6.27	11.90	6.29	1.71	2.42	0.94	6.50	4.81	6.02	8.09	6.32

*Note: Agri. : Agriculture; Vety. Sc. : Veterinary Sciences; Engg. : Engineering and Technology; *Arts -include oriental learning; Com. - Commerce; Edn.-Education; Total^ in 100,000; GR - average annual growth rates.*

Source: Annual Reports, University Grants Commission, various issues

The choice of how long and what to study is among the most important investment decisions that a person makes during her or his lifetime. Besides course choices, the socio-economic background plays an important role in this decision. Hence, the choice tends to indicate that students from well-off families and market oriented courses enjoy an edge over students who are not so well off and pursue non-market oriented courses. This potentially creates new inequalities whereby students from poorer backgrounds qualify to diploma level and those from more affluent backgrounds achieve professional degrees (Christie and Munro, 2003). Courses such as medical and engineering are not only the relatively long duration and high-cost courses but also high paying degrees. These labour market signals often align with private educational institutions as they quickly respond to these changing demands. Such trends perpetuate the inequality across lifetime earnings. Further, such competition in the market would result in an imbalance in the course structure as more and more able and talented students opting for market-oriented courses than the conventional courses, creating an imbalance. This may lead to a shortage of teachers in pure and basic science, mathematics and humanities disciplines as being experienced in India.

It may be pointed out that the 12th five-year plan document notes that 'Science and Maths education would need special attention during the Twelfth Plan. Poor science and maths education (and English) accounts for 80 per cent of total students who fail in Tenth Board Examination. The transition rate from X to XI in Science is very small as indicated by less than 12 percent share of students in UG Science stream. Such low enrollment in science stream at the higher secondary level and poor-quality education is a constraint in the development of scientific manpower in the country. Under RMSA, a special component will be created to identify scientific talents at the secondary level and to strengthen science and mathematics education; teachers will be trained and retrained on modern methods of science education' (Planning Commission, 2013). Also, credit markets in higher education in India cater to a narrow section of student community depending on their choice of courses, primarily professional and market oriented courses.

Large inequalities persist in access to youth education, by income, gender, social group, geography and course choices. Thus, urgent efforts are needed to improve the quality of education. The concern is equal access to good quality education for all. There has been a learning crisis at all levels of education in India. With more private sector participation and is also expected to grow further given the policy directions, the challenge is to dramatically improve equal access to good quality youth education simultaneously.

Demand-supply Gap

The major reasons for dropping out are found to be the direct and indirect cost of education and both children and parents not interested in studies as reported in many household surveys of NSSO and NFHS. The reported reason 'not interested in studies' could lead to different interpretations. But the fact is the schools are unable to retain the enrolled children in schools. Though educating poor people spreads the benefits of growth, aside from raising human development directly and investment in the human capital of the poor raises growth itself, yet, the poor seldom receive a satisfactory quality of education and hence unable to proceed further. This very fact reduces poor students' chances to continue their studies in higher education, while the rich obtain relatively better quality educational services from private schools enhancing their chances to continue their studies in higher education. The quality of education could affect the labor market outcomes and the future productivity of children. School quality is associated with higher returns to education (Hanushek and Woessmann, 2008) and a higher probability of finishing school and entering into higher education.

The most common way of rationing scarce educational places is by examination; those with the highest scores are allowed to enter the higher educational institutions. As argued by Jimenez (1987), however efficient this approach may be, it is not equitable. Even if it is assumed that innate ability is randomly distributed throughout the population, children from richer households can be expected to do better on examinations than those from poorer groups. It is because these children from the richer quintiles exit the government schools for a better training in good quality private unaided schools to gain access in highly selective government provided higher educational services. These discrepancies are greater by the time students reach higher education, where selectivity is more stringent.

Becker (1975) in his seminal work, provided the empirical analysis of human capital formation in a demand-supply framework with special reference to education. The supply curve captures the financing aspect of human capital formation. If the individual is faced with a relative flatter supply curve, financing education becomes easier for him and his family. However, the sources of financing education include both governmental and non-governmental sources (parents, philanthropy, banks, etc). Further, he showed that education and training increase an individual's cognitive capacity which in turn increases his productivity. Productivity tends to increase earnings of educated and skilled individuals and this becomes a measure of human capital. But before investing in education, a person always assesses the costs and benefits arising out of it.

The return from investing in education would then act as a guiding factor for decision-making. Factors influencing returns can be earnings foregone while learning and consumption benefit from education. A person would invest in education if its benefits in terms of future earnings are greater than the cost of education including foregone earnings. Also, there remain risk and uncertainty regarding the estimation of future earnings in terms of wages as the future is always uncertain. A rational investor would make sure before investing that the expected rate of return would be greater than the rate of return on risk-less assets plus a term to account for liquidity and risk premiums associated with an investment (Becker 1975). Not only individuals enjoy benefits arising out of investment in human capital but also the society as whole gains substantial benefits as externalities.

An analysis of earnings by educational qualifications at this juncture would be worthwhile. The simplest measure of the earning premium or private returns signifies that graduates with additional years of schooling receive higher earnings compared with lesser years of schooling. The monotonic relationship can be observed between each year of schooling with that of earnings across male-female and at time points 2005 and 2012 (Table 5.24). It clearly brings out a number of kinks, first at the secondary (10 years of schooling), next at the senior secondary (12 years of schooling) and another at undergraduate level. This pattern is same across gender and time period. Yet another important concern revealed in this table is that earnings of females are substantially lesser than male across each year of schooling in India.

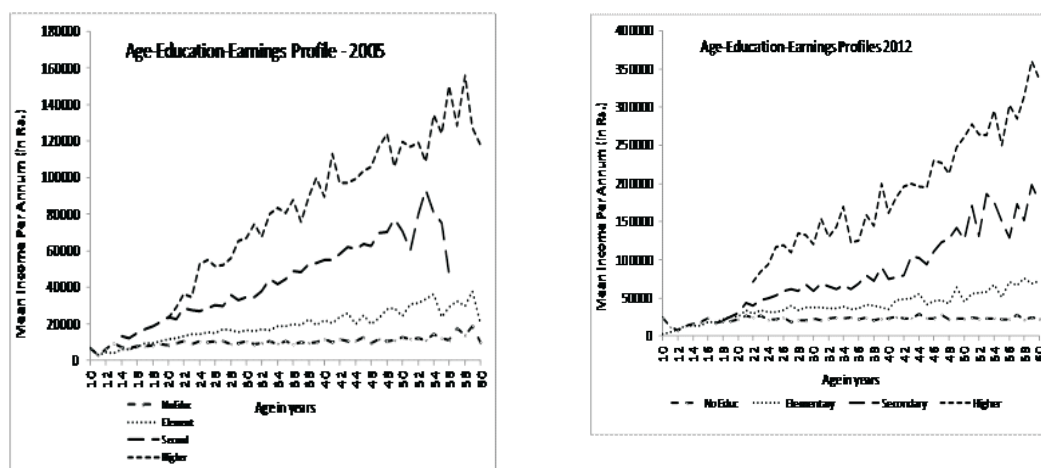
Table 5.24 Earnings by Completed Levels of Education per Annum in India (in Rs.)

Years of Schooling	2005			2012		
	Male	Female	Total	Male	Female	Total
None	13825	5971	10151	32936	14243	23296
1st class	13296	8162	12115	31473	17385	27394
2nd class	14145	7491	12416	34439	16991	29109
3rd class	15334	6917	13290	35640	15778	29546
4th class	16458	7049	14448	40090	16406	33571
5th class	19782	8478	17470	43761	16922	36512
6th class	19615	8424	17702	44065	18024	38343
7th class	20671	9271	18408	44674	18014	38546
8th class	25656	13342	24089	50080	19223	44647
9th class	25387	10266	23753	52305	22551	47410
Secondary	42006	26293	40316	80774	39468	74573
11th Class	36362	28800	35566	57834	33875	54108
Higher Sec	48625	42212	47740	93807	73188	90301
1 year post-secondary	57606	34036	52450	94765	59907	87187
2 years post-secondary	53535	52095	53234	94641	88426	93069
Bachelors	89227	71711	86316	161893	127018	155001
Above Bachelors	--	--	--	213861	166496	200431
Total	29932	11898	24986	63616	27609	52612

Source: Based on Unit Data, Indian Human Development Survey - I and II

It can be observed from the table that earnings premium for a college degree relative to a high school degree nearly doubled in the last three decades in India also in many countries. Further, there is no particular evidence this earnings premium has declined as a result of the Great Recession. Rather the unemployment rate in the USA for college graduates and above was 4.4 percent, while high school graduates faced an unemployment rate of 8.5 percent and those with collegiate attainment less than a BA degree faced an unemployment rate of 7.6 percent in 2011(Avery and Turner, 2012).The simplest measure of the earning premium or private returns is higher salaries graduates receive compared with non-graduates'. The recent estimates of private returns to education in India suggest that there is an incentive to acquire higher levels of education as returns to higher education are positive and monotonically increasing (Figure 5.8A and 5.8B).

Figure 5.8A and 5.8B Age-earnings Profiles of Persons in the age group 10-60 by Levels of Education in India in 2005 and 2012



Source: Based on Unit Data, Indian Human Development Survey - I and II

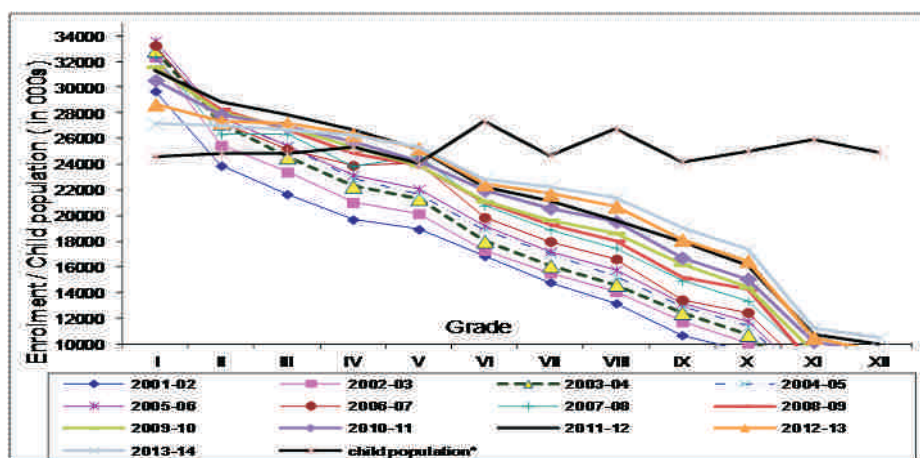
Apparently given the access and quality of education, rates of return to education varies across social groups. For instance, Geetha Rani (2013) estimated that returns to higher education vary ranging from -29.10 percent among the socially deprived (called Scheduled Caste /Scheduled Tribe) workers with the highest returns of 26.1 per cent among Brahmin/high caste group.

Inequality in returns to education begins to emerge at secondary education. Along with expanding access to secondary education, it is necessary to examine the equity of its

distribution. As access to secondary schooling becomes gradually universal, it is usually obtained first by advantaged groups and only later by the marginalised and poor. Even when low-income and other socially marginalised groups achieve access to secondary education, further differentiation is ensued between higher and lower quality schools, through various ways *viz.*, the emergence of varying quality of private schools, selection or filtering via examinations, etc. Further differentiation can also appear in the transition to higher education. Unequal access to good quality elementary education means secondary remains or becomes a source of inequality. Such inequitable access to youth education is perceptible here in the evidence though GoI promise for equality of educational opportunity to all children.

Enrolment from Grade I to Grade X indicates the demand for school education, which is downward sloping. The horizontal line is the age-specific child population corresponding to 2011, indicate the supply of children (Figure 5.9). The vertical axis intuitively indicates the cost or price of education through reasons for declining grade-wise enrolment.

Figure 5.9 Grade-wise Enrolment and Projected Child Population* in India



*Note:**Age cohort based on child population projections as per the age of the children corresponding to the classes, starting from 5 years, 10 months to 16 years 10 months.

Source: Based on Selected Educational Statistics, Child population in the ages from 6 to 17 from Census of India, 2001 and 2011 and Projected using CAGR for the rest of the years.

Implicitly it can be inferred that quality comes at a price besides the opportunity cost (foregone earnings) and the subsidised government system of education is unable to provide quality due to various factors. The gap between the demand and supply curve after Grade V

is widening, indicating the extent of children to be covered to complete a twelve years of schooling. These gaps are where the compound effects of inequalities in access to and completion of school education and progression through secondary education, become the most visible. This is the culmination of disadvantage rooted in poverty, social discrimination and the filtering effect of inequality at lower levels of the education system. Even though large numbers more than the child population (including over aged) children enter primary school, too many fail to complete their education as the widening gap at each grade indicates.

Concluding Remarks

Education is recognised as a potentially powerful instrument in fighting not only poverty but also the many associated ills of poverty, like poor health status like high Infant Mortality Rate (which are very closely related with female education) and the demographic transition (with low birth rate or low fertility rates associated with female education). The slow growth of publicly provided and poor quality of secondary education spurred a heightened demand for private alternatives. The central and state governments have neither seriously attempted to improve the quality of secondary schools both in government and government-aided managements nor restricted the growth of rapidly coming up unaided private schools till the launch of RMSA. This has automatically denied an equal access for quality secondary education for the students coming from low-income families, deprived sections - women and minorities, and in rural and remote areas. This has resulted in a dual system - one, the unaided private for the affordable and another, the resource-starved institutions managed by government, local bodies and government-aided schools serving for the unaffordable, wherein both the quantity and quality of the system have been deteriorating. This has also resulted in a parallel system with mushrooming coaching / tuition centres to supplement the government or government funded secondary education. This has widened the inequities existing in the system especially at the secondary and higher levels of education. Recognising the increasing share of market forces in higher education, recent committees constituted by Government of India (NKC, 2008; Yashpal, 2009) suggest that primary focus should, therefore be on making education affordable, either through scholarships or loans.

Since the 11th and 12th five-year plans, the emphasis is more on inclusive growth as the economic growth during the reforming period has not resulted in redistribution of income. In this debate, measures to improve equality of education opportunity deserve special attention. Hence it is important to make equal access to good quality education as a top-most priority. But for those out of school youth, employment oriented vocational and skill based education is prerequisite so as to reap the demographic dividend in the country. However, it is still de-linked from the mainstream secondary education, that there is no easy exit/entry of

vocational courses to higher education courses. In India, only 5 percent of the population of 19–24 age group has acquired some sort of skills through vocational education, while the corresponding figure for Korea is as high as 96 percent (Planning Commission¹⁷, 2013). The Skill Development Mission has been working on this like the initiatives on National Skill Qualification etc. A sizeable proportion of youth population in India lacks education, even literacy resulting in early marriage, burdened with childbearing and rearing, the large unmet need for family planning, poor nutritional status, etc.

For long run economic growth and human development, it is mandatory to invest on good quality education. To fully exploit the demographic dividend, India's youth need to be healthy, educated, skilled and forward looking. Acquiring hard skills such as critical thinking, problem solving; behavioural skills (soft or socio-emotional skills) as well as IT skills are important in attaining a good employment. Heckman and Kautz, (2012) have shown that socio-emotional skills are not immutable but can be learned through positive school experiences and are found to be as important as cognitive skills in obtaining good employment. Providing equal opportunities in schooling, while strengthening the quality of school education, is an important first step to ensure that young people have the range of skills needed to improve their life prospects. It is immensely important to make secondary education more accessible to the disadvantaged and improve its relevance to work.

Policy Implications

Attainment in higher education requires successful completion of school education, but many of the poor fail to complete even five to eight years of basic schooling (the minimum requirement for entry into secondary education). By the time these children reach the age of 14 or 15, much of the damage is already done. A policy designed to equalise educational opportunity should start with an effective quality provision of school education. Hence, the policy underpinning is a two-pronged strategy involving differential user fees at higher levels of education, and simultaneously ensuring better quality among government schools via regulatory steps. These two aspects and various policy options are explored¹⁸.

Improving the Quality of Public Schooling

The discontentment is the increased government spending on education did not result in improved learning outcomes. This perceptibly implies that a mechanical way of raising school

¹⁷The chapter has briefly discussed this aspect in Section II under NIOS.

¹⁸This section is based on Geetha Rani (2014).

inputs is not going to improve schooling outcomes. It reclaims that increased spending on education is necessary but not sufficient. Improving the quality of learning may challenge addressing the issues at different levels, simultaneously from individual, school, and systems. At individual level, it needs to begin from focusing on the teachers. The current system of teacher recruitment, teacher promotions and transfer policies need to be reviewed and transformed. The political process involved in both teacher recruitment and transfer policy needs to be de-linked. This is with regard to bringing in new set of teachers to the existing system. The existing teachers need to be motivated through various monetary and non-monetary measures. Role of teachers' motivation enables institutions to realise, recognise and respond to the critical issues of learners which have an important bearing on improving the quality of education. The problem currently is such that there is no reason why a teacher needs to be good teacher. A performing teacher needs to be recognised at the cluster and district level.

At the school level, it is to re-evaluate school establishment policies. One of the major concerns is a proliferation of small schools. In order to improve universal access, establishing the small school as a policy was advocated since the middle of the 1990s with the beginning of the Education Guarantee Scheme (EGS). As a low-cost strategy, many states have adopted the EGS type schools. As against the National Policies on Education, 1968 and 1986, which envisaged formal schools, the program SSA (to implement education policies) encouraged alternative small and economically unviable schools in various forms. These schools endorse exclusion and inequity which are deprived of basic physical and human resources. Such small schools are of poor quality, where the marginalised children get enrolled by a matter of compulsion rather than choice. Small schools defined either in terms of enrolment or teachers invariably affect the quality of schooling.

At this juncture, it is imperative to introspect the development of schooling. Enrolment explosion in elementary education started with DPEP program continuing with SSA. The target being enrolling children and not really and adequately ensuring enough number of teachers besides equipping the teachers with the kind of requirements to manage these first generation learners with the parents who work under difficult circumstances. Multi-level deprivation factors operate here. In order to ensure these multi deprived children the education system is not yet geared to cope with these children. In this enrollment boom, children enrolled are to a larger extent are the first generation learners. They are doubly excluded from genuine learning and schooling experience. In this context, can we think of consolidating these small schools by ensuring access to these children in a relatively big school where the number of teachers are for instance ten and more. Consolidation can be done through an inclusive and a dynamic school mapping which can identify few big and better

performing schools, where neighbouring children can have a choice to access a group of schools. Above all, the attitude towards marginalised, first generation learners needs to be boosted up. These interventions and initiatives need to be supported at the systemic level with an overall improvement in the accountability issues. The biggest challenge here is political constraint.

Differential User Fees in Higher Education

Given the unequal distribution, the policy option suggested is for differential fees in higher education. In response to such inequitable distribution, Atkinson (1995) and Sen (1995) establish the need for targeting of government expenditures towards the poor. The theoretical rationales for targeting extend to both equity and efficiency. According to Sen (1995), 'the more accurate a subsidy, in fact, is in reaching the poor, the less the wastage, and less it costs to achieve the desired objective'. However, the political question concerns the actual feasibility and acceptability of aiming public policy toward particularly deprived groups. The political economy of targeting has to be concerned not just with the economic problems of selection, information, and incentives but also with the political support for and feasibility of, aiming public policy specifically at removing the deprivation of particular groups.

The informational aspect of targeting relates to the identifiability of the characteristics associated with deprivation. A categorical approach generally employs multiple indicators to supplement whatever is available on income and assets in order to maximise the social objective for which the transfer schemes are designed. Categorical indicators, for example, might include occupation, type of housing, region of residence, automobile ownership, family size and age of children, gender, ethnicity, and other characteristics that are not only relevant to the estimation of means and needs, but may enable the system to target beyond means for additional social purposes. Such indicators have the additional advantages of being difficult to manipulate - hence less susceptible to corruption; and also relatively easy to measure by simple observation - hence less costly.

It is argued that additional information on income and assets with various categorical indicators can still augment efficiency and accuracy. Using different categorical indicators to emphasise differential treatment can attempt to reduce the multi-level deprivations. In this differential treatment of students based on a number of categorical indicators facilitate to adhere to the economic ability to pay or the progressive principle in acquiring higher education. Some percent of cost is recovered from economically and socially better off students. Further, the government financing of higher education is in place, which is not sub-

optimal. Above all, equity or the distributive justice is sustained to the extent one can cover the multi-deprivation. Though identification of the differential fee is a difficult task, still targeting should be tried which would involve errors of commission and omission. Such errors of targeting often influence policy advice. As pointed out, the key point is not whether a scheme avoids errors of targeting, but how well it meets its stated objectives given budget constraints, the information that is available to policymakers, and the behavioral and political responses to targeted interventions (Walle, 1996). Categorical indicators can also aid to reduce such errors. Nevertheless, there could be some imperfection in these measures, but rough justice in estimating ability to pay is still preferable to equal subsidies for all. Most importantly, it is an endeavor to ensure unequal treatment of equals, which is an attempt to predicament of existing and the worst form of inequality which is equal treatment of unequal.

We conclude this paper by quoting Stieglitz, (2016) that public investment in education is fundamental to address inequality. A key determinant of workers' income is the level and quality of education. If governments ensure equal access to education, then the distribution of wages will reflect the distribution of abilities (including the ability to benefit from education) and the extent to which the education system attempts to compensate for differences in abilities and backgrounds. If those with rich parents usually have access to better education, then one generation's inequality will be passed on to the next, and in each generation, wage inequality will reflect the income and related inequalities of the last.

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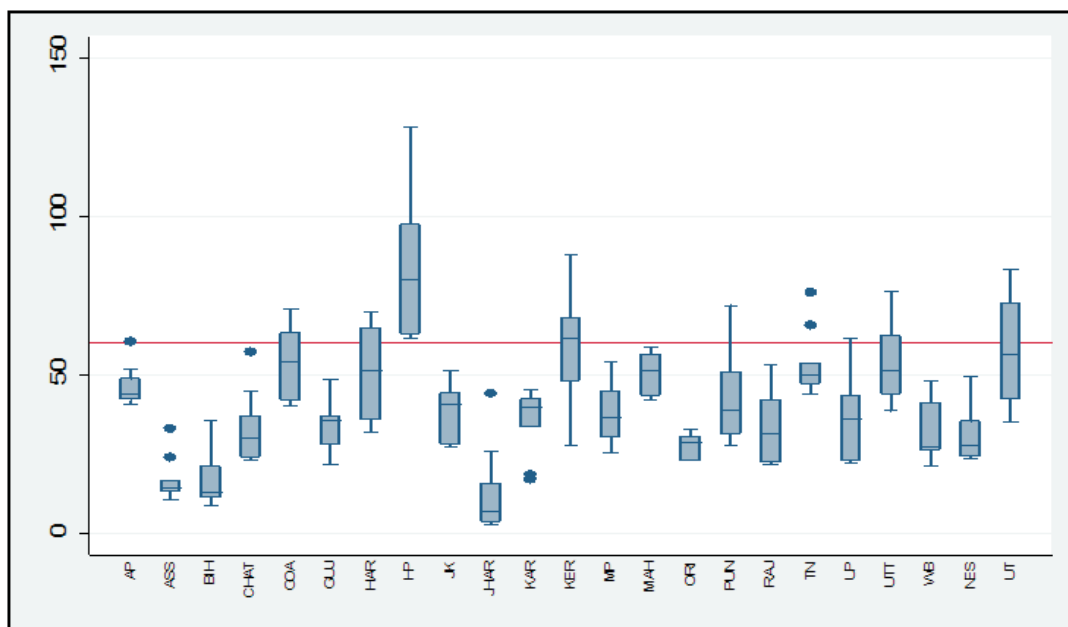
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Annexure Figures

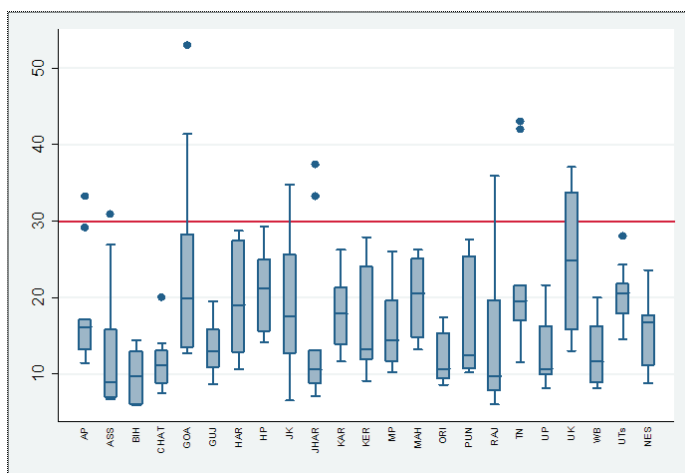
Figure A1 GER in Senior Secondary Education by States*
2004-05 to 2013-14 (in %)



Note: *We combined all seven northeastern states (NES) as one category and all union territories as one category.

Source: Based on School Education Statistics; SEMIS for the years 2012-13 and 2013-14

Figure A2 GER in Higher Education across States during 2004-05 to 2013-14 (in %)



Source: Based on School Education Statistics, Statistics on Higher and Technical Education; All India Higher Education Survey

YOUTH IN INDIA: CHALLENGES OF EMPLOYMENT AND EMPLOYABILITY



CHAPTER VI

YOUTH IN INDIA: CHALLENGES OF EMPLOYMENT AND EMPLOYABILITY

SECTION - C STATUS PAPERS

Introduction



Youth is a more fluid category than a fixed age-group. 'Youth' is often indicated as a person between the age where he/she leaves compulsory education and the age at which he/she finds his/ her first employment. Youth is defined differently by different countries/ agencies and by same agency in different contexts. United

Nations defines 'youth' as persons between 15 and 24 years of age. In the National Youth Policy-2003, 'youth' was defined as a person of age between 13-35 years. But in the current Youth Policy 2014, the age-group of youth is defined as 15-29 years with a view to having a more focused approach, as far as various policy interventions are concerned. However, it needs to be recognised that all young persons within this age group are unlikely to be a homogeneous group. Different segments of the Youth would have different needs and concerns, which need to be addressed.

India lies on the cusp of a demographic transition, similar to the one that fuelled the spectacular rise in GDP of the East Asian Tigers in the second half of the 20th century. However, in order to capture this demographic dividend, it is essential that the economy has the ability to support the

increase in the labour force and the youth have the appropriate education, skills, health awareness and other enablers to productively contribute to the economy. Youth in the age group of 15-29 years comprise 27.5% of the population (Census 2011). At present, about 34% of India's Gross National Income (GNI) is contributed by the youth, aged 15-29 years. However, there exists a huge potential to increase the contribution of this category of the nation's citizenry by enhancing their labour force participation and their productivity. The Government of India (GoI) currently invests more than Rs. 90,000 Crores per annum on youth development programmes or approximately Rs. 2,710 on a young person per year, through youth-targeted (higher education, skill development, healthcare etc.) and non-targeted (food subsidies, employment etc.) programmes. In addition, the State Governments and a number of other stakeholders are also working to support youth development and to enable productive youth participation. However, individual organisations in non-Government sector are small and fragmented and there is little coordination between the various stakeholders working on youth issues.

India is among the few countries having the advantage of being home to a relatively higher proportion of the younger population. Across the world, every fifth youth is an Indian. This demographic dividend of arising share of the working age population (15-59 years), which came into effect in the early 1980's is likely to remain till 2025 (ILO 2013; Aiyar and Mody 2011). Such a huge proportion of the young population in India is expected to contribute to both its economic growth and the consequent demand for goods and services (Bloom and Canning 2004; Aiyar and Mody 2011). However, this 'demographic dividend' can turn into a 'demographic nightmare' if opportunities are not created for the all-round development of the youth, including decent employment (Chandrasekhar, et al. 2006). The information technology revolution and increasing use of social media have facilitated an unprecedented mobilisation of the youth to reflect on issues of their concerns (World Bank 2013a). The uprising in the Middle East called the 'Arab Spring', and the voices criticising corruption and demanding clean governance in India are examples of mobilisation of the youth to bring about a change in the existing systems.

The major issues that confront the youth include the high incidence of unemployment as well as under employment, limited opportunities for remunerative jobs, low levels of education and skills, and the quest for identity and dignity (ILO 2013; FES 2012; Mitra and Verick 2013). All this applies to India as well. The youth suffer disproportionately more than others from slow growth in employment opportunities and economic slowdown (ILO 2013). Moreover, the growth process in India has also resulted in rising inequality in incomes and human capital formations, which in turn, has caused significant disparities across various

social groups and regions (Planning Commission 2013). The marginalised sections of the population, such as Scheduled Tribes (STs) and Scheduled Castes (SCs) still remain at the bottom of the social hierarchy in terms of various socio-economic indicators of development (Mamgain 2013). Much of their slow development is increasingly being attributed to social exclusion and discrimination which they continue to face in their daily lives in various forms (World Bank 2013b; Thorat and Newman 2010).

Growing mismatches in the demand and supply of education and skills are yet another dimension that affects the overall employability of youth in India and several other countries as well (ILO 2010; Chadha 2000; Mamgain 2010). While on the one hand, employers complain against shortages of skilled manpower that pose hurdles in their expansion (India Skills Report 2014; ILO 2013), on the other hand, there is a very high rate of unemployment among educated youth, particularly women (Dev and Venkatanarayana 2011). Employers find a large number of job-seekers unemployable due to insufficient exposure of the latter to practical aspects of education.

Given this brief background, we examine the questions of unemployment, employment and human capital formation of Indian youth belonging to various social and religious groups across different regions since the advent of economic reforms in the early 1990s. The second section of the paper examines the pattern of participation of youth in the labour force. Section III analyses the nature and pattern of employment among youth with a focus on its quality. Section IV analyses the situation of unemployment among the youth. Section V examines the human capital base of the youth population and its quality and shows how a large section of the youth is still characterised by low levels of educational attainment and skill training. The determinants of youth employment are discussed in Section -VI, while the policy implications are discussed in the concluding section.

This chapter is based on National Sample Survey Organisation's (NSSO) large sample unit level data on 'Employment and Unemployment for the years 1993-94, 2004-05 and 2011-12, highlighting the post-economic reform scenario with regard to youth employment in India. The data pertain to usual activity status (UPSS) of persons. The analyses in the paper have been presented across the following five socio-religious groups: (i) Scheduled Tribes (STs), (ii) Scheduled Castes (SCs), (iii) Other Backward Caste-Muslims (OBC-Muslim), (iv) Other Backward Caste-Others (OBC-Other), (v) Other Caste-Muslims (OC-Muslims), and (vi) Others (OCs). This analysis facilitates a comparison of the situations pertaining to youth belonging to various socio-religious groups and the inter-group disparities among them.

Participation of Youth in Labour Market

The labour force participation rate indicates the percentage of the population who are already engaged in any kind of work and those who are ready to work given the employment opportunity. In other words, the labour force includes both the workers or the employed and the unemployed. India would be the second largest country in the world in terms of the size of the labour force. The ideal situation would be when almost all persons up to the age of 24 years are able to complete their tertiary level of education, which would imply their reduced participation in the labour force as most of them would be studying. The reality, however, is that a large percentage of the youth in the country today are either working or seeking work, which makes them a part of the labour force. In 2011-12, about 146.8 million youth, representing over 44.4 percent of the youth population, were in the labour force, while 91.4million youth were unemployed.

Age group-wise, the labour force participation rates (LFPRs) of youth shows that one-fourth of the youth population in the 15-19 years age group is either working or looking for jobs (Table 1), whereas nearly 63 percent of them are students. However, within the next age group of 20-24 years, the LFPR jumps to 50.5 percent and further increases to 64 percent in the age group of 25-29 years. As opposed to this trend, the proportion of youth acquiring education declines substantively with the higher age groups. A sizeable proportion of youth is simply engaged in other domestic chores. Thus, the proportion of youth in the labour force is less than that in the age-group of 30-59 years (68.5 percent) (Table 6.1).

Table 6.1 Participation of Youth in Labour Force, 2011-12 (percent)

Age Group (Years)	1993-94	2004-05	2011-12
15-19	43.81	39.29	23.35
20-24	63.34	61.87	50.54
25-29	70.98	71.48	63.65
15-29	58.46	63.13	44.36
30-59	74.81	74.95	68.5
15-59	67.13	72.77	58.04
Total	42.78	43.00	39.28

Source: Calculated from the Unit Record Data of the 68th Round on Employment and Unemployment, National Sample Survey Organisation (NSSO), Government of India, New Delhi, January 2014. For rest of the tables, the data source is the same as in Table 1.

Gender-wise, 63.4 percent of the males and 24.1 percent of the females among the youth are in labour force. This kind of disparity in the LFPRs between young males and females exists across all the three youth age groups (Appendix Table 1). Further, the share of students among the female youth population is also proportionately much less than that of their male counterparts. Thus, over half of the female youth are neither in the labour force nor acquiring any education. Over 27 per cent of the females in the age group of 15-19 years are neither studying nor doing any job. This high ratio of females in the age cohorts of 20-29 years, vis-à-vis the corresponding proportion of females in the next age cohort of 30-59 years shows the high degree of involvement of female youth in the home care economy.

The overall labour force participation rate (LFPRs) based on NSS usual status (includes both principal and subsidiary) shows that there has not been any steady decline or increase during the last three and half decades but it was fluctuating between 40 to 44 percent (see Table 6.2). However, a close look at the trend shows that during the 1970s the LFPR had increased to its highest ever in 1977-78 and began to decline thereafter. During the 1980s decline in WPR continued till late 1990s. Between 1987-88 and 1993-94, although there was a marginal increase in LFPR, there was a sharp decline of 2 percentage points between 1993-94 and 1999-2000. But the LFPR increased again between 1990-2000 and 2004-05 with a sharp increase of 2.4 percentage points. Again during 2011-12, the LFPR has declined by 3.7 percentage points from the level of 2004-05.

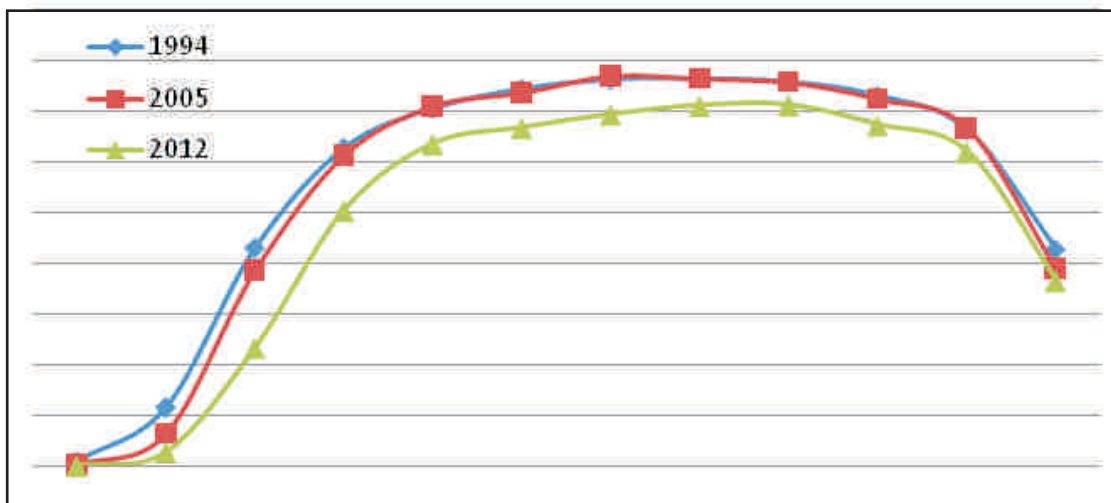
Table 6.2 Labour Force Participation Rate (LFPR) Trends in India

Year	Rural and Urban			Rural			Urban		
	P	M	F	P	M	F	P	M	F
1972-73	42.0	54.5	28.6	43.9	55.1	32.1	34.5	52.1	14.2
1977-78	43.9	56.0	31.0	45.8	56.5	34.5	37.5	54.3	18.3
1983 - 84	43.0	55.1	30.0	45.2	55.5	34.2	36.2	54.0	15.9
1987-88	42.2	54.5	29.0	44.3	54.9	33.1	35.6	53.4	16.2
1993-94	42.7	55.6	28.7	44.9	56.1	33.0	36.3	54.3	16.5
1999-00	40.6	54.0	26.3	-	54.0	30.2	-	54.2	14.7
2004-05	43.0	55.9	29.4	44.6	55.5	33.3	38.2	57.0	17.8
2011-12	39.3	55.5	22.1	40.5	55.2	25.1	36.6	56.3	15.5

In fact, the sharp decline in LFPR during the 1990s could be partly due to increase in attendance rate in educational institutions. The same explanation may not withstand in the LFPR revival scenario given the continuous increase in the enrolment. Therefore one may have to search elsewhere the explanation for fluctuations in LFPR in the recent past. There are rural-urban and male-female differences in labour force participation rates. The LFPR is higher in the rural areas when compared to urban and higher among the male population when compared to their female counterparts. There has not been any clear trend of change in terms of declining or increasing rural-urban and male-female differences in LFPR.

The labour force participation rate (LFPR) by age group indicates that it is declining among younger cohorts below 30 years of age over the period and a slight increase in the older cohorts (see Figure 6.1). Owing to a reshuffling of labour force across age groups, the overall participation rate remained the same. The explanation of increasing enrolment for declining LFPR may be applicable to younger cohorts. But one has to search an explanation for increasing LFPR among the senior (30 + age) adult cohorts. It may be that the loss of income due to the withdrawal of younger cohorts while attending education to the household has to be compensated. Moreover, the household has to increase its income level to invest in children's education. Therefore, the number of adults available in the labour market might have to increase.

Figure 6.1 Labour Force Participation Rate (LFPR) in India by Age Group



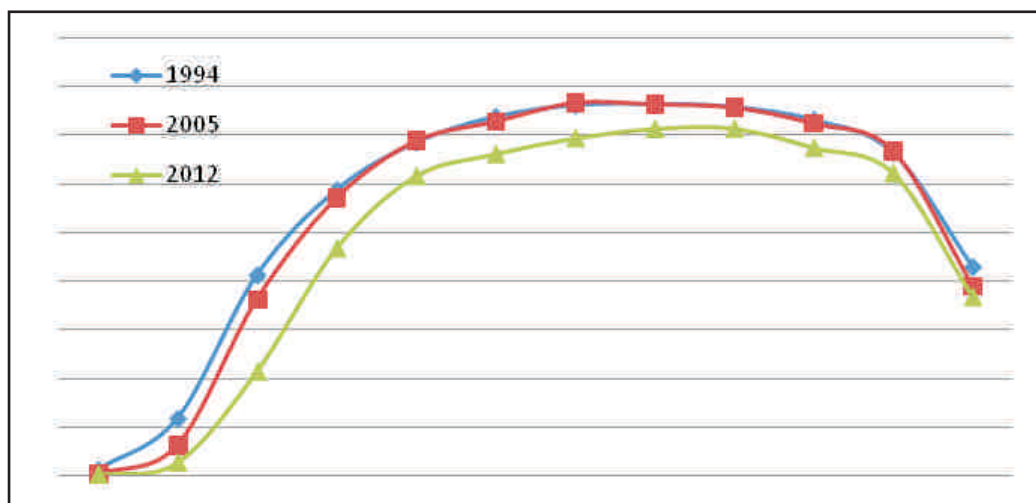
Work Participation Rate

The measure of work participation rate presents the percentage of persons who actually worked or employed in the total population. Work participation rate (WPR) excludes the percentage of unemployed from the labour force participation rate (LFPR). The WPR is given in Table 6.3. In India there were about 459 million workers during 2004-05 consisting of 42 percent of the country's total population and the workforce has increased to 461.4 million in 2007-08. The trend in work participation rate during the last three and half decades shows that there has not been any sharp decline or increase; it remained between 40 to 42 percent. But a close look at the trend shows a similar pattern observed in the case of LFPR. Clearly, during the 1970s the WPR had increased to its highest ever and during the 1980s there was a decline that continued till late 1990s. The WPR declined to its lowest ever to 39.7% in 1999-2000 and revived between 1999-2000 and 2004-05 with an increase of 2.3 percentage points. But, it declined to 40% in 2007-08.

Table 6.3 Work Participation Rate (WPR) of Youth in India

	Total			Rural			Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1993-94									
15-29	72.63	36.76	55.16	77.23	44.20	60.95	61.48	17.10	40.55
15+	83.57	41.25	62.95	86.28	48.23	67.54	76.68	22.01	50.82
30+	91.56	44.52	68.62	92.73	51.11	72.23	88.47	25.77	58.74
2004-05									
15-29	70.15	33.96	52.69	74.12	40.78	57.72	62.10	18.38	41.89
15+	89.95	44.84	67.66	91.56	53.14	72.45	86.37	25.56	56.79
30+	81.93	40.56	61.68	84.62	48.29	66.62	76.18	22.71	50.70
2011-12									
15-29	59.57	22.43	41.60	61.62	25.78	44.14	55.57	15.58	36.55
15+	89.78	34.48	62.25	91.61	40.70	66.17	86.10	21.67	54.25
30+	78.00	29.94	54.33	80.00	35.09	57.76	74.02	19.37	47.40

Figure 6.2 Work Participation Rate (WPR) in India by Age Group



As in the case of LFPR, the work participation rate (WPR) is also higher in rural areas than their urban counterparts and higher among males as compared to females. However, the trend shows that locational differences have always been higher than gender difference. Though there is no drastic change in the overall work participation rate, the change is observed across age groups especially those of young age groups. The work participation rate (WPR) by age group indicates the pattern observed in the case of labour force participation rate (LFPR) i.e. it is declining among younger cohorts below 30 years of age over the period and a slight increase in the older cohorts (Figure 6.2).

Labour Force Participation Rate for Social and Religious Group

In terms of social groups, the LFPRs of ST youth declined by the highest proportion of 20.4 percentage points between 1993-94 and 2011-12, while the corresponding figure for SCs was nearly 16.8 percentage points. The next highest decline in the youth LFPRs has been observed in the case of OBC - Others, while the least decline has been seen in the case of Muslims (both OBC and Others) (Annexure Table 2). The corresponding increase in the proportion of students has been highest for OBC - Others, at 12.9 percentage points, followed by OC-Others, at 10.7 percentage points, and SCs, at 10.3 percentage points, while the least decline has been observed in the case of OBC - Muslims, at 6.9 percentage points, during the period 2004-05 to 2011-12. These vast disparities with regard to the participation of youth in education have not been able to bridge the gap in the educational development of youth

belonging to various socio-religious groups over the past years. These differentials in the educational development of youth belonging to various social groups also have implications for their employment prospects, as discussed in the later sections.

The participation of youth in the labour force also varies significantly among different social groups. It is highest among ST youth at 56.1 per cent, followed by SCs at 47.3 per cent, OBC - Muslims and OBC - Others, at about 44 percent each, and the lowest among OCs, at 38 per cent. The reverse trends can be observed with regard to the participation of youth in education except in the case of Muslims. The proportion of youth who are neither in the labour force nor acquiring education is the highest among OBC - Muslims and the least among STs (Table 6.4). The low level of participation of young females in the labour market is, however, a common feature for all social groups. However, it is the lowest in the case of OBC - Muslims, at about 17 percent, followed by OCs, at 19.3 per cent each for OC-Muslims and OC-Others, OBC - Others and SCs, at 17 per cent and 25 per cent, respectively and among STs, at 41.5 per cent. These deviations can be also partly be attributed to socio-cultural and religious contexts, which prohibit women's participation in labour market activities.

Table 6.4 Activity Status of Youth (15-29 Years) by Social Group, 2011-12 (%)

Social Group	LFPR	Student	Others
ST	56.14	22.96	20.9
SC	47.26	26.1	26.64
OBC-Muslim	43.52	22.92	33.56
OBC-Others	43.73	31.42	24.85
OC- Muslim	45.58	25.61	28.82
OC- Others	38.02	38.75	23.24

Source: Same as for Table 6.1.

A crucial question is as to how the LFPRs of youth have changed over the period of 18 years from 1993-94 to 2011-12. It has been observed that there has been a sizeable reduction of over 14.1 percentage points in the participation of youth in the labour market between 1993-94 and 2011-12. This decline has been more pronounced, at over 20.5 percentage points, in the age group of 15-19 years and moderate at about 12.8 percentage points, in the next age cohort of 20-24 years. The student population, on the other hand, has registered an increase over the period (Annexure Table 1). While a major decline of nearly 19 percentage points in the LFPRs of youth occurred during the period 2004-05 to 2011-12 alone, it increased by 4.7 percentage

points during the earlier period (1993-94 to 2004-05). The percentage share of students in the youth population increased marginally from 15.9 percent in 1993-94 to 16.5 percent in 2004-05, and almost doubled to over 30 per cent by 2011-12. This jump in the ratio of students in the youth population has been witnessed in the case of both genders but has been more conspicuous in the case of females. There has also been a big jump of 12 percentage points in the female youth population categorised as 'Others' who mainly comprise young women engaged in domestic chores and other home care works, in the age-group of 25-29 years during the period 1993-94 to 2011-12. Similar declines of 5 percentage points have been noticed for females in the age group of 20-24 years and of about 12 percentage points for those in the age group of 30-59 years. Thus, the decline in the LFPRs of youth can be explained in terms of their rising enrollment/retention in the spheres of secondary and tertiary education, to a large extent, and is partly caused by the withdrawal of females from the labour market with their rising household income and also withdrawal from the labour force due to the lack of remunerative employment opportunities (Neff et al, 2012; Rangarajan, *et al.* 2011). The non-recording of women's work in recent years has also been cited as yet another reason for the low LFPR among women.

In terms of social groups, the LFPRs of ST youth declined by the highest proportion of 20.4 percentage points between 1993-94 and 2011-12, while the corresponding figure for SCs was nearly 16.8 percentage points. The next highest decline in the youth LFPRs has been observed in the case of OBC - Others, while the least decline has been seen in the case of Muslims (both OBC and Others) (Annexure Table 2). The corresponding increase in the proportion of students has been highest for OBC - Others, at 12.9 percentage points, followed by OC-Others, at 10.7 percentage points, and SCs, at 10.3 percentage points, while the least decline has been observed in the case of OBC - Muslims, at 6.9 percentage points, during the period 2004-05 to 2011-12. These vast disparities with regard to the participation of youth in education have not been able to bridge the gap in the educational development of youth belonging to various socio-religious groups over the past years. These differentials in the educational development of youth belonging to various social groups also have implications for their employment prospects, as discussed in the later sections.

The LFPRs of the youth of various categories vary significantly across states. Over half of the youth population was accounted for by the labour force in the states of Chhattisgarh, Gujarat, Himachal Pradesh and Andhra Pradesh in 2011-12. In states like Bihar, however, less than one-third of the youth population constitutes its labour force. The other states exhibiting a far lower participation of youth in the labour market than the national average are Arunachal Pradesh, Manipur, Delhi, Assam, Uttarakhand and Haryana, in that order.

The pattern of youth LFPRs across states also shows a mixed pattern along with their levels of economic development. For example, low-income states such as Jharkhand have very low youth LFPRs whereas the corresponding figures are much higher in high-income states such as Gujarat. It is assumed that in high-income states, the participation of youth in the labour market would be low as most of them are able to continue their educational development. This also applies to some extent in the case of the youth population in the age group of 15-19 years but certainly not to the next age groups of 20-24 and 25-29 years, respectively. The LFPRs of youth declined substantially by over 18 percentage points between 1993-94 and 2011-12 in the 11 states of Andhra Pradesh, Rajasthan, Karnataka, Tamil Nadu, Madhya Pradesh, Haryana, Himachal Pradesh, Uttarakhand, Chhattisgarh, Meghalaya and Arunachal Pradesh. However, states such as Odisha, West Bengal, Gujarat, Uttar Pradesh and Jharkhand witnessed a lower decline in their youth LFPRs, and thus had relatively high youth LFPRs in 2011-12 (Annexure Table 3).

Briefly, therefore, the youth LFPRs significantly differ across gender, social groups and regions. The factors determining the probability of participation of youth in the labour market are discussed in the ensuing section.

The Employment Challenge

Growth in Youth Employment

About 137.6 million youth were reportedly workers in 2011-12, accounting for 29.1 per cent of the total workforce in India. Over 60 per cent of the male and nearly two-fifths of the female youth population are observed to be workers (NSSO 2014). The growth rate of the youth employment was around 1.3 per cent per annum during the period 1993-94 to 2004-05 but thereafter declined in absolute terms between 2004-05 and 2011-12, at the rate of 1.39 percent per annum (Table 6.5). This decline has been mainly witnessed in the case of the female youth workers, more so due to their increased participation in education and partly withdrawing from the work (Annexure Table 1). Contrary to this pattern, growth in employment of adult male workforce was significantly higher but tended to decline in absolute terms for females. The reasons for withdrawal of females from labour force have been already mentioned in the previous section.

Table 6.5 Growth Rate of Employment among Youth

	1993-94 to 2004-05	2004-05 to 2011-12	1993-94 to 2011-12	1993-94 to 2004-05	2004-05 to 2011-12	1993-94 to 2011-12
	Youth			Adult		
Male	1.46	-0.39	0.73	2.38	2.77	2.53
Female	0.89	-3.83	-0.98	2.73	-0.81	1.34
Total	1.28	-1.39	0.23	2.50	1.66	2.17

In the following section, the nature and quality of youth employment and the prevalent trends therein since the advent of economic reforms in the 1990s are analysed.

Quality of Employment

As regards the overall structure of employment, a highest 46 percent of the youth workforce was self-employed in various economic activities in 2011-12. Another one-third of the youth workers were engaged in casual wage works, while the remaining only around one-fifth were working in regular salaried jobs (Table 6.6 and 6.7). How does this structure of employment differ between male and female youth? Despite their low LFPRs, the broad structure of employment among women is similar to that of their male counterparts, that is, the highest number of young women were self-employed, followed by those engaged in casual wage labour, while the least number were engaged in regular salaried employment. However, the proportion of young women working as self-employed is substantially high as compared to young men. The opposite is their share in case of regular employment.

Table 6.6 Nature of Employment Available to Youth

Year	Male			Female			All		
	SE	REG	CL	SE	REG	CL	SE	REG	CL
1993-94	52.53	13.64	33.82	53.75	6.02	40.23	52.93	11.14	35.93
2004-05	49.44	17.05	33.51	59.99	8.61	31.39	52.80	14.36	32.84
2011-12	42.68	22.86	34.46	55.64	16.55	27.81	46.06	21.22	32.72

Note: SE-Self-employed, REG-Regular salaried employment, CL-Casual wage labour.

Table 6.7 Distribution (%) of Young Workers in India by Status of Employment

Sector	Status	1993-94		2004-05		2011-12	
		Youth	All	Youth	All	Youth	All
Rural and Urban	Self Employment	55.84	57.92	56.40	60.33	46.06	52.23
	Regular/Salaried	5.56	6.55	7.07	7.05	21.22	18.48
	Casual	38.60	35.52	36.53	32.62	32.72	29.29
Rural	Self Employment	42.43	42.15	41.02	45.14	51.17	56.36
	Regular/Salaried	33.91	39.93	39.90	39.78	10.04	8.51
	Casual	23.66	17.93	19.08	15.08	38.79	35.13
Urban	Self Employment	42.43	54.43	52.51	56.45	33.75	42.05
	Regular/Salaried	33.91	13.94	15.36	15.40	48.14	43.05
	Casual	23.66	31.63	32.12	28.14	18.11	14.89

The structure of youth employment varies significantly across different socio-religious groups. Nearly half of the youth workers except SCs were self-employed during 2011-12 and the highest percentage (about 50 percent) of the SC youth were working as casual wage labourers. The low proportion of SCs in self-employment and the corresponding high percentage of this social group in casual wage labour, unlike other social groups including the OBCs, STs, OCs and Muslims, is largely associated with the highest incidence of landlessness among SCs. This historical disadvantage still continues wherein a large majority of the SC youth workers continue to work as casual wage labourers. The situation of ST youth is similar to that of their SC counterparts, as nearly as 42 per cent of the ST youth were found to be engaged in casual wage works in 2011-12. This pattern is largely the result of growing landlessness among the STs, which, in turn, has been associated with their displacement in recent years. The situation of OBCs and OC-Muslims falls somewhere between that of the STs and the OCs. In contrast, the proportion of casual labourers is the lowest (14 percent) among youth included in the category of OCs (Mamgain and Tiwari 2015).

This kind of divergence in the structure of youth employment is also visible while analysing their share in regular salaried employment. While the highest proportion of 37 percent of the OCs youth workers were employed in regular salaried jobs, merely 8 percent of the ST youth were employed in such jobs. The share of OBCs, Muslims and SCs in such employment ranged from 18 to 20 percent, respectively, during the year 2011-12.

The trends in the structure of youth employment over the past 18 years since 1993-94 show a slow pace of change - a decline of about seven percentage points in the share of self-employment and another three percentage points decline in casual employment. The corresponding increase was largely seen in regular salaried work. A remarkable increase was witnessed in the share of women entering into regular employment with a corresponding decline in casual wage work. In the case of male youth, their share in casual wage employment almost remained constant over the period, while the corresponding decline in self-employment has been in favour of regular salaried jobs (Table 6.6).

Among various social groups, the highest decline of nearly 12 percentage points in the share of self-employed was observed in the case of OBC - Muslim youth and OC-Other youth during the period 2004-05 to 2011-12. The categories of OBC - Others, SCs, and OC-Muslim youth also witnessed a substantial shift of about 8, 5 and 3, percentage points respectively from self-employment to wage employment. Thus, much of the shift away from self-employment has been towards a faster increase in the share of regular salaried employment for all socio-religious groups except in the case of OBC - Muslim youth, whose share in both casual as well as regular employment increased during the period 2004-05 to 2011-12. Contrary to this, the decrease in the share of self-employed among OCs occurred largely in favor of regular salaried jobs. The proportion of young OCs workers in regular salaried jobs increased by about 13 percentage points from 23.6 percent in 2004-05 to 37 percent in 2011-12, which accounts for the highest increase in their share in such regular salaried jobs as compared to the corresponding figure for the marginalised social groups. The proportion of SC youth workers in regular salaried jobs more than doubled from 7.7 percent in 1993-94 to 17.7 percent in 2011-12. This increase for SCs is the second highest, next only to OCs. This can be termed as a healthy trend for SCs despite the largest proportion (about 49.8 percent) of them still working as casual wage labourers (Mamgain and Tiwari, 2015) (See Annexure 4).

Briefly, therefore, there has been a comparatively faster increase in the number of regular wage employment opportunities for youth belonging to various social groups in recent years. However, their dependence on casual wage employment has not decreased significantly, and this has been more so in the case of STs and SCs than the other social groups.

Industrial Structure of Youth Employment

Although there has been a significant shift of the entire Indian workforce from agriculture to the industry and service sectors over the past two or three decades (Papola and Sahu, 2012), still relatively higher proportion (nearly 43 percent) of the youth workers are engaged in agriculture and allied activities. The next important industrial sectors are manufacturing and construction, with each of them employing about 16 percent and 13 percent of youth workforce, respectively, in 2011-12. Over one-tenth of the youth workers were employed in trade and other services each (Table 6.8).

Table 6.8 Percentage Distribution of Young Workers in India by Industry Division

	1993-94			2004-05			2011-12		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Youth (15-29)									
Agriculture	77.68	11.74	63.96	69.60	6.81	53.75	43.26	59.24	4.78
Non-Agriculture	22.32	88.26	36.04	30.40	93.19	46.25	56.74	40.76	95.22
Mining & Quarrying	0.62	0.81	0.66	0.55	0.29	0.48	0.6	0.6	0.6
Manufacturing	7.94	26.92	11.89	10.01	30.03	15.07	16.13	11.35	27.65
Electricity	0.14	0.62	0.24	0.05	0.19	0.08	0.52	0.18	1.34
Construction	2.85	7.53	3.82	6.19	9.56	7.04	12.96	13.78	10.99
Trade	4.07	21.42	7.68	6.46	26.48	11.52	11.21	6.41	22.77
Transport	1.63	7.49	2.85	2.98	7.70	4.18	5.31	3.35	10.04
Other Services	5.07	23.49	8.90	4.15	18.93	7.88	10.01	5.1	21.83
Total	100.00	100.00	100.00	100.00	100.00	100.00	100	100	100
All Workers (15+)									
Agriculture	78.26	12.17	63.64	72.70	8.73	56.37	47.82	64.49	6.73
Non-Agriculture	21.74	87.83	36.36	27.30	91.27	43.63	52.18	35.51	93.27
Mining & Quarrying	0.61	1.18	0.74	0.51	0.80	0.59	0.55	0.47	0.76
Manufacturing	6.78	23.41	10.46	7.93	24.20	12.08	12.63	8.36	23.14
Electricity	0.21	1.04	0.39	0.16	0.67	0.29	0.53	0.23	1.28
Construction	2.42	6.34	3.28	4.93	8.11	5.74	10.64	11.12	9.44
Trade	4.34	19.51	7.69	6.15	24.59	10.86	11.36	6.43	23.51
Transport	1.48	8.07	2.94	2.50	8.72	4.08	4.96	2.93	9.97
Other Services	5.90	28.28	10.85	5.12	24.18	9.99	11.51	5.96	25.18
Total	100.00	100.00	100.00	100.00	100.00	100.00	100	100	100

Table 6.9 Industrial Structure of Youth Employment, 2011-12

Industry Group	STs	SCs	OBC-Muslims	OBC-Others	OC-Muslims	OCs	Total
Agriculture	68.16	42.34	21.68	48.62	24.92	33.86	43.26
Mining and Quarrying	0.62	0.77	0.70	0.6	0.16	0.52	0.60
Manufacturing	5.82	13.3	28.33	13.92	31.94	19.2	16.13
Electricity, Gas and Water Supply	0.3	0.4	0.26	0.72	0.74	0.43	0.52
Construction	14.45	20.54	16.91	10.6	13.06	6.48	12.96
Trade, Hotels and Restaurant	3.87	7.15	17.06	10.86	16.63	16.66	11.21
Transport Storage and Communication	2.08	5.29	8.0	5.12	6.61	6.16	5.31
Other Services	4.7	10.21	7.07	9.56	5.93	16.69	10.01
Total	100	100	100	100	100	100	100

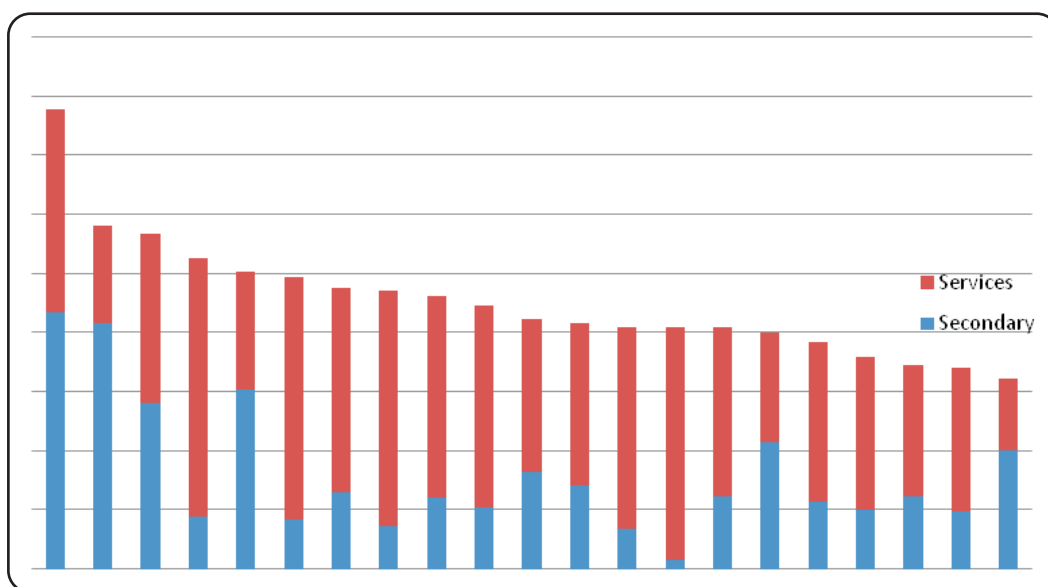
The industrial diversification has not been uniform across socio-religious groups (Table 6.9). Still, in 2011-12, STs, OBC - Others and SCs have a large dependence on the agriculture and construction sectors. About 42.3 percent of the SC youth have been found to be engaged in agriculture, mainly as casual wage workers. The employment structure of OC and Muslim workforce is highly diversified, with these categories of youth having overcome their dependence on agriculture and shifted in large numbers to the services sector. As would be seen later, this shift in their employment, particularly in the case of youth in the category of OCs, has been significantly facilitated by favorable economic and social endowments in terms of land, education, and social status, among other things.

Another question that needs to be considered is: What is the sectoral composition of youth employment across various regions of the country? The share of the primary sector in youth employment varied from the highest figure of 69 per cent in Chhattisgarh to less than one-tenth of the total in Kerala among the major Indian states in 2011-12. The other states exhibiting a predominance of youth employment in the primary sector are Bihar, Himachal Pradesh, Madhya Pradesh, Odisha and Assam. The secondary sector, which includes

manufacturing and construction, accounted for the highest share of youth employment in Tamil Nadu, West Bengal, Haryana and Punjab. The service sector, on the other hand, accounted for the highest share of youth employment in Kerala, with over 54 percent of the youth in the state engaged in this sector. The other states characterised by a high share of services in youth employment are the relatively more developed states such as Tamil Nadu, Maharashtra, Karnataka, Punjab, Uttarakhand, Haryana and Andhra Pradesh (Annexure Table 6).

The share of the primary sector in youth employment decreased by over 20 percentage points between 1993-94 and 2011-12. The states experiencing the highest percentage points of this decline included Uttarakhand (38.8 percent), Kerala (29.02 percent), Tamil Nadu (28.3 percent), Jammu & Kashmir (26.3 percent), Karnataka (25.1 percent), Haryana (24.6 percent), Orissa (23.7 percent), Jharkhand (23.5 percent), Punjab (23.1 percent), Rajasthan (22.3 percent) and Assam (21.1 percent). The corresponding shift has been in towards the services sectors in most of the states. (Figure 6.3).

Figure 6.3 Structural Shift in Youth Employment from the Primary to the Secondary and Services Sectors between 1993-94 and 2011-12

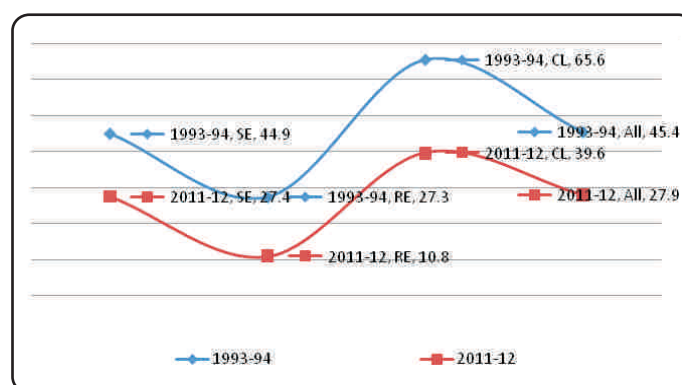


Source: Calculated from NSSO Unit Level Data on Employment and Unemployment, Various Rounds.

Working Poor

By using Tendulkar Poverty Line approach, nearly 28 percent of youth workers' incomes were insufficient to take them out of the poverty threshold income, generally described as the 'working poor'. Unsatisfactorily, the proportion of working poor is marginally higher among youth than among adult workers. It is the highest among casual labourers and the least among those employed in regular salaried jobs. The proportion of youth of working poor declined by about 17 percentage points between the years 1993-94 and 2011-12. This decline was the highest in the case of casual wage labourers, followed by those who were self-employed (Figure 6.4).

Figure 6.4 Working Poor among Youth Workers, 1994-2012



Note: The headcount ratio has been calculated for the MPCE data as has been collected in EUS. This may lead to an over-estimation of the poverty numbers as calculated from the MPCE data collected in the CES. Moreover, the magnitude and direction of change in the poverty ratios are more or less similar.

As regards the pattern of poverty in India, over half of the youth workers among STs fall under the category of the working poor. Nearly one-third of the SC and OBC - Muslim workers are poor. The proportion of the working poor is the least among Other Caste Hindus (Table 6.10). This pattern of the working poor exists among social groups in the case of casual wage employment, and to some extent in the case of self-employment and regular wage employment as well. This clearly shows that the quality of employment available to the ST, SC and Muslim youth is significantly inferior to that accessible to the youth classified under the categories OBC - Others and Others. The reasons for the proportionately high number of working poor among these marginalised groups across all types of employment could be due to the lack of quality assets, poor education, locational disadvantages and persisting discrimination against them during their human capital formation stage and later, even in the labour market.

Table 6.10 Percentage of Working Poor among Youth across different Categories of Employment, 2011-12

Socio-religious Group	Self-employed	Regular Salaried	Casual labour	Total
ST	50.17	16.11	57.45	50.48
SC	29.72	17.79	41.01	33.23
OBC-M	34.05	19.42	37.31	32.14
OBC-O	25.38	10.00	33.25	24.70
OTHER-M	24.80	13.07	39.55	26.75
OTHER	13.73	4.76	31.07	12.86
ALL	27.43	10.78	39.64	27.90

Source: Same as for Table 6.1

Youth and the Information Technology (IT) Sector

At this juncture, it is important to examine the contribution of information technology sector to employment especially of the youth. In India, Information Technology (IT) is seen as a shortcut to rapid economic growth and development. India's aspiration to be an "IT superpower" and a "knowledge-based society" is now well recognised. Since the mid-1990s IT, a component of the service sector, has shown remarkable growth in terms of its value added. Employment in the IT sector has been growing at a rapid pace since 1996-97. The fast growth of the IT sector is, in fact, generating employment opportunities for educated and skilled labour in India and abroad. There are expectations that the growth of the IT sector may solve the employment problem in India. But its contribution to total employment is quite minuscule. Moreover, information technology is by its very nature an urban activity and employment opportunities in this sector are limited to the educated, especially those with technical qualifications and skills. Skilled workers live in cities and telecommunication facilities, which are important for this sector, could be established much more easily in big cities. Based on the NSS 61st round (2004-05) and 68th round (2011-12) employment and unemployment survey, the share of computer-related services, a major component of broad IT sector is shown in Table 6.11.

Table 6.11 Employment in Computer-related Services (CS) in India

Age Group	Rural	Urban	Total	% of Urban	% of female	% of age-group
2004-05						
15+	0.01	0.75	0.20	94.64	18.94	100.00
15-29	0.03	1.41	0.38	93.55	24.96	64.37
30-44	0.01	0.59	0.17	96.15	8.35	31.31
15-44	0.02	0.97	0.27	94.40	19.52	95.68
2011-12						
15+	0.03	1.52	0.46	95.92	18.28	100.00
15-29	0.21	16.46	3.88	95.76	26.69	54.09
30-44	0.03	1.64	0.54	96.06	8.24	43.25
15-44	0.02	1.02	0.31	95.89	18.49	97.35

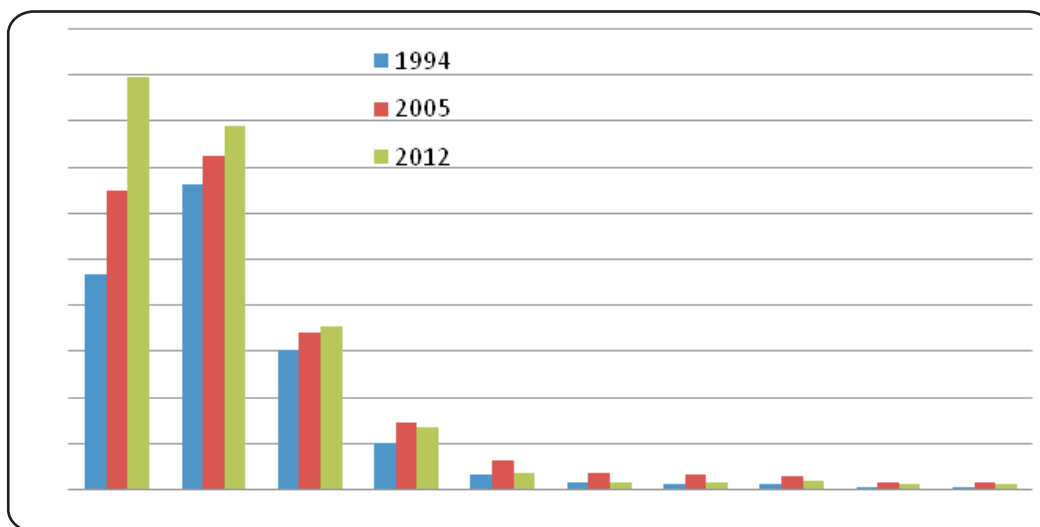
Unemployment among Youth and the Challenge of their Employability

About 9.14 million youth in India are unemployed, representing 84.7 per cent of the entire unemployed population in the country in 2011-12. The number of unemployed youth in the country swelled from 5.60 million in 1993-94 to 7.9 million in 2004-05 and further to 9.14 million in 2011-12, increasing at the rate of 2.75 percent annually during the entire reference period. The incidence of unemployment is almost three times higher (6.2 percent) among youth as compared to adults (2.2 percent). Gender-wise, the rate of unemployment is higher among young females particularly in the urban areas (14.1 percent) as compared to young males (8.25 percent). The corresponding figure for rural areas is about 5 percent each for males and females. The rate of unemployment among the youth increased steadily from nearly 4 percent in 1993-94 to 5.4 percent in 2004-05, and to 6.2 percent by 2011-12.

The unemployment rate by five year interval age groups shows that it is the highest among the younger cohorts especially 20 to 24 years age cohorts (Figure 6.5). In other words, the

incidence or instances of those who are willing to work and available for the labour market but unable to find the work or employment is higher among the young (below 30 years) when compared to their seniors (30 + age). It is highest among the 20 to 24 years age cohorts. The situation of young job seekers in comparison to adults seems to be hard.

Figure 6.5 Unemployment Rate in India by Age Group



Mismatch between Education and Employability

Over 67.6 per cent of unemployed youth possess secondary and above education. Youth having graduate degree including technical and professional educational attainments suffer from the highest incidence of unemployment as about 20 percent of them were unemployed in 2011-12. The next highest incidence of unemployment is among those having diploma level professional and technical education (Table 6.6).

Female youth with a higher level of education suffer from high incidence of unemployment as compared to their male counterparts. For example, about 26 percent of female youth with graduate and above education were unemployed as compared to 17.4 percent of their male counterparts in 2011-12 (Mamgain and Tiwari, 2015). Reasons for such high incidence of unemployment among young females include responsibilities of home care economy, limited mobility due to various socio-economic constraints and prevalence of gender discrimination in recruitment and wages (IHD-ISLE 2014).

Similarly, the rate of unemployment among graduate youth varies from a highest 32.9 percent in the case of OCs to 19.3 percent in the case of OBC - Others. As regards the youth who have acquired diploma level education (below the graduate level), the incidence of unemployment among the SC, OBC - Others and ST youth is much higher as compared to OCs (Table 6.7). It appears that the acquisition of degree level technical education has significantly improved the employability of youth in the categories of SCs, OBC - Muslims and OBC - Others, as compared to STs, OC-Muslims and 'OCs'. This is possibly due to the implementation of the reservation policy in public employment and also the incidence of a growing number of SC and Muslim youth taking up private sector regular salaried jobs.

As regards the changes in the incidence of unemployment over the years, it increased substantially among illiterate and less educated youth during the period 1993-94 to 2011-12 but decreased significantly in the case of those having attained higher levels of education, barring those with technical degrees (Table 6.13). In fact, the unemployment rate among graduates with technical degrees jumped from 7.7 percent in 1993-94 to 18.2 percent in 2004-05 and increased further to nearly 21 percent in 2011-12. The rate of decline in the incidence of unemployment has been substantive (ranging from 2 to 3 percentage points) for those with technical diplomas and high school graduates.

Table 6.12 Education-specific Unemployment Rates among Youth

Education Levels	1993-94	2004-05	2011-12
Illiterate	0.59	1.02	1.72
Up to Primary Level	2.00	2.79	3.03
Up to Middle level	5.93	4.70	4.47
Up to High School and Higher Secondary Level	11.85	10.34	7.40
Diploma and Certificate	21.21	20.11	15.98
Graduate and above	23.82	21.45	19.86
Technical degree	7.69	18.21	20.79
Diploma Not Equivalent to a Degree	22.57	19.95	18.20
Diploma Equivalent to a Degree	23.75	20.17	17.03
Total	3.98	5.44	6.23

Table 6.13 Unemployment Rates among Youth by their Social Groups, 2011-12

Education Level	STs	SCs	OBC-Muslims	OBC-Others	OC-Muslims	OCs
Illiterate	0.62	1.98	3.62	1.46	2.61	1.18
Primary	0.97	4.12	3.70	1.73	5.32	4.22
Middle	3.06	4.56	5.68	4.12	9.18	3.82
High school and higher secondary	12.10	6.84	10.16	5.87	11.03	7.37
Diploma & Certificate	14.34	20.43	9.86	20.09	11.47	10.11
Graduate & above	24.73	22.92	25.93	19.29	32.95	17.54
Technical degree	33.03	15.08	21.82	18.71	39.32	21.44
Diploma not equivalent to degree	20.47	23.87	16.62	20.55	13.62	13.33
Diploma equivalent to degree	11.50	8.33	20.87	14.37	12.50	20.54
Total	4.11	5.62	6.36	5.61	8.29	8.49

Regional Trends in Incidence of Unemployment among Educated Youth

How the incidence of unemployment varies across the Indian states and that particularly for SC/STs? A highest 29 per cent of educated youth in Assam and another 28 percent in Kerala were unemployed in 2011-12. In contrast, Gujarat has the lowest rate of unemployment among its educated youth (2.6 per cent). Gujarat has a consistently low rate of unemployment as compared to most of the states since 1993-94. This shows the success of Gujarat's industrialisation in creating employment opportunities since the early 1990s. Other states such as Bihar, Orissa, Jharkhand and West Bengal also face comparatively much higher incidence of unemployment than the national average of 11.5 percent. Notably, these states not only have a comparatively very low percentage of educated among their youth but also lag behind in their industrial development and the resultant employment opportunities. Such states have a double challenge of not only to improve the educational levels of their youth but also have to create employment for them on a large scale.

Unemployment rate for educated SC/ST youth is marginally higher than other social groups. However, at least ten among 21 states, they suffer from proportionately higher incidence of unemployment. Surprisingly, in states like Uttar Pradesh, Madhya Pradesh, Himachal Pradesh, Jammu & Kashmir, Chhattisgarh and West Bengal, the unemployment rate among educated SC/ST youth is significantly lower than others. The possible explanations for this situation are the very low proportion of educated young women among SC/ST as compared to others, thereby keeping the overall rate of unemployment among such educated youth low in these states.

As seen earlier, unemployment rates among educated youth tended to decline over the period 1993-94 to 2011-12. This trend has been observed in all states except Uttarakhand, Assam, Jammu & Kashmir and Uttar Pradesh during the period 2004-05 to 2011-12. Andhra Pradesh and Madhya Pradesh witnessed a marginal decline in unemployment.

In the case of SC/ST youth, the rate of unemployment also tended to decline in all states except Uttarakhand, Jharkhand, Bihar, Assam and Karnataka. States like Andhra Pradesh, Himachal Pradesh, Punjab, Delhi, Tamil Nadu, Odisha, Maharashtra and Kerala experienced a decline of over five percentage points in the rate of youth unemployment among SC/ST between 2004-05 and 2011-12. Notably, in these nine states, the decline in youth unemployment rate has been rather lower for youth from other social groups as compared to SC/STs (Table 6.14).

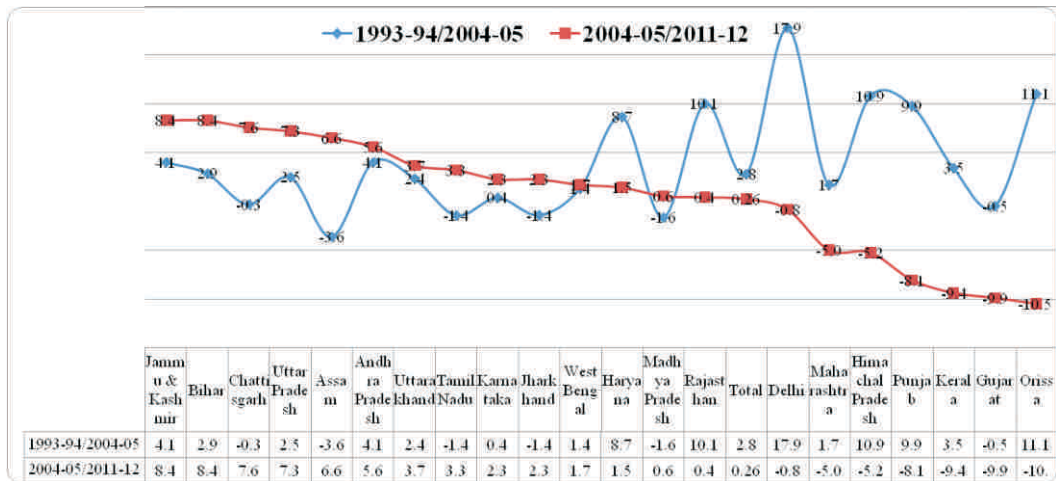
Table 6.14 Unemployment Rate among Educated Youth (Secondary and above)

State	1993-94			2004-05			2011-12		
	SC/ST	Others	Total	SC/ST	Others	Total	SC/ST	Others	Total
Andhra Pradesh	14.06	12.89	13.05	17.10	12.14	13.01	7.85	13.85	12.65
Assam	43.74	42.88	43.02	21.28	27.86	26.44	34.41	27.06	28.88
Bihar	13.20	18.05	17.50	10.88	15.75	15.07	35.58	10.61	13.76
Chhattisgarh	14.45	18.12	17.11	8.49	11.74	10.62	4.59	13.54	10.05
Delhi	0.00	4.17	3.87	19.15	17.61	17.75	12.07	11.42	11.57
Gujarat	11.13	6.93	7.70	3.81	4.89	4.67	4.42	2.07	2.58
Haryana	12.05	10.15	10.32	14.45	12.83	13.04	14.41	10.51	11.00

Himachal Pradesh	5.47	5.38	5.39	13.21	6.62	8.30	1.74	7.36	5.52
Jammu & Kashmir	15.78	14.02	14.31	12.76	15.53	15.18	7.80	18.83	16.66
Jharkhand	29.80	30.23	30.15	12.77	18.58	17.15	21.68	14.67	17.22
Karnataka	13.21	12.55	12.64	7.45	10.08	9.65	10.00	7.42	7.78
Kerala	43.00	39.49	39.70	37.32	40.11	39.86	30.01	27.20	27.49
Madhya Pradesh	16.21	14.36	14.72	7.94	8.35	8.30	4.29	8.50	7.50
Maharashtra	15.95	12.08	12.45	12.71	7.47	8.39	6.42	5.49	5.67
Orissa	14.46	28.29	25.81	23.99	35.20	32.55	17.38	14.50	15.35
Punjab	8.74	11.74	11.25	21.73	17.80	18.93	8.23	9.02	8.81
Rajasthan	13.54	5.57	6.63	11.73	8.00	8.78	8.75	7.53	7.81
Tamil Nadu	23.97	17.18	18.23	18.08	12.27	13.18	11.68	12.09	12.00
Uttar Pradesh	5.13	7.83	7.50	6.53	5.19	5.34	4.70	10.42	9.37
Uttarakhand	10.05	17.80	16.66	5.83	10.85	10.09	26.00	15.71	17.19
West Bengal	24.85	28.84	28.22	17.64	21.16	20.40	13.45	17.43	16.54
Total	16.11	15.87	15.91	14.58	13.55	13.73	12.02	11.30	11.45

While looking at the growth rates in absolute numbers of unemployed youth, their number increased by nearly 3 percent per annum between 1993-94 and 2004-05, and thereafter decelerated significantly to about 0.3 per cent per annum between 2004-05 and 2011-12. This means that employment opportunities for educated youth significantly improved along with their sizeable transition in favor of education since the early 1990s. However, this pattern significantly varies across the states. There are at least a dozen states where growth in the number of unemployed youth increased by 2 to 8 percent annually during the recent period 2004-05 / 2011-12, and these growth rates were higher than the previous period, 1993-94/2004-05. Most prominent among such states are Bihar, Uttar Pradesh, Assam, and Andhra Pradesh. Contrary to these states, the number of educated youth unemployed declined in absolute terms significantly in the states, namely, Maharashtra, Himachal Pradesh, Punjab, Kerala, Gujarat, Orissa and to some extent Delhi during the period 2004-05/2011-12. Notably, these states except Orissa are relatively developed ones, thereby implying that growth helps in giving jobs to youth and also make it possible to drive them for higher education by opting out of the labour market.

Figure 6.6 State-wise Annual Growth in the Number of Unemployed Youth



In brief, the overall employability of youth has declined over the years, which is largely due to the rising incidence of unemployment among youth with education levels up to or below middle school. The reduction in unemployment rates among those with educational levels up to secondary school and higher, except graduates with technical degrees largely confirms that an improvement in the education levels of youth has led to a concomitant improvement in their employability since the early 1990s. However, the prevalence of a high rate of unemployment among graduates and technical degree diploma-holders is still a matter of concern. This also justifies the concerns of employers regarding the poor education and skill levels of youth passing out of higher and technical educational institutions. There is a huge disconnect between the theoretical learning and practical knowledge being imparted in educational institutions. Moreover, the mushrooming growth of technical education institutions during the last two decades has grossly undermined the quality of vocational and technical education in the country. As a result, the demand for degree level technical education offered by private institutions has significantly reduced as evidenced by a sizeable number of seats remaining vacant therein in recent years. Many private institutions offering degree level technical education are now also offering diploma level education. The demand for such diploma level courses is increasing as the industry is getting technically qualified undergraduates at comparatively low salaries. The emphasis of Prime Minister Narendra Modi on imparting skills among Indian youth for helping them improve their employment prospects, coupled with the current initiatives under the National Skill Development Mission, will ensure that the gap between current education levels and needs of the industry is bridged by ensuring both the quality and the relevance of technical education in the country.

Joblessness among the Youth

It may be noted that the efficiency of the unemployment rate as a sufficient indicator for measuring the problem of youth in the labour market has been questioned for a long time (O'Higgins 2008). The attention has been turned in fact to focus on the discouraged young workers who are excluded from the measures of youth unemployment. The discouraged young workers are those young people who are neither in education attending educational institutions or employment and they may not be actively searching work. They are not searching for work because they know or believe that acceptable employment is not available (O'Higgins, 2008). The broad or relaxed definition of International Labour Organisation (ILO) on the unemployment rate, in fact, includes this category of people who are neither attending school/colleges nor employed. This category of youth is defined as a jobless youth (O'Higgins, 2008). The category of jobless youth in definition includes both the unemployed and those who are neither employed nor in educational institutions. The joblessness among the youth in India seems to be significantly high where about one-fourth (25.9 percent) of youth population was found to be jobless in 2004-05 (Table 15). In absolute number, of the total 203.6 million youth population, there is about 52.7 million jobless youth in India. The joblessness, however, is declining over a period of time. It declined from 41.8 to 27.18 percent during the period 1983 and 2004-05 but marginally increased in 2011-12. It is evident that the joblessness among the youth is much higher than the incidence of unemployment. One must remember that the unemployment rate is for the labour force and the incidence of joblessness is for the population.

The incidence of joblessness varied with the literacy status and level of education of the youth population. The incidence of joblessness between the literate and illiterate youth indicates that the joblessness was distinctively higher among the illiterates than that of the literates (Table 6.15). It is a distinct pattern when compared to unemployment rate between literate and illiterate youth. In terms of the level of education, unlike the pattern of unemployment rate which was increasing with the level of education, the joblessness among youth was, in fact, declining with the level of education up to secondary level. But it was the highest among those who had a post-secondary level education; it was 33.302 percent in 2004-05.

Table 6.15 Joblessness of Youth in India by Literacy Status and Education Levels

Education Level	1993-94			2004-05			2011-12		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
All	26.52	33.61	28.53	25.68	30.41	27.18	28.03	28.47	28.18
Not Literate	32.21	49.13	34.57	34.31	47.07	36.23	44.48	50.08	45.50
Literate	22.27	30.31	25.19	22.36	28.44	24.58	24.87	26.79	25.55
Below Primary	25.84	37.65	28.65	27.25	36.15	29.13	37.85	37.77	37.84
Primary	24.42	38.46	28.23	24.63	33.24	26.91	31.16	35.31	32.17
Middle	20.04	29.98	23.25	20.04	29.58	23.11	23.85	27.52	24.89
Secondary	19.71	23.87	21.64	19.23	22.31	20.62	18.92	21.37	19.90
Post Secondary	28.34	35.78	33.24	28.79	35.56	33.30	30.06	32.25	31.47

Human Capital Formation among Youth

Development economics now lays great importance on the concept of human capital. Education, defined in terms of literacy rate and schooling levels (enrolment ratios – in primary and secondary schools - mean years of schooling), is an important component of human capital. These indicators proximately represent the level of human capital in society. As seen in the earlier sections, there was a remarkable increase of three and half times in the population of youth pursuing their education during the period 1993-94 to 2011-12. Paradoxically, about 30 percent of the youth were attending educational institutions in 2011-12 (Annexure Table 1 and Annexure Table 7), yet over 13 percent of the youth in the country still remain illiterate. While over 55 percent of the youth population has acquired education up to the middle school level and below, 35 percent of the youth have attained education up to the high school and higher secondary level. The share of graduates among the youth stands at 8.6 per cent but the proportion of those with technical education is abysmally low, little over 3 percent of the total youth population (Table 6.16).

Table 6.16 Trends in Educational Development of Youth

Education Levels	1993-94	2004-05	2011-12
Illiterate	38.55	22.8	13.14
Up to the Primary Level	24.39	23.65	19.19
Middle Level	19.71	23.25	22.70
Secondary and Senior Secondary Level	13.2	23.38	34.55
Diploma and Certificate.	0.20	1.38	1.78
Graduate and Above	3.96	5.54	8.63
Total	100.00	100.00	100.00
TechnicalDegree-holder	0.09	0.28	0.49
TechnicalDiploma-holder below the Degree Level	0.81	1.62	2.04
TechnicalDiploma-holder equivalent to a Degree	0.99	0.87	0.75
Total-Technical Degree/Diploma-holders	0.89	2.77	3.28

If seen gender-wise, over 18 per cent of the female youth are illiterate as compared to the much lower corresponding figure of 8.5 percent for their male counterparts. Interestingly, the proportion of graduates among female youth is close to that of males (over 8 per cent). However, the proportion of female youth having technical degrees and diplomas is almost half of that for male youth (4.17 percent and 2.34 percent, respectively) in 2011-12.

Significant disparities still exist between the educational attainments of youth belonging to various socio-religious groups. Over one-fifth of the ST and OBC - Muslim youth are still illiterate at the dawn of the twenty-first century whereas the proportion of such youth is less than 4 percent among the OCs. The proportion of youth with secondary level of education is almost double among the OCs as compared to the STs. Similarly, the percentage of graduates is much higher among the OCs than among the STs, SCs and Muslims. A similar pattern can be observed in the case of youth with technical degree and diploma level educational attainments. It may thus be concluded that where higher educational attainments are concerned, the OCs are on top, followed by the OBC - Others, Other-Muslims, SCs, OBC-Muslims and lastly, the STs (Figures 6.7 and 6.8).

There has been a significant improvement in the educational levels of youth during the period 1993-94 to 2011-12, a fact that has been confirmed by earlier research too (IAMR 2011; IHD - ISLE 2014). The proportion of graduates and of those who have passed secondary and senior secondary levels among youth is more than double during the period. Although the ratio of technical degree holders among the youth is low, it improved by 5.4 times since 1993-94. However, such improvement has been uneven across various socio-religious groups. Between 2004-05 and 2011-12, the relative gap of percentage share of 'Graduate and above' among OCs and ST/SC youth widened with a faster improvement in the case of OCs. The youth belonging to the category of OBC - Others have also achieved a considerable improvement in their educational levels, particularly at the secondary level as compared to ST, SC and Muslim youth (Figures 6.7 and 6.8).

Figure 6.7 Percentage of Youth with Education of Secondary and Above Level

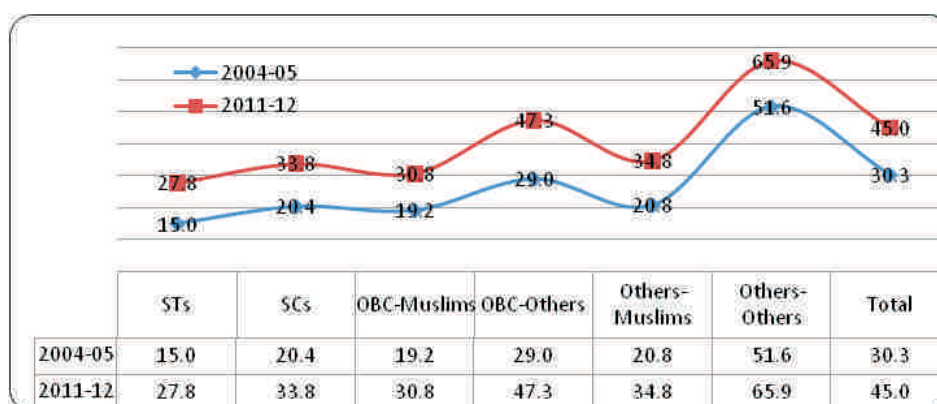
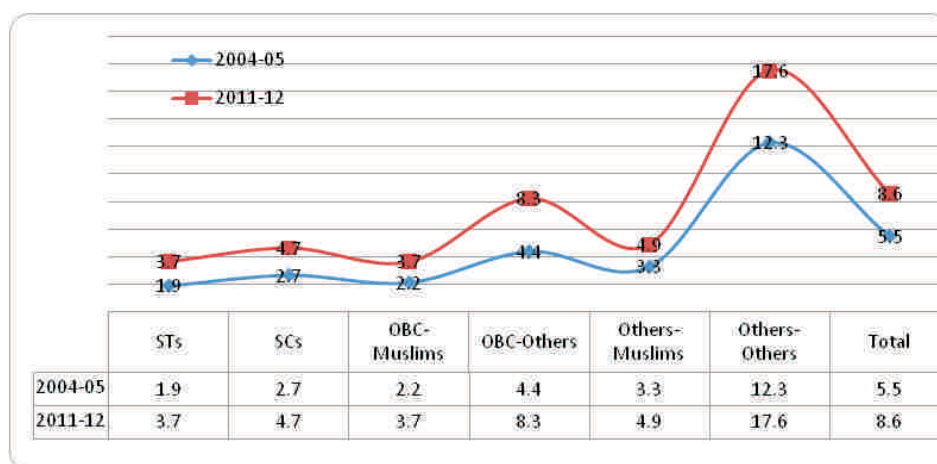


Figure 6.8 Percentage of Youth with Education of Graduate and Above Level



In brief, despite a few significant improvements in the literacy levels of youth belonging to the ST, SC and OBC - Muslim groups, their transition to a higher level of education has been rather slow as compared to that of OCs and OBC - Others. This has seriously hampered their employability and prospects in moving to better occupations.

Conclusion and Policy Issues

To conclude, Indian youth face the highest incidence of unemployment, which also has been increasing over the years, particularly among less educated. They continue to be socially and economically vulnerable as about one-third of the employed youth are still working as casual wage labourers. Although the opportunities for regular wage employment have increased for them somewhat, this has not happened at the desired rate. Every third youth among ten employed youth belong to 'working poor' class. The prevalence of low quality of employment, particularly among the SCs, STs and Muslims, has created a vicious circle of low-productivity occupations, poor remunerations and the limited ability of the family to invest in education and healthcare, which dampens the overall prospects for both development and growth. A positive feature of this situation, however, has been the phenomenon of an increasing proportion of youth studying in educational institutions. However, this transition in favor of education is not uniform across social groups, thereby leading to a widening of the gap between them in terms of their participation in both work and education. The likelihood of ST, SC and OBC - Muslim youth continuing their education is significantly lower than that of their counterparts in the OC group.

Persistence of unemployment among youth may lead to conflicts also (Carmer 2010; Planning Commission 2008). The challenge, therefore, is to create a large number of remunerative employment opportunities with adequate social security for both youth as well as others in the coming years. Various policies and programmes for creating employment opportunities have less than the desired impact on ameliorating unemployment situation among youth. This calls for measures to increase investment in the labour-intensive sectors, especially in the industrially backward and remote areas, which include measures for easy to do business, infrastructure development, safety, good governance and sound corporate social responsibilities, and ethical practices on the part of the industry. It is thus imperative to intensify policy initiatives to promote enterprise development, particularly among SCs/STs in a big way.

As most of the new employment on offer is contractual by nature without any social security and low levels of wages, the employers of such labour need to realise that such practices would not help them in long term to improve their growth and competitiveness.

Another major challenge is to improve the educational development of youth. Since education significantly enhances the probability of getting better jobs, efforts need to be made to ensure the higher transition of youth to vocational and technical education and also to higher education. Although the measures towards educational development of SCs / STs such as the grant of scholarships and free uniforms, provision of coaching for competitive examinations and imposition of reservation in educational institutions have improved their participation in education at various levels, these need to be strengthened further. An alarming aspect is the increasing deficit of quality education and skill training. Public educational institutions, at both the school and higher levels, need to be strengthened and made accountable for their quality and relevance. Private educational and training institutions also need to be monitored closely for the quality of teaching they offer and their fee structures. The current measures of skill development under the National Skill Development Mission need to be pegged up in a big way in order to address the skill shortages being faced by the Indian industry. Unlike in the past, today's youth are more informed and keen to be a part of the IT revolution. They are justifiably asserting their concerns for a decent and dignified life. Both state and central governments, and policy-makers must, therefore, come forward in a big way to facilitate the overall development of youth in the country and to ensure decent employment opportunities for them.

Annexure Table 1 Gender-wise Activity Status of Youth

Age Category	Male			Female			Persons		
	LFPR	Student	Others	LFPR	Student	Others	LFPR	Student	Others
1993-94									
15-19	54.54	41.9	3.55	30.85	27.17	41.98	43.81	35.23	20.96
20-24	86.51	11.55	1.94	40.71	4.59	54.71	63.34	8.04	28.62
25-29	97.43	1.38	1.19	45.86	0.32	53.82	71.0	0.83	28.16
15-29	77.06	20.58	2.36	38.97	10.95	50.07	58.46	15.88	25.66
30-59	97.77	0.06	2.17	50.7	0.05	49.24	74.81	0.06	25.13
15-59	88.04	9.7	2.26	45.19	5.18	49.63	67.13	7.49	25.38
Total	55.64	23.69	20.67	29	17.18	53.82	42.78	20.54	36.68

2004-05									
15-19	48.83	47.72	3.45	28.12	38.22	33.66	39.29	43.34	17.37
20-24	85.36	12.95	1.69	38.48	6.85	54.68	61.87	9.89	28.24
25-29	97.44	1.52	1.04	45.79	0.46	53.75	71.48	0.99	27.54
15-29	79.14	19.06	1.8	45.35	13.75	40.89	63.13	16.55	20.32
30-59	97.47	0.03	2.5	52.02	0.05	47.92	74.95	0.04	25.01
15-59	89.75	8.36	1.88	54.44	5.88	39.67	72.77	7.17	20.06
Total	55.9	26.39	17.7	29.43	22.01	48.56	43	24.26	32.74
2011-12									
15-19	30.99	65.99	3.02	14.12	58.47	27.42	23.35	62.58	14.07
20-24	74.33	23.94	1.73	26.2	14.52	59.29	50.54	19.28	30.18
25-29	95.85	2.85	1.3	32.75	1.32	65.93	63.65	2.07	34.29
15-29	63.38	34.5	2.12	24.07	25.66	50.27	44.36	30.22	25.41
30-59	97.79	0.03	2.18	38.84	0.05	61.11	68.5	0.04	31.46
15-59	82.65	15.2	2.15	32.53	10.98	56.48	58.04	13.13	28.84
Total	55.53	29.78	14.69	22.08	25.24	52.67	39.28	27.58	33.15

¹By using the UPSS approach, students working in their subsidiary capacity get included as workers. However, such number is not large, thus not affecting the overall trends.

Annexure Table 2
Activity Status of Youth by Their Socio-religious Groups

	LFPR	Student	Others
1993-94			
ST	76.52	9.19	14.29
SC	64.1	10.86	25.04
Other -Muslim	50.85	12.05	37.1
Other	55.81	18.81	25.38
2004-05			
ST	71.26	14.72	14.01
SC	59.7	15.73	24.57
OBC -M	49.08	16.05	34.86

OBC -Others	58.41	18.48	23.1
OTH -M	50.63	16.75	32.62
OTH -Others	48.62	28.09	23.28
2011-12			
ST	56.14	22.96	20.9
SC	47.26	26.1	26.64
OBC -M	43.52	22.92	33.56
OBC -Others	43.73	31.42	24.85
OTH -M	45.58	25.61	28.82
OTH -Others	38.02	38.75	23.24

Annexure Table 3
Regional Trends in Labour Force Participation Rates

States	Youth (15-29 years)		Others (30-59 Years)	
	1993-94	2011-12	1993-94	2011-12
Andhra Pradesh	71.12	49.39	83.54	79.15
Arunanchal Pradesh	53.44	34.43	84.13	72.72
Assam	48.70	38.00	64.42	60.55
Bihar	45.16	32.06	62.94	54.46
Chattisgarh	71.07	52.40	84.52	83.21
Delhi	44.47	37.23	60.76	58.67
Goa	47.94	44.63	69.18	58.06
Gujarat	61.90	51.80	76.13	66.61
Haryana	56.21	38.16	74.00	62.58
Himachal Pradesh	70.85	50.07	88.00	89.30
Jammu & Kashmir	56.74	43.75	81.79	68.38
Jharkhand	51.13	41.00	69.57	66.83
Karnataka	63.96	44.88	79.27	70.28
Kerala	47.19	41.83	70.65	65.22

Madhya Pradesh	63.75	45.65	79.57	68.81
Maharashtra	60.68	46.63	80.68	74.03
Manipur	38.94	37.00	77.54	68.64
Meghalaya	70.37	43.08	88.95	87.47
Mizoram	49.54	50.29	75.94	78.00
Nagaland	33.61	46.20	67.65	73.64
Orissa	59.55	50.20	74.08	68.53
Punjab	52.33	45.90	67.89	65.64
Rajasthan	67.66	47.01	81.23	75.17
Sikkim	47.30	56.76	69.94	86.65
Tamil Nadu	64.70	46.10	79.85	73.27
Tripura	39.63	51.92	63.00	70.11
Uttaranchal	64.59	38.13	84.14	70.49
Uttar Pradesh	51.09	42.07	69.32	65.41
West Bengal	53.41	47.58	67.16	64.87
Total	58.46	44.36	74.50	68.50

Annexure Table 4
Nature of Employment by Socio-religious Groups

	SE	REG	CL	Total
1993-94				
ST	47.88	4.64	47.48	100
SC	33.95	7.76	58.29	100
Other -Muslims	56.95	11.85	31.2	100
Other	59.48	13.35	27.17	100
Total	52.93	11.14	35.93	100
2004-05				
ST	49.09	5.71	45.2	100
SC	36.94	12.21	50.85	100
OBC -Muslim	60.49	13.11	26.4	100
OBC -Others	57.28	13.15	29.56	100

OC - Muslim	54.77	15.19	30.03	100
OC - Others	60.79	23.66	15.54	100
Total	52.80	14.36	32.84	100
2011-12				
ST	50.53	7.96	41.50	100
SC	32.43	17.74	49.83	100
OBC -Muslim	47.61	20.23	32.16	100
OBC -Others	49.4	20.05	30.55	100
OC - Muslim	52.82	18.91	28.27	100
OC - Others	48.91	36.98	14.11	100
Total	46.06	21.22	32.72	100

Note: SE=Self-employed, REG=Regular employment, CL=Casual labour

Annexure Table 5
Nature of Youth Employment across States

State	1993-94			2011-12		
	SE	REG	CASUAL	SE	REG	CASUAL
Andhra Pradesh	42.25	9.73	48.02	36.90	22.46	40.64
Arunachal Pradesh	79.63	15.84	4.53	76.61	13.05	10.34
Assam	57.25	11.95	30.79	64.20	12.20	23.61
Bihar	48.37	3.27	48.36	49.25	4.32	46.43
Chhattisgarh	58.33	4.36	37.31	47.79	10.29	41.92
Delhi	38.87	46.66	14.47	23.03	72.75	4.22
Goa	30.90	37.02	32.08	12.20	71.32	16.49
Gujarat	43.89	13.46	42.65	40.79	34.71	24.50
Haryana	59.70	13.64	26.67	45.49	32.36	22.15
Himachal Pradesh	83.53	7.02	9.45	67.27	18.20	14.54

Jammu & Kashmir	77.78	12.63	9.59	57.36	20.03	22.61
Jharkhand	58.89	5.05	36.06	58.85	7.71	33.43
Karnataka	51.35	11.31	37.35	38.63	30.50	30.87
Kerala	35.88	15.00	49.12	21.80	34.74	43.46
Madhya Pradesh	57.59	7.12	35.29	52.57	10.44	36.99
Maharashtra	42.86	19.60	37.53	39.80	32.55	27.65
Manipur	85.81	9.06	5.13	63.72	9.68	26.60
Meghalaya	77.33	7.69	14.98	62.05	15.33	22.63
Mizoram	84.22	11.98	3.81	73.41	11.62	14.96
Nagaland	77.69	18.63	3.68	88.08	7.17	4.75
Orissa	52.32	7.20	40.48	58.81	11.01	30.18
Punjab	55.23	18.25	26.51	43.42	32.96	23.62
Rajasthan	71.17	8.79	20.04	55.92	14.49	29.59
Sikkim	51.52	26.46	22.02	72.78	22.55	4.66
Tamil Nadu	35.45	17.90	46.65	22.96	38.34	38.70
Tripura	47.38	11.61	41.01	38.94	16.04	45.02
Uttaranchal	83.65	6.36	9.99	62.10	24.36	13.54
Uttar Pradesh	70.56	6.58	22.86	57.04	11.51	31.45
West Bengal	50.64	12.90	36.46	41.14	17.46	41.40
Total	53.05	11.47	35.48	46.06	21.22	32.72

Annexure Table 6
Sectoral Distribution of Youth Employment across States

States	1993-94			2011-12		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Andhra Pradesh	67.94	13.53	18.53	47.95	22.78	29.27
Arunachal Pradesh	84.18	4.00	11.82	74.84	6.61	18.55
Assam	73.94	5.65	20.40	52.85	18.56	28.59
Bihar	82.14	4.70	13.17	61.71	18.97	19.32
Chhattisgarh	86.46	3.83	9.71	69.24	14.89	15.86
Delhi	2.44	49.40	48.15	0.00	29.77	70.23
Goa	28.70	25.81	45.49	12.16	27.42	60.42
Gujarat	59.21	21.88	18.91	42.23	33.99	23.78
Haryana	58.05	16.71	25.24	33.40	37.16	29.45
Himachal Pradesh	77.79	11.24	10.97	59.82	24.22	15.95
Jammu & Kashmir	67.52	12.37	20.10	41.21	34.24	24.55
Jharkhand	72.41	10.84	16.75	48.90	30.75	20.36
Karnataka	65.36	15.80	18.83	40.29	25.73	33.98
Kerala	37.79	28.76	33.45	8.77	36.95	54.28
Madhya Pradesh	78.66	9.15	12.19	59.46	22.65	17.89
Maharashtra	59.56	16.42	24.03	43.46	22.44	34.10
Manipur	59.89	24.45	15.66	36.96	43.34	19.71
Meghalaya	82.95	3.58	13.47	62.63	11.40	25.97
Mizoram	77.42	4.06	18.52	62.18	15.68	22.13
Nagaland	74.92	2.53	22.55	78.76	8.13	13.11
Orissa	76.95	9.65	13.40	53.25	26.80	19.94
Punjab	54.34	18.05	27.60	31.26	35.05	33.69
Rajasthan	68.85	16.68	14.46	46.53	33.79	19.69
Sikkim	55.98	8.27	35.75	56.76	10.92	32.31
Tamilnadu	50.27	26.74	22.98	21.99	41.00	37.01
Tripura	43.34	10.40	46.27	25.65	47.88	26.47
Uttaranchal	81.30	7.91	10.79	42.49	25.03	32.48
Uttar Pradesh	66.80	14.79	18.41	46.34	34.44	19.22
West Bengal	52.79	23.85	23.37	32.29	40.92	26.79
Total	64.59	15.98	19.44	43.86	29.61	26.53

Annexure Table 7
Literacy Rate and Educational Levels of Working Youth in India

Age Group	Formal Schooling						
	Literacy	None	Below Primary	Primary	Middle	Secondary	Post Secondary
1993-94							
7+	50.49	50.75	11.05	11.88	11.38	10.65	4.28
15+	50.95	50.29	10.82	11.78	11.64	11.02	4.44
15-29	57.95	43.19	10.51	13.91	15.63	13.28	3.48
2004-05							
7+	61.23	41.15	8.66	13.86	15.37	14.79	6.16
15+	61.30	41.06	8.49	13.64	15.48	15.06	6.27
15-29	73.17	28.84	8.92	16.78	22.14	18.19	5.13
2011-12							
7+	69.61	30.87	10.34	13.21	16.46	19.94	9.19
15+	69.66	30.82	10.20	13.12	16.50	20.09	9.26
15-29	82.82	17.46	9.83	15.64	22.38	25.77	8.92

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EDUCATION, SKILLS AND EMPLOYMENT DYNAMICS FOR YOUTH IN INDIA





CHAPTER VII

EDUCATION, SKILLS AND EMPLOYMENT DYNAMICS FOR YOUTH IN INDIA

SECTION - C STATUS PAPERS

Introduction



Investment in education and skill development is considered as the most important and valuable capital by all classical and neo-classical economists. The pioneering work by Schultz's (1963) and Becker (1964) emphasised that education is not merely a consumption activity, but a human capital investment which is equally necessary for investment in physical capital. These theories argued that when these

investments are combined with new technologies emerging from physical capital investments, then they lead to growth acceleration. They improve income distribution by raising wages and savings. More recently, the development of endogenous or “new growth” theories also stressed on increasing returns to investment in human capital. These theories viewed human capital as an endogenous factor and rediscovered its impact on economic growth through multiple channels (Tilak 1989).

The youth population (aged 15 to 29 years) in India, which constituted for 333 million (around 27.5 per cent of the total population) in Census 2011, however, suffers from a low level of education and skill base. Only 3.8 percent of the youth population had either received or was receiving formal vocational training in 2011-12. This percentage is very low as compared to developed countries such as 68 per cent in the UK, 75 percent in Germany, 80 percent in Japan and 96 percent

in South Korea and developing countries such as 36 per cent in Mauritius and 28 percent in Colombia (see Appendix Table A.1). Similarly, the level of education which is treated as the foundation for acquiring a specific type of skill reflects dismal performance. Around 20 per cent youth were illiterate or below primary education in 2011-12. Besides this, there exist huge disparities in education and skill attainment across gender, social groups, income groups, rural – urban and formal – informal sector workers, type of work etc (shown later in this paper).

In such a scenario, education and skill development of youth is a particular imperative due to two reasons: First, the demand for a skilled workforce has gone up due to changing work organisation. It is estimated that there will be an additional net incremental requirement of around 110 million skilled - manpower by 2022 in twenty-four key sectors in India. Secondly, changing demographic profiles of India with bulging youth population (also known as a demographic dividend - or demographic gift, bonus or window) suggest that the youth population will increase from 333 million in 2011 to 370 million by 2030. These young people are likely to join the labour market and need to be provided quality education and training to make them employable workforce in the future. This will not only expand the production possibility frontier of India but also meet the expected shortfall of the young skilled workforce in the aging developed world (National Policy for Skill Development and Entrepreneurship 2015). Further, a critical component in the booming youth population is its huge inter-state variations. Some states (southern states of Kerala and Tamil Nadu) have completed the demographic dividend phase while some states such as Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (BIMARU states) are beginning to reap it. This inter-state disparity is of concern for skill development policies of youth as these BIMARU states typically underperform as compared to other Indian states (Thakur 2012).

Activity Profile of the Youth

The activity profile of youth in 2011 shows that about 42 percent were workers, 3 percent were unemployed, 30 percent attended educational institutions and 25 percent were non-workers (by using NSS 68th round). In order to make appropriate education and skill development policies for youth, it is essential to have an idea of trends in activity profile of youth in future. For the purpose, we have projected activity profile of youth in 2030. Based on current trends, we assume that in 2030, the educational participation rate of youth will increase to about 85 percent for 15 to 19 years age group, 35per cent for 20-24 years age group, and 7.5per cent for 25 to 29 years age group. We further assume that the percentage of youth who will be in the labour force among non-participants in education will continue to be around 95 percent among males and will be 10 percent higher than present rate for young women. On this basis,

the projected activity profile of youth in 2030 (See Table 7.1) shows that youth in the labour force will increase by about 9 million and will be almost equal to youth in education. As the educational participation of youth increases, there is a strong case for strengthening quality education and building the skill component in education became stronger, along with schemes for skill training of youth who are not in education. Also, provided an assumption regarding female labour force participation rate holds, the entire increase in youth labour force between 2011 and 2030 will be due to increase in young female participation in the labour market. This is reasonable due to rising enrollment of young women in higher education in the current period (Chandrasekhar & Ghosh 2011, Rangarajan et al 2011 and Planning Commission 2011: 9-10) who are more likely to participate in the labour market as borne out by current patterns. This highlights the importance of focusing on gender issues in education and skills.

The projection of increase in youth labour force at state level made by NCEUS (2009) reveals that between 2006-07 and 2016-17 around 81 percent of the increase in youth labour force will be in the Eastern and Central states (Madhya Pradesh., Chhattisgarh, Jharkhand, Bihar, Uttar Pradesh, West Bengal, Odisha, Assam and the Northeastern states) while the Southern and Western states will contribute negatively. This trend is of serious concern as the formal training capacity in a former group of states is only 28.1 percent as compared to 57.1 per cent in the latter group of states. As a result, the skill - training programs must address skilling needs of lagging states to have their significant impact on youth.

Table 7.1 Present and Projected Activity Profile of the Youth

Youth Population (15-29) in Millions	2011-12	2030
In Education		
Male	58.9	81.9
Female	41.0	67.1
Total	99.9	149.0
Labour Force		
Male	108.0	103.8
Female	38.4	51.6
Total	146.4	155.4
Other Non-workers		
Male	3.6	2.7
Female	80.2	63.1
Total	83.8	65.8

Source: Author's own calculations based on United Nations, World Population Prospects (2015) by using medium fertility variant and unit level data of NSS 68th Round, 2011-2012, Employment-Unemployment Survey

Educational Profile of the Youth

Education is the foundation for acquiring a specific type of skill. Hence, before discussing skill profile of youth, it is essential to look at the basic educational attainment of the youth to have an idea of generic and foundational skills. In 2011-12, the share of the youth population (in the age group 15 – 29 years) who were illiterate or below primary education was 20.3 percent (Table 7.2) coming down from 31.2 percent in 2004-05 (Table 7.3). This share of illiteracy was higher among youth workers (27 percent), women workers (39 per cent) and in rural areas in 2011-12. There has been some improvement over the years in higher education. In 2004-05, the share of young people educated up to higher secondary was 9 per cent, which has gone up to 14 percent in 2011-12. If we look at the share of graduate and above youth population, then its share has improved over time from 6 percent in 2004-05 to 9 percent in 2011-12. This share has increased in both rural and urban areas and higher for female workers than their male counterparts in urban areas.

**Table 7.2 Educational attainment of Youth Population and Workers (15-29 years)
(2011-12)**

YOUTH POPULATION (percent)									
	Total			Rural			Urban		
Education	Male	Female	Total	Male	Female	Total	Male	Female	Total
Illiterate & < Primary	15.3	25.8	20.3	17.8	31.7	24.6	10.3	13.7	12.0
Primary	11.8	12.2	12.0	13.1	14.1	13.6	9.2	8.2	8.7
Middle	24.1	21.1	22.7	26.3	22.4	24.4	19.9	18.5	19.2
Secondary	22.1	17.9	20.1	22.2	16.9	19.6	22.0	19.8	20.9
Higher Secondary	15.5	13.5	14.5	13.8	10.3	12.1	18.9	20.0	19.4
Diploma / Certificate	2.3	1.2	1.8	1.6	0.7	1.2	3.7	2.2	3.0
Graduation & above	8.9	8.4	8.7	5.2	3.9	4.6	16.0	17.5	16.7
Total	100	100	100	100	100	100	100	100	100

YOUTH WORKERS (UPSS) (percent)									
Illiterate &< Primary	23.1	39.2	27.3	26.2	44.5	31.4	16.3	21.6	17.4
Primary	15.6	16.0	15.7	16.6	17.5	16.8	13.4	10.7	12.9
Middle	24.1	17.3	22.3	25.2	18.0	23.1	21.8	15.2	20.5
Secondary	16.5	10.3	14.9	16.5	10.4	14.7	16.7	10.0	15.3
Higher Secondary	9.8	6.5	8.9	9.3	5.5	8.2	10.9	9.7	10.6
Diploma / Certificate	2.2	1.4	2.0	1.6	0.8	1.4	3.4	3.6	3.4
Graduation & above	8.8	9.3	8.9	4.7	3.4	4.3	17.6	29.3	20.0
Total	100	100	100	100	100	100	100	100	100

Source: Computed from unit level data of NSS 68th Round, 2011 - 2012, Employment-Unemployment Survey

Table 7.3 General Educational attainment of Youth Population (15-29 years) in percent (2004-05)

Education	Total			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Illiterate &< Primary	23.3	39.8	31.2	28.0	48.1	37.9	13.5	19.8	16.4
Primary	15.4	13.4	14.5	16.8	14.2	15.5	12.5	11.6	12.1
Middle	26.3	20.0	23.3	26.9	19.3	23.2	25.0	21.7	23.5
Secondary	16.7	12.5	14.7	15.4	10.3	12.9	19.2	17.8	18.6
Higher Secondary	10.4	7.9	9.2	8.2	5.3	6.7	14.9	14.3	14.6
Diploma / Certificate	1.8	1.1	1.4	1.1	0.7	0.9	3.2	2.0	2.6
Graduation & above	6.3	5.3	5.8	3.7	2.1	2.9	11.7	12.9	12.2
Total	100	100	100	100	100	100	100	100	100

Source: Computed from unit level data of NSS 61st Round, 2004 - 2005, Employment-Unemployment Survey

Indian labour markets are highly segmented, based on geographical, sex, socio-cultural groups, and occupation. This market segmentation is largely due to the endowment- 'education, skills and experience' of a person (Papola 2012). The educational attainment of youth workers is sharply differentiated across the formal/organised and informal/unorganised sectors (Table 7.4). Youth workers employed in the formal sector are more educated than informal sector workers. This result holds for both male and female and for all employment status (self-employed, regular wage and casual wage workers) of youth workers. Also, the level of education is higher for regular wage workers than self-employed and casual workers (Table 7.5).

By broad sections of industrial groups (Table 7.6), the share of illiterate youth workers is highest in agriculture, followed by the construction sector. Workers employed in trade and services sectors have much higher level of education than in other industrial groups. For instance, the percentage share of graduate and above workers in trade and services sector is 23 per cent, whereas it is only 7.3 percent in manufacturing, mining and electricity sectors, 3 per cent in agriculture and 1.9 percent in the construction sector.

Table 7.4 General Educational attainment of Youth Workers (UPSS) across Sectors (2011-12)

Education (in per cent)	Informal Sector			Formal Sector		
	Male	Female	Total	Male	Female	Total
Illiterate & below primary	24.6	41.6	29.1	9.9	16.6	11.6
Primary	16.4	17.1	16.6	7.9	6.5	7.5
Middle	25.3	18.4	23.5	14.7	8.6	13.2
Secondary	16.7	10.4	15.1	15.4	9.9	14.1
Higher secondary	9.5	5.9	8.6	12.6	11.7	12.4
Diploma/certificate	1.5	1.0	1.4	7.8	5.2	7.1
Graduation & above	6.0	5.5	5.8	31.7	41.5	34.1
Total	100	100	100	100	100	100

Source: same as Table 7.1

**Table 7.5 General Educational attainment of Youth Workers (UPSS) by
Employment status & Sector (2011-12)**

Education (in percent)	All Workers				Informal Sector				Formal Sector			
	SE	RW	CL	total	SE	RW	CL	total	SE	RW	CL	Total
Illiterate &< primary	26.2	10.8	39.4	27.3	26.1	15.5	39.5	29.1	18.3	3.9	38.4	11.6
Primary	15.0	10.8	19.7	15.7	15.0	14.9	19.9	16.6	16.0	4.9	16.9	7.5
Middle	23.0	19.2	23.4	22.3	23.1	25.1	23.5	23.5	14.1	10.5	22.5	13.2
Secondary	17.3	14.9	11.5	14.9	17.3	15.4	11.4	15.1	3.5	14.1	13.8	14.1
Higher secondary	10.7	12.4	4.2	8.9	10.7	11.0	4.2	8.6	21.3	14.5	5.1	12.4
Diploma/certificate	1.0	6.0	0.7	2.0	1.0	4.1	0.7	1.4	0.0	8.9	1.0	7.1
Graduation & above	6.8	25.8	1.0	8.9	6.8	14.1	0.9	5.8	26.8	43.2	2.3	34.1
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: same as Table 7.1

Here, SE stands for Self Employed, RW stands for Regular wage workers and CL stands for Casual labourers.

**Table 7.6 General Educational attainment of Youth Workers (UPSS) by Broad
Sections (2011-12)**

Education (in percent)	Agriculture	Mining, Manufacturing & Electricity	Construction	Trade & Services	Total
Illiterate &< primary	35.0	24.7	34.9	12.6	27.3
Primary	16.2	17.6	20.0	11.5	15.7
Middle	22.9	23.9	24.7	19.3	22.3
Secondary	14.5	14.2	12.2	17.4	14.9
Higher secondary	8.1	8.5	5.0	12.6	8.9
Diploma/certificate	0.5	3.9	1.3	3.5	2.0
Graduation & above	3.0	7.3	1.9	23.1	8.9
Total	100	100	100	100	100

Source: same as Table 7.1

There are systematic differences in education levels of youth population across socio-religious groups (Table 7.7). The illiteracy rate is higher for those who lie in the lower stratum of social groups (ST, SC and Muslims) and the share of young people with higher education goes up as we move across the social gradient from Scheduled Caste and Scheduled Tribe to Other Backward Classes and General Castes. For instance, the graduate and above youth population increases from 3 percent (ST) to 4.4 percent (Muslims), 4.7 percent (SC), 8.1 percent (OBC) and 17.3 percent for Hindu General Castes. Similarly, there is a pattern in educational attainment for youth population across income groups (proxied by monthly per capita consumption expenditure). The level of higher education (higher secondary and above) goes on increasing as one moves up from bottom to top quintiles in terms of MPCE (Table 7.8).

Table 7.7 General Educational attainment of Youth Population across social-religious groups (2011-12)

Education (in percent)	Hindu -ST	Hindu -SC	Hindu-OBC	Hindu-General Caste	Muslim	Others (Minorities)	Total
Illiterate &< Primary	37.0	26.4	19.1	7.6	28.6	9.8	20.3
Primary	15.0	15.3	10.8	7.2	16.2	11.2	12.0
Middle	22.9	25.2	23.2	20.0	22.4	21.2	22.7
Secondary	12.9	16.8	22.0	23.4	17.6	22.6	20.1
Higher Secondary	8.6	10.5	14.9	21.8	9.8	19.4	14.5
Diploma/Certificate	0.6	1.2	2.0	2.8	1.1	2.7	1.8
Graduation & above	3.0	4.7	8.1	17.3	4.4	13.1	8.7
Total	100	100	100	100	100	100	100

Source: same as Table 7.1

Table 7.8 General Educational attainment of Youth Population across MPCE Groups (2011-12)

Education (in percent)	Lowest MPCE	Second MPCE	Middle MPCE	Fourth MPCE	Highest MPCE	Total
Illiterate &< primary	36.8	29.0	21.6	13.1	5.4	20.3
Primary	16.9	15.0	13.9	10.8	4.8	12.0
Middle	25.1	25.1	25.7	23.6	14.9	22.7
Secondary	13.2	18.8	21.2	24.0	21.8	20.1
Higher secondary	6.4	8.8	12.0	17.9	25.2	14.5
Diploma/certificate	0.2	0.7	1.0	1.9	4.6	1.8
Graduation & above	1.5	2.8	4.5	8.7	23.3	8.7
Total	100	100	100	100	100	100

Source: same as Table 7.1

Thus there is a link between socio-economic background and education and between the latter and employment status. The former needs to be tackled in order to reduce disparity in employment outcomes.

Skill Profile of the Youth

The skill base of youth population can be analysed by broadly taking into account two categories- formal training and informal training. The Formal training is a structured training programme for a specific skill and certificates, diplomas or degrees are received from recognised agencies (NCEUS 2009) and its outcome is measured with respect to some objective parameters. The content of skill education and training program can vary (either co-integrated with the school system as vocational education or can be imparted independently) and its duration can also last from few weeks to several years (for instance, the technical or engineering education, polytechnics etc). On the other hand, informal training is much more prevalent in countries like India which majorly includes hereditary, self-learning and learning on the job. This training is generally undertaken by those who have little or no formal education (or basic literacy and numeracy skills) and find difficult to acquire formal skills (Srivastava 2008).

The analysis of skill acquisition in the 15 - 29 age population highlights that in 2011-12, a total of 4.5 million persons were undergoing vocational training and 7 million people had already received formal vocational training, together constituting around 3.8 percent of the population (Table 7.9 and 7.10). Also, people residing in urban areas are more formally trained than their rural counterparts. Similarly, there are gender differences in the attainment of formal training. Male's acquisition of formal skills is greater than that of females in both rural and urban areas. Overall, 4.4 percent of males have formal skills in contrast to 3.2 percent of females. Further, there is hardly any improvement in the acquisition of formal skills over the years (2004-05 to 2011-12).

On the other hand, informal training is much more prevalent (7.3 percent) than formal training (3.8 per cent), with the highest proportion of population acquiring informal skills by learning on the job, followed by hereditary and self-learning. The acquisition of informal skills in rural areas is more through hereditary means, whereas in the urban areas learning on the job is more prevalent. It is to be noted that there is a huge gender difference in the attainment of informal skills, both in rural and urban areas.

Table 7.9 Skill levels of Youth Population (15-29 Years) in 2011-12 (in millions)

	Total			Rural			Urban		
Skill / Training	Male	Female	Total	Male	Female	Total	Male	Female	Total
Formal Training									
Receiving	2.9	1.7	4.5	1.3	0.6	1.9	1.6	1.1	2.7
Received	4.6	3.4	8.0	2.0	1.3	3.3	2.6	2.2	4.7
Informal Training									
Hereditary	4.8	2.4	7.2	3.9	2.0	5.8	1.0	0.4	1.4
Self-learning	2.7	1.9	4.5	1.5	1.3	2.8	1.2	0.6	1.8
Learning on the job	8.7	2.2	10.9	4.4	1.5	5.9	4.3	0.7	5.0
Others	0.6	0.8	1.3	0.3	0.4	0.7	0.2	0.4	0.6
No training	146.2	147.1	293.3	99.1	99.8	198.9	47.1	47.4	94.5
Total	170.4	159.4	329.8	112.5	106.8	219.3	57.9	52.6	110.5

Source: same as Table 7.1

**Table 7.10 Percentage of Population (15 – 29 Years) with Skills in the year
2011-12 & 2004-05**

Skill / Training	Total			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2011-12									
Formal Skills	4.4	3.2	3.8	2.9	1.7	2.4	7.1	6.2	6.7
Informal Skills	9.8	4.5	7.3	9.0	4.8	6.9	11.6	3.8	7.9
2004-05									
Formal Skills	4.5	3.1	3.8	2.5	1.7	2.1	8.6	6.5	7.6
Informal Skills	9.4	5.8	7.7	9.5	6.2	7.9	9.2	4.9	7.2

Source: Computed from unit level data of NSS 68th and 61st Round, 2004 - 2005, Employment-Unemployment Surveys

Regarding skill attainment of youth workforce (Table 7.11), around 26 million workers had any training, out of which only 5.7 million had formal training in 2011-12 (constituting around 3.8 percent of the youth workforce). As expected there are gender differences in formal training acquisition. Overall, around 4 million male workers have formal training as compared to 1.6 million female workers. Informal training is more dominant with its share around 15 percent, accounting for around 17 million youth workers. There is a rural-urban divide in skill attainment of youth workforce, with more urban workers getting formal training.

Table 7.11 Skill levels of Youth Workers (15-29 Years) in 2011-12 (in millions)

Skill / Training	Total			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Formal Training									
Receiving	0.9	0.4	1.3	0.4	0.1	0.6	0.5	0.2	0.7
Received	3.2	1.2	4.4	1.4	0.4	1.8	1.8	0.8	2.6
Informal Training									
Hereditary	4.6	1.7	6.3	3.7	1.5	5.2	1.0	0.2	1.2
Self-learning	2.5	0.9	3.3	1.3	0.6	2.0	1.1	0.3	1.4
Learning on the job	8.6	1.7	10.3	4.4	1.2	5.6	4.2	0.6	4.8
Others	0.5	0.3	0.8	0.2	0.2	0.4	0.2	0.1	0.3
No training	81.3	29.5	110.8	57.9	23.4	81.3	23.4	6.0	29.5
Total	101.5	35.7	137.2	69.3	27.5	96.8	32.2	8.2	40.4

Source: same as Table 1

The skill profile of youth population across socio-religious groups shown in (Table 7.12) highlights that there is a clear upward trend in the acquisition of formal skills as one move from social groups Hindu-ST, Hindu-SC, Hindu-OBC to Hindu- general caste. Muslims have much lower formal training than Hindu and other minority religious groups. It is only the Hindu-general caste category and other minority religious groups which perform better than the average of 3.8 per cent. On the other hand, informal training is fairly dispersed across social – groups, with Hindu – upper castes having the lowest acquisition of such skills.

Table 7.12 Percentage of persons with skills (15-29 Years) across socio-religious groups (2011-12)

Skill / Training	Hindu-ST	Hindu-SC	Hindu-OBC	Hindu-General Caste	Muslim	Others (Minorities)	Total
Formal Training	2.0	2.7	3.5	6.0	2.7	6.8	3.8
Informal Training	8.1	6.4	6.7	6.0	9.8	10.6	7.3

Source: same as Table 7.1

One of the most important obstacles in the acquisition of skills, especially formal skills, is the low income of the population. There is a positive relationship between income level and attainment of formal training. The incidence of formal training is only 0.5 percent in the lowest MPCE quintile and goes on increasing to reach 9.6 per cent in the highest MPCE quintile group (Table 7.13). Informal training also shows such positive linkage with MPCE and it is higher than formal training at all MPCE quintiles except for the highest MPCE quintile group, where it declines somewhat and becomes smaller than formal training. From this, one can conclude that steps will have to be taken to make skill training accessible to the poorer youth.

Table 7.13 Percentage of persons with skills (15-29 Years) across MPCE groups (2011-12)

Skill / Training	Lowest MPCE	Second MPCE	Middle MPCE	Fourth MPCE	Highest MPCE	Total
Formal Training	0.5	1.3	2.4	4.1	9.6	3.8
Informal Training	6.0	6.7	7.6	8.4	7.3	7.3

Source: same as Table 7.1

Analysis of skill profile of youth across different states in India highlights that there is a huge disparity in the pattern of skill acquisition across the states in the year 2011-12 (Table 7.14). Considering only formal training among youth, it is found that the highest share was in Kerala (16.4 percent), followed by Maharashtra (8.5 per cent), Tamil Nadu (7.3 per cent), Himachal (7.3 per cent), Punjab and Haryana (5.7 per cent). On the other hand, Bihar has the lowest incidence of formal training (0.8 per cent) followed by Jharkhand, Uttar Pradesh, Rajasthan, and Chhattisgarh. If the percentage of persons trained or undergoing formal training is considered, Maharashtra stands first with 22.4 percent of the skilled population in the age group of 15–29 years, followed by all southern and western states. This is because, these states have higher levels of industrialisation, higher levels of education, and availability of training infrastructure and training capacity both in the public and private sectors (NCEUS 2009).

Table 7.14 Formal Skill Acquisition of Population in the Age Group 15-29 Years across the States of India (in percent)

STATE	2004-05		2011-12	
	State-wise distribution of persons with formal skills (percent)	percent of persons with Formal Training to Total State Population	State-wise distribution of persons with formal skills (percent)	percent of persons with Formal Training to Total State Population
Jammu & Kashmir	0.4	2.0	0.7	2.8
Himachal Pradesh	1.0	5.6	1.1	7.3
Punjab	2.8	4.1	3.9	5.7
Uttaranchal	0.8	3.9	1.2	6.0
Haryana	2.8	4.5	3.8	5.7
Delhi	1.7	4.1	0.6	1.8
Rajasthan	2.5	1.7	2.8	1.8
Uttar Pradesh	6.9	1.7	5.6	1.3
Bihar	0.8	0.5	1.6	0.8
Assam	0.8	1.4	0.9	1.4
West Bengal	6.9	3.2	6.2	3.1
Jharkhand	0.8	1.3	0.8	1.2
Orissa	1.9	1.9	1.5	1.7
Chattisgarh	2.0	3.5	1.2	2.3

Madhya Pradesh	3.4	2.2	3.9	2.5
Gujarat	6.6	4.7	5.2	3.8
Maharashtra	21.7	8.3	22.4	8.5
Andhra Pradesh	6.6	3.2	6.5	3.2
Karnataka	4.6	3.1	6.9	4.9
Kerala	12.2	15.5	10.3	16.4
Tamil Nadu	11.3	7.6	11.2	7.3
Union Territories	1.3	12.6	1.3	15.8
North-East	0.4	1.3	0.4	1.4
Total	100	3.9	100	3.8

Source: Computed from unit level data of NSS 61st (2004 – 05) and 68th Round (2011 – 2012), Employment-Unemployment Survey

Therefore, the national policy will have to take specific measures to build skill training capacity with necessary labour market linkages in states where such capacity is low.

Inter-Linkage between Education, Skills and Employment of Youth

It is to be emphasised that there exist a positive relationship between education and skills (Table 7.15). As the level of education increases, the proportion of people with formal training improves. The formal training proportion was only 0.2 per cent among the illiterate youth and reached to 13 percent for graduate and above population. This shows that both education creates a demand for formal skill training and skill training is considered to be complementary to education. Naturally, the highest formal training is acquired by those who have diploma or certificate. On the other hand, non-formal training is higher among those with lower levels of education (up to middle) and falls thereafter. Gender differences also exhibit a similar pattern in educational attainment and formal skills, except for the fact that males have a higher incidence of formal training than females at all levels of education.

This shows that there is a need for a dual approach towards training – formal training for the educated and formalisation of informal training for the less educated.

Table 7.15 Percentage of Population (15 – 29 Years) with Vocational Training by Education & Gender (2011-12)

	Persons			Male			Female		
	formal	informal	Total Skill	formal	informal	Total Skill	formal	informal	Total Skill
Illiterate &< Primary	0.2	8.4	8.6	0.4	13.0	13.3	0.1	5.5	5.6
Primary	0.7	11.3	12.0	0.6	15.1	15.7	0.8	7.4	8.2
Middle	1.5	8.3	9.8	1.5	11.7	13.2	1.4	4.2	5.6
Secondary	2.7	6.2	8.8	2.7	8.3	11.0	2.6	3.4	6.0
Higher Secondary	6.9	4.4	11.3	7.6	5.4	13.0	6.1	3.3	9.3
Diploma / Certificate	38.2	5.6	43.8	39.9	6.3	46.2	34.7	4.1	38.7
Graduation & above	13.1	3.7	16.8	13.1	4.9	18.0	13.0	2.5	15.5
Total	3.8	7.3	11.1	4.4	9.8	14.2	3.2	4.5	7.7

Source: same as Table 7.1

Further, it can be hypothesised that the positive relation between education and skills must translate into better employment outcomes for youth workers. However, the activity profile of youth population exhibits that 10.6 percent of young people with formal training are unemployed and only 4.2 percent are employed (Table 7.16). This shows the mismatch in the supply and demand of skills in the Indian economy which needs to be corrected by appropriate interventions both in the labour market and skill training.

Table 7.16 Composition of Population (15 -29 Years) by Activity and Skill level (percent) in 2011-12

Skill / Training	Employed	Unemployed	Student	Not In Labour Force	Total
Formal Training	4.2	10.6	4.4	1.8	3.8
Informal Training	15.1	2.2	0.7	2.7	7.3

Source: same as Table 7.1

The main purpose of formal training in the Indian context is to provide employment security to the workers. It can be achieved by increasing the share of formal sector's workforce in the labour market, particularly by raising the share of regular wage (salaried) workers, as this type of employment is considered as occupational stability and has a status in the society. It can be seen from Table 7.17 that formally trained youth workers are higher in organised (formal sector) sector (around 12.2 percent) than in the informal sector at only 3.2 percent. Also, both males and females with formal training have a higher proportion in the formal sector, with the share being higher for females (13.5 percent). Besides this, by employment status of workers (Table 7.18), the largest proportion of formally trained workers is the regular workers (11 percent), followed by self-employed (3 percent) and casual workers (1.5 percent). In both organised and unorganised sectors, formally trained workers have a higher share in securing regular wage jobs. This is a positive outcome for formally trained workers. It is also to be noted that informal training also helps youth workers in getting salaried jobs.

Table 7.17 Percentage of Workers (15 – 29 Years) with Skills by Sector (2011-12)

	Total			Informal Sector			Formal Sector		
Skill / Training	Male	Female	Total	Male	Female	Total	Male	Female	Total
Formal Training	4.0	4.5	4.2	3.1	3.5	3.2	11.8	13.5	12.2
Informal Training	15.9	12.9	15.1	16.5	13.8	15.8	12.4	6.0	10.8

Source: same as Table 7.1

Table 7.18 Percentage of Workers (15 – 29 Years) with Skills by Employment Status & Sector (2011-12)

	All Workers				Informal Sector				Formal Sector			
Skill / Training	SE	RW	CL	Total	SE	RW	CL	total	SE	RW	CL	total
Formal Training	2.9	11.0	1.4	4.2	2.9	8.4	1.4	3.2	0.0	15.1	2.3	12.2
Informal Training	16.4	19.1	10.8	15.1	16.4	24.6	10.9	15.8	1.4	11.1	10.0	10.8

Source: same as Table 7.1

The analysis of youth workers' employment in broad industry groups who have formal training (either received or receiving) with different levels of education underlines that the highest share of formally trained workers is in the trade and services sectors, followed by manufacturing/mining/electricity (lowest in agriculture sector). This proportion is higher for graduate and above educated youth, indicating that higher education and formal training together improves workers' employment outcomes (Table 7.19).

Table 7.19 Percentage of Workers (15-29 Years) with Formal Skills across Industry and Education by Sex, 2011-12

	Illiterate & < primary	Primary	Middle	Secondary	Higher secondary	Diploma/ certificate	Graduate &>	All
Total								
Agriculture	0.1	0.5	0.6	0.8	3.7	43.2	8.0	1.1
Min, Mfg& E	0.6	1.5	3.2	4.1	7.6	47.1	19.9	5.7
Construction	0.3	0.1	1.6	2.6	6.5	50.9	20.6	2.2
Trade & serv.	0.8	2.4	4.7	7.3	10.1	42.0	16.4	9.1
Total	0.3	1.0	2.1	3.5	6.9	44.6	15.8	4.2
Male								
Agriculture	0.1	0.2	0.3	0.7	3.8	40.6	7.3	1.1
Min, Mfg& E	0.6	0.7	2.4	2.4	6.2	46.0	18.8	5.7
Construction	0.4	0.1	1.7	2.1	6.7	52.1	19.0	2.3
Trade & serv.	0.9	2.2	5.0	6.5	8.2	39.9	14.8	7.8
Total	0.4	0.7	2.1	3.1	6.1	43.5	14.4	4.0
Female								
Agriculture	0.0	1.2	1.2	1.0	3.0	67.7	11.4	1.0
Min, Mfg& E	0.6	2.8	5.5	8.8	11.7	58.8	25.6	5.6
Construction	0.0	0.0	0.0	13.5	0.0	35.2	35.7	1.7
Trade & serv.	0.1	4.2	2.5	14.2	19.4	46.9	19.8	15.0
Total	0.1	1.8	2.4	5.6	10.5	49.4	19.7	4.5

Source: same as Table 7.1

Here, Min, Mfg& E stands for Mining, Manufacturing and Electricity

Programmes for Skills Formation among the Youth

Given the low level of education and skill attainment of youth population in India and to make a match between demand (industry requirements) and supply side (youth requirements) of the labour market, the government of India has launched Skill India Mission under which several new programmes and initiatives, along with a revamp of few existing ones, have been taken and proposed. These programmes aim at “fresh skilling/ up-skilling / and re-skilling” of

about 500 million people by 2022 which would target youth, particularly school dropouts, socially disadvantaged groups like SCs, STs, minorities, women, physically and disabled persons, and informal sector workers. However, provided the age and structure of the workforce, this target appears unrealistically high and a target of 20 – 25 million are probably more realistic to achieve.

Some of the major programmes / Initiatives taken by the government for skill development of youth are mentioned below:

Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme is being implemented through Public-Private and Public-Public partnerships of the National Skill Development Corporation (NSDC), Sector Skill Councils (SSCs), Assessing Agencies and Training Partners. It aims to provide vocational training to 24 Lakh youth in one year period from the date of its implementation by providing a back-ended monetary reward of Rs. 8,000 per candidate. The scheme focuses on youth who are the first time entrants to the labour market, mostly school dropout students after class 10 and class 12 in order to improve their employability. The target for skill training would be based on skill demand, the 'Skill Gap Studies' and some of the Central Government's flagship programmes, such as - 'Swachh Bharat', 'Make in India', 'Digital India', 'National Solar Mission' and so on. In order to remove mismatch between demand and supply side, the scheme will involve participation by industries through the Sector Skills Councils (SSCs). They will aid in the development of relevant curriculum, improved pedagogy, trained instructors, verification and certification of all training centers. Also, in order to create awareness and mobilize target groups, it would ensure participation by State and district governments, Members of Parliament, and Non-governmental/community-based organisations. Also, special measures like the organisation of 'Kaushal Melas' and Skill Yatras being initiated. The budgetary support for the scheme in 2015-16 is Rs 1,500 crore.

Upgrading Skills and Training in Traditional Arts/Crafts for Development (USTTAD)

In order to preserve traditional arts/crafts of minorities, the Ministry of Minority Affairs has launched the scheme as 100 percent Central Sector Scheme. It aims at identification and standardisation of traditional arts and crafts of minorities and to build the capacity of master craftsmen/artisans so that they can provide training to the younger generation. This will improve the employability of existing workers, school dropouts, marginalised minorities etc.

It focuses on enhancing linkage of traditional skills with the global market. This scheme is implemented from 2014-15 onwards during 12th Five Year Plan with a scheme outlay of Rs. 15.29 Crore (out of earmarked budget of Rs 17.01 Crore). The scheme includes following programmes:

- (a) Up-gradation of Skills and Training in Traditional Arts/Crafts through Institutions.
- (b) USTTAD Fellowship for Research and Development in traditional arts/crafts.
- (c) Support to Craft museum for curating traditional arts/ crafts.
- (d) Support to minority craftsmen/artisans for marketing their products.

Skill Development Initiative on Modular Employable Skill (MES)

The scheme was launched by Ministry of Labour and Employment in 2007 with the responsibility of Directorate General of Employment & Training (DGE&T) at the national level to issue guidelines and fund transfer. The scheme is implemented by the state government and regional institutions under Ministry of Labour and Employment in partnership with Vocational Training Providers and Assessing Bodies. The scheme aims to certify and upgrade informal skills (on-job-training) of existing workers, particularly in the unorganised sector and to provide training facilities to school drop outs (after 5th or 6th grade). It provides short duration and demand-driven vocational courses based on Modular Employable Skills (MES) by consulting with industries. It seeks to ensure flexibility in skill development by meeting skilling needs of all types of trainees (part time, weekends, full time, and onsite) with limited education. The testing of acquired informal skills is done by a third party and National Council of Vocational Training (NCVT) certification is issued. Till Dec 2014, the scheme has trained/tested 27.31 lakh youth. Also, it is being implemented by 9807 Vocational Training Providers and 104 Assessing Bodies. The budgetary support during the 12th plan period is Rs 2000 crore with a skilling target of total 25 lakh people.

Craftsmen Training through Industrial Training Institute (ITI)

The scheme was initiated by the Directorate General of Employment & Training (DGE&T) in 1950 by establishing about 50 Industrial Training Institutes (ITIs). It aims to provide craftsman training to youth (age greater than 14 years) to ensure supply of semi-skilled workers. The scheme is conducted in over 10,000 institutes with a seating capacity of about 1.3 million and training is available for about 116 trades. It places more emphasis on practical teaching, with the practical to theory teaching ratio being 70:30 (Skill Development in India 2015). The educational qualification varies from class VIII pass to Class XII pass depending ed

upon the trades and the duration of training varies from six months to three years. The seats are reserved for SC/ST, OBC and women candidates.

On the Job Training – Apprenticeship Training through Industry

The apprenticeship training scheme of DGE&T is imparted under the Apprentices Act, 1961. The scheme focuses on school – dropouts and ITI graduates with an aim to provide skilled workers for the industry. The educational qualification ranges from class VIII pass to Class XII pass depending upon the trades and the duration of training varies from six months to four years. It issues National Apprenticeship Certification to successful trainees. However, there has not been any significant improvement in respect of seat location as well utilisation of this Act. The scheme suffers from some issues such as “low participation of workers and employers, low rates of stipend, strict regulatory requirements for employers including penalties for non-compliance, less coverage of trades in the services sector and lack of progression into higher qualifications” (Skill Development in India 2015, pp - 7). As a result, the act has been amended in December 2014 to suit the needs of the industry and youth. It will be implemented by the Regional Directorate of Apprenticeship Training (RDAT) under DGE&T. According to the amended Act, the working hours and leave benefits will be same for both apprentices and regular workers. Also, more non-engineer graduates and diploma holders can be employed as apprentices and new trades for apprenticeship training will be introduced. The Apprentice Protsahan Yojana was also launched to engage apprentices in Micro, Small and Medium enterprises in the manufacturing sector. Under the scheme, the central government subsidises small firms for half the stipend paid to apprentices, or on-the-job trainees, during the first two years of training. The budgetary outlay is a total of Rs. 346 crore funds for the duration of scheme 1-10-2014 to 31-03-2017.

Deen Dayal Upadhyaya Gramin Kaushal Yojana (DDU-GKY)

The placement linked skill scheme, Aajeevika Skills, has been revamped as the Deen Dayal Upadhyaya - Gramin Kaushal Yojana. In order to alleviate poverty, the scheme seeks to increase skill acquisition of rural poor youth in the age group of 15 – 35 years. It is a market led scheme in a PPP mode and guarantees placement to 75 per cent of the trained candidates. After three months training, it provides a minimum salary of 6000 per month to the trainees. It covers households having MGNREGA youth workers with at least 15 days of work experience, RSBY household, Antyodaya Anna Yojana household, BPL PDS card household, NRLM- SHG household, household under auto inclusion parameters of SECC 2011 and socially disadvantaged groups (i.e. SC, ST, minorities, women and physically disabled

persons). Besides this, for regional inclusion, there are two special initiatives for the rural youth of Jammu & Kashmir (called Himayat) and poor families in 27 most affected Left Wing Extremist (LWE) districts across 9 states (called Roshni). The implementation of the scheme is conducted in a decentralised manner by empowering states through DDU-GKY State Missions and the Project Implementing Agencies (PIAs). But the funding is centrally sponsored with 75 per cent funding provided by Central Government to all states (except North – East states) and 90 per cent in case of North – Eastern states. Rest of the funding is financed by State Government. The scheme targeted to train 2,10,000 people in 2014 – 15, out of which 86,120 people got training and 52,286 people got placed.

Some other programmes for skill formation which target non-working youth are given in the Appendix Table A.4.

Challenges and Future Directions for Improving Skills, Education and Employment among the Youth

From the previous section, the general structure of government's skill development programmes for youth can be summarised as follows: first, the programmes for the youth are based on Public-Private Partnerships (PPP mode) with varying degrees and nature of governmental support. They seek to cater to the three segments among the youth - those who are in education, workers with different levels of education and those who are out of the workforce with varied levels of education. Secondly, for this reason, there is an attempt to provide flexible training (modular, part-time etc.) along with full-time training in the courses approved by the Skills Council and certified through third parties. Third, the programmes aim to provide and upgrade entrepreneurial skills to diverse socio – economic youth groups in both rural and urban areas covering SCs, STs, marginalised minorities, disabled, adolescent girls and women, school dropouts (after class 8 or class 10), workers in the informal sector and economically weak youth. They will be imparted with modern skills, traditional arts/crafts skills, craftsmanship training, on the job training through apprenticeship, certification and up gradation of informal skills, short term demand driven modular skills etc. Despite these tremendous efforts by the government to create a vast skill development system, these programmes suffer from some challenges which are listed below:

Communicating skill demand and supply to match demand – supply imbalance

One of the major obstacles currently encountered in the Indian labour market is mismatching in the demand and supply of skills of youth. This can be manifested by the high unemployment

figure for youth with formal training. Skill Development in India (2015) report signified that most of the vocational training programmes do not fulfill the requirements of the industry. Aspiring Minds through its National Employability Report (2015) also brought to notice that only 3.67 percent of the total was employable for a role of a software engineer in the IT products segment due to their low levels of requisite skills. Besides this, since the global economy is going to face scarcity of younger population in the coming years and India will have a surplus of younger people i.e. the so-called demographic dividend, these young people need to be equipped with necessary skills to meet global demand.

Therefore, identification and communication of skill training gaps for the provision of training given the local, national and global demand have become necessary. In this regard, the government of India has decided to roll out national Labour Market Information System (LMIS) which aggregates data on demand and supply of skills so that the existing and expected skill gaps in various sectors can be bridged down. The LMIS is an integrated database on supply of skilled labour force, demand of skilled/unskilled labour, persons mobilised and acquiring skill training, skilled manpower working in the unorganised and MSME sectors, trends in wages and their distribution, trends in economic growth across sectors, courses on vocational skills, modules and training providers etc. This information will also be made available in regional languages to avoid information barrier at the state level to balance actual demand and supply and at gender disaggregated form to ensure equity. In addition, forecasting of future demand and supply of skilled workforce will be carried out which will help different stakeholders (like government, industry) for appropriate policy interventions (National Policy for Skill Development and Entrepreneurship 2015).

Reforms in the education and skill training system

At present, skill development in India is skewed towards formal education system with low vocational training. This is due to prevalent mis-perception regarding vocational training, which is considered to be suitable for only those who do not succeed in the formal education system and for blue collar jobs. Thus a stigma is attached to vocational education and it does not get proper recognition. Eligibility has emerged as a major barrier to migration from vocational training programme to higher education institutes. As a result of this lack of integration between vocational training and formal education, the two are not treated as feasible substitutes (Skill Development Report 2015).

This requires streaming of education system with the vocational training system along with universalisation of high-quality school education. India can learn from education and VET

structure from other countries such as Germany, Australia, China etc., where VET is an integral part of the overall education system and students after completing compulsory education (which varies from country to country) can directly enter into vocational education & training. Some countries like Australia provide vocational education and training through an apprenticeship at the school level, where students combine apprenticeship with school education. In this direction, the Government of India aims to integrate vocational education with skill training, general education, technical education and job market by aligning it with the National Skills Qualification Framework (NSQF) and this needs to be strengthened and expanded to accomplish the desired goal. The NSQF will help school drop-outs with eight years or more of schooling to acquire their desired skill levels and join the labour market and then further upgradation of their skill sets by returning to skill development. It is based on prior recognition of skills, knowledge, and experience gained by an individual either formally or informally and different competencies which establish a credit system for all the qualifications. Besides the establishment of National Skills Universities across states for vocational training, Government's proposal to introduce vocational education for four years from class 9, in at least 25 percent of the schools and using its qualifying marks for admission to higher levels will further assist in integrating vocational training into the formal education system. Some states such as Haryana and Karnataka have started it as a pilot project (Skill Development Report 2015). But it is important to emphasize here that the existing training system provides training to the youth with higher levels of education (usually higher secondary and in some cases, the minimum qualification is class 8). For instance, the government's flagship scheme for skill development – Pradhan Mantri Kaushal Vikas Yojana (PMKVY) - focuses on school dropout students after class 10 and class 12. However, it will leave out a large chunk of students who drop out after class 5 (19.8 percent) and class 8 (additionally 36.3 per cent). Also, 55 percent of the workforce has education only up to primary level (as per twelfth plan document of Ministry of HRD). On account of this, there should be some vocational training programmes which target all those who have minimum schooling of at least class 5.

Addressing regional imbalance

The training system should be sufficiently decentralised to address the skill development challenges of all backward regions including small towns and villages. For instance, recently there has been a rise in youth population in BIMARU states (Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh) which have low training capacity and suffer from weak infrastructure, poor education system and governance (NCEUS 2009 and Acharya 2016). In such a case, the main focus of government's skill development efforts should be to utilise existing facilities, as well as create skill training capacities in these states to correct regional

imbalance through appropriate interventions either in public sector or through Public Private Partnerships. In addition, the government's proposal to set up new Industrial Training Institutes (ITIs) in PPP mode known as Multi-Skilling Institutes (MSIs) should be encouraged in backward regions. However, given the weak entrepreneurial base in the lagging regions, this will be a formidable challenge.

Promotion of Skills among Socially – Disadvantaged Youth

The skilling needs of socially disadvantaged groups such as SC, ST, Minorities, Women, physically disabled and informal sector workers should be identified and supported by developing appropriate training programmes. For instance, USTTAD, MANAS (Maulana Azad National Academy for Skills, Nai Manzil and Seekhoaur Kamao (Learn & Earn) etc serve the skilling needs of minority youth. In a similar manner, skill development programmes specifically targeting women need to be strengthened, given the fact that there will be increasing participation by them in the labour market in near future. Furthermore, suitable interventions must be made to promote skill development of workers in the informal sector (accounting for 93 percent of the workforce). It has been found that informal sector workers have low motivation to acquire formal training due to two reasons: First, they are not aware of different types of courses/training programs and benefits associated with them. Secondly, their low income/wages make them unable to afford the cost of training. Lowering of tuition fees for economically weaker sections, short duration demand-driven vocational skills courses to prevent quitting of jobs by workers in the informal sector as the opportunity cost of quitting job is higher for them, doorstep training, flexible modules, higher degree of standardisation and proper certification attached to training programmes etc. will encourage youth to go for vocational education and training (Skill Development Report 2015 and National Policy for Skill Development and Entrepreneurship 2015). Training for girls has to be designed such that it is not gender stereotypical. Weaker sections need to be incentivised and for this back ended rewards/incentives may not be adequate.

Labour Market Interventions

Entrepreneurs neglect skill training due to the apprehension that skilled and trained workers may demand higher wages or may quit a job to work for competitors or become entrepreneurs (NCEUS 2009 and Srivastava 2008). In order to incentivise skill training, the government will have to take steps in this regard through proper labour market interventions so that formal jobs can be created and those with skills can get a premium in terms of higher wages. The skilling programmes must develop a system which can increase the demand for skill training programmes among workers as well as non-workers. For instance, quality job

placement after training, retention of good quality apprentices as permanent employees, payment of skill premium to skilled and semi-skilled workers, higher stipends to apprentices. Awareness must be created among employers such that they become equal opportunity employers. There is a need to have a broader framework to prevent discrimination in the labour market on grounds of sex, caste, religion, ethnicity, HIV/AIDS etc.

Awareness and mobilisation among youth

At present, the government has created numerous training programmes but there is a need to create awareness among them regarding their nature, target area, benefits and employment prospects at the state, district and village level. To serve this, the government's steps such as the proposed Labour Market Information System (LMIS), local camp-based approach such as 'Skill Melas' or 'Kaushal Melas' involving participation by State Governments, use of conventional and social media etc. should be promoted along with counseling and guidance by teachers to students about potential career opportunities after vocational training. Parents also need to be sensitised about the same (Skill Development Report 2015). This will help to remove lower valuation of vocational education in India vis-à-vis to general formal education.

Evaluation and Monitoring of Skill Training Programmes

The outcomes of skill training programmes need to be monitored and evaluated to ensure its quality and responsiveness to employer's needs. There must be evaluation studies with respect to enrollment and institutional capacity. In addition, the employment tracking of youth in the post-training phase must be made mandatory to find whether they are able to get regular employment/self-employment or no job. Such analysis will help in devising policies accordingly.

Encouraging public-private partnership

At present, most of the skill training programmes are based on public-private partnerships. This should be encouraged further by increasing private investments in skill training programmes to ensure widespread availability of skill capacities for youth. Recently, the government has also proposed that industries should allow two percent of their payroll bill (including for contract labour) for skill development initiatives (Skill Development Report 2015).

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APPENDIX

Table A1 Vocationally Trained Youth: India and its International Comparison

Country	Age Group	Vocationally Trained Population	Vocationally Trained Workers
India (2011)		In Percentage	In Percentage
Formal Training	15-29	3.8	4.2
Informal Training	15-29	7.3	15.1

Source: Author's own calculations based on NSS 68th round (Employment – Unemployment Survey)

Country	Age Group	Formally Vocationally Trained (per cent of Those in labour force)
Developing Countries		
Botswana	20-24	22.42
Colombia(1998)	20-29	28.06
Mauritius(1995)	20-24	36.08
Mexico(1998)	20-24	27.58
Developed Countries		
Australia(1998)	20-24	64.11
Canada(1998)	20-24	78.11
France(1997)	20-24	68.57
Germany (1998)	20-24	75.33
Israel(1998)	18-24	81.23
Italy (1997)	20-24	43.88
Japan (1997)	15-24	80.39
Korea Republic (1998)	20-24	95.86
New Zealand (1997)	20-24	63.03
Russian Federation (1998)	20-24	86.89
Singapore (1998)	20-24	66.24
United Kingdom(1998)	20-24	68.46

Source: NCEUS (2009), based on the Report of the Task Force on Employment Opportunities set up by the Planning Commission

Table A2 Inter-State Disparity in Demographic Dividend

INTER-STATE DISPARITY IN DEMOGRAPHIC DIVIDEND		
Final stages of demographic dividend (2011)	Intermediary stages of demographic dividend	Initial stages of demographic dividend
Kerala	Gujarat	Bihar
Tamil Nadu	Orissa	Madhya Pradesh
Andhra Pradesh	Maharashtra	Rajasthan
	Himachal Pradesh	Utter Pradesh
	Assam	
	Haryana	

Source: based on Census (2011) and calculated from Kumar (2014)

Table A3 State-wise Total Youth Labour Force & Increase in Youth Labour Force & Training Capacity (percent)

State	per cent to Total Youth Labour Force (15-29 years), 2006-07	per cent to Total Increase in Youth Labour Force (15-29years) 2006-07 to 2016-17	Seating Capacity in ITI/ITC
Andhra Pradesh	8.8	2.3	12.1
Assam	2.3	4.8	0.6
Bihar	6.3	15.4	3.1
Gujarat	5.5	3.1	8.2
Haryana	2.3	2.8	2.9
Karnataka	5.6	-0.3	9.8
Kerala	2.7	-2.4	6.7
MP	6.2	9.6	3.5
Maharashtra	10	3.6	11.3
Orissa	3.8	3.4	8.3
Punjab	2.5	-0.4	3.3
Rajasthan	6.3	12.7	5.7
Tamil Nadu	5.9	-8.9	9
UP	14.7	31.7	7

WB	7	5	1.5
Jharkhand	2.4	6.4	2.2
Chhattisgarh	2.2	3.3	1.3
Uttarakhand	0.9	0.9	0.9
Other NE States	1.2	2	0.5
Others	3.4	4.9	2
Total - South & West (1+4+6+7+9+13)	38.5	-2.6	57.1
Total East & Centre (2+3+8+10+14+15+16+17+19)	46.2	81.6	28.1
All States	100	100	100

Source: NCEUS (2009)

Table A4 Programmes for Skill Formation of non- Working Youth

Deen Dayal Upadhyaya Antyodaya Yojana (DAY) Scheme

The scheme targets for the upliftment of over 5,00,000 urban poor by imparting market-oriented skills through City Livelihood Centers. Vendors are also given skill training under this scheme. In addition, to encourage self-employment, it provides loans at a concessional rate (7 per cent) to urban poor to set up enterprises (individually as well as in group). The scheme outlay is Rs. 500 Crores.

Nai Manzil

The scheme is launched by the Ministry of Minority Affairs in 2015-16 to impart skill training to minority youth (in the age group of 17-35 years) who have dropped out of their schools (after class 8 or class 10) or received their education in community educational institutions like madrasas and other similar institutions. The scheme outlay is 650 Crores for next 5 years and a half funding will be provided by the World Bank.

MANAS (Maulana Azad National Academy for Skills)

The scheme aims to provide and upgrade entrepreneurial skills of minority youth by providing an all India Level training framework, based upon tie-ups with National/International training organisations (on PPP mode). It has launched skill development programmes in Madarasas and gives access to doorstep skill training to marginalised minority sections - women and child to encourage employment. The scheme has successfully trained 6,788 youth in 2014- 15 and targeted 24000 youth in 2015 -16.

Seekho Aur Kamao (Learn & Earn)

The scheme is launched by Ministry of Minority Affairs with an aim to upgrade various modern/traditional skills of minority youth to increase their employability (especially self-employment).

YOUTH AND CIVIC & POLITICAL PARTICIPATION



CHAPTER VIII

YOUTH AND CIVIC & POLITICAL PARTICIPATION

SECTION - C
STATUS PAPERS

Introduction



In a country where the bridge between the celebration and mourning of diversity is wafer thin, and a time when competitions between nations and developmental targets are on an upward shift, being dynamic to the changing societal scenario and keeping in sync with the mind sets and aspirations of the citizens are of paramount

importance. These aspirations are conceived by and more often reflect the wants and desires of the majority population, which according to recent findings point at the youth (people between the age group of 15 and 35). Predictions indicate that by 2020, India will become the world's youngest country, with 64% of its population in the working age group.

(Shivakumar 2013) (Wulf 2015). This makes it all the more necessary to shed light on the socio-political aspects concerning the youth. Migration of youth from rural to urban areas, education in social and civic matters, religious views, openness to constructive debates, effective leadership skills and gender sensitisation are few of the many factors that contribute towards building a foundation, upon which support systems have to be built not just to make the participation of the youth in the political sphere possible, but effective and tangible as well.

In the recent past, through the advent of various platforms – both online and offline – the youth of our nation has been involved in matters of public interest and have portrayed the intent to be a conspicuous part of today's socio-political scenario. During the 2014 elections, though the mainstream political parties launched umpteen initiatives to target the youth and promised inclusive growth, only 28 MPs under the age of 35 years were elected to the Parliament [(S Rukmini 2014); (PRS, n.d.)]. More alarming is a report published by multiple news agencies, (The India 2013; Biswas Soutik 2011) which suggests that every MP under the age of 30 has inherited a seat in the parliament. This growing nepotistic and lineage-based approach poses a serious threat not just to the participation of the youth, but also to the political machinery itself. These points indicate the idea that the participation focused on youth in politics cannot happen only through education and targeted groups on guiding the youth, but by checking the system in place and ensuring free and fair opportunity for all.

In India, voter turnout in national elections has mostly hovered between 55 to 59 percent and crossing 60 percent only in six elections (1967, 1977, 1984, 1989, 1998, and 2014). Lower voter turnouts could be attributed to various reasons. They could be due to migration in search of work or due to errors in electoral lists (Kumar 2014). The parties who are now developing their strategies to mobilise the youth are most likely to fail in their approach. This is mainly due to the larger equation of identity which is also the biggest denominator in a person's choice to vote. The multiple identities of an average Indian have caste, class, region and religion, besides the identifying factors of gender and age. These identities of the average Indian voter are usually predominant and outshine the other identities. In the case of young Indians, this means a division of the youth over their class and caste identities, rather than feeling united on the basis of age and the issues which concern them in particular. However, corruption in India's governance is one of the issues which were particularly supported by the youth. If political parties present innovative ideas and agenda which are achievable and attractive to an increasingly demanding electorate, it may get the youth engaged in the electoral process. (Kumar 2014)

Civic and political participation of the youth from the grassroots is necessary to ensure the growth of social capital. This coupled with the support system and thorough education offered by non-politicised and community-oriented government and (&) non-government initiatives will generate a unique and truly profitable demographic dividend. Strategies and interventions at various levels have to be designed, keeping in mind the key factors such as money, influence, skills, education and so on, which will influence the leaders of tomorrow. These young leaders must involve themselves in effective policymaking, think tanks, and advocacy groups while networking with the society on various fronts. Their work must be focused towards achieving a symbiotic balance between the competitions and challenges, development of the economically and socially downtrodden and the creation of tangible demographic dividends, thereby increasing the human and social capital of the country, which is an indicator of true development.

Background

The United Nations and the World Bank define "Youth" as those in the age group of 15–24 years, and according to the Commonwealth, it is 15–29 years. In order to use a definition more in line with these international standards, the Draft NYP-2012 changed the definition from 13–35 years to 16–30 years, which was further changed to 15-29 years by the National Youth Policy of 2014 (Ministry of Youth Affairs & Sports 2015)

Youth is an experience that may shape an individual's level of dependency, which can be marked in various ways according to different cultural perspectives. The definition of youth perhaps changes with circumstances, especially with the changes in demographic, financial, economic and socio-cultural settings; however, the definition that uses 15-29 years cohort as youth fairly serves its statistical purposes for assessing the needs of the young people and providing guidelines for youth development.

Being the largest democracy and one that accommodates people from diverse backgrounds and ethnicities, India stands testament to the idea of universal acceptance. India has been lauded for the deep human value its constitution inspires and for the openness with which it was penned. However, a rule book is something that is used to ensure the success of an objective without being subjective about the matter at hand. The constitution was not drafted to control the growth of the society nor was it intended to be viewed like the commandments that were carved on stone. The constitution's prime ideal is to ensure tangible governance of the society by staying a step ahead of the tide and effectively welcoming change.

The role of the youth in setting this change process into motion, in nation-building and in catalysing the developmental process has been deemed pivotal and of extreme importance by revered saints of yore, by economists, visionaries and every entity that saw the rising of a tide affluent with passion and renewed energy. Many government and non-government bodies, starting as early as 1949, have worked on designing and promoting activities for the youth that are focused on nation building. However, according to the National Youth Policy (2014), Youth organisations in India are “fragmented, and there is little coordination between the various stakeholders working on youth.” Various national platforms and youth wings of political parties exist, yet “there are no systematic channels for engagement between the government and young citizens and no mechanisms for youth to provide inputs to government”(Youth Policy 2014).

The Government of India (GoI) currently invests more than INR 90,000 Crores per annum on youth development programmes (Youth Policy 2014). However, a proper roadmap must be chalked out by involving multiple stakeholders (predominantly consisting of the youth) and target groups for effective channelisation of the resources. Support systems and tools have to be put in place in order to ensure better participation of the youth in politics, be it contesting in the election, voting, policy implementation, redressal or any/every activity that support and complement the political machinery. An institutionalised framework for better civic and political participation of the youth and installing a national ownership must be achieved so as to best utilise the demographic dividend that India possesses.

Youth and Civic Participation

Background

Many Youth Organisations, under the guidance of the Ministry of Youth Affairs and Sports, function with different models of operations and targets. Organisations such as ABVP, NYKS, NSS, AISF and others have worked extensively towards strengthening the youth to participate in community-related activities, educating and campaigning for civil rights, political awareness, and other constructive engagements.

Youth Organisations and their present status

- a. **Nehru Yuva Kendra Sangathan (NYKS):** NYKS was established in the year 1972 with the objective of providing avenues to rural youth to take part in the process of nation building as well providing opportunities for the development of their personality and

skills. With almost 2.8 lakh Youth Clubs, NYKS is the largest grassroots level organisation engaged with the youth in India, mobilising the youth for community participation (Yuva and Sangathan 2003).

- b. **Akhila Bharatiya Vidyarthi Parishad (ABVP):** Founded in 1949 with the idea of staying above party politics and looking at every issue with progressive thought, ABVP works with and for many student organisations throughout the country. ABVP has undertaken many campaigns and movements through which many voices have been made heard (ABVP 2016). With over 35 lakh membership, it is considered as one of the world's largest student organisations.
- c. **All India Youth Federation (AIYF):** AIYF was started in 1959 to unite Democratic Youth Organisations functioning separately in various States, Districts, and Regions. AIYF is the Youth Wing of the Communist Party of India (CPI). AIYF aims at taking up tasks focused on nation building and creation of a new and independent society for the well-being of the people. AIYF functions with the aim of uniting youth for the work of development. The youth sometimes stage protests against other parties, leaders of political parties on college campuses and universities. This is a way of civic participation in which every citizen has the right to participate actively irrespective of their guiding ideologies (Rajimwale Anil 2015).
- d. **National Students Union of India (NSUI):** NSUI was started on 9th April 1971 and has over three million members through open membership. It has the mission to empower the student community to create responsible citizens and leaders based on the values of Democracy, Liberty, Secularism, Quality and Equality (NSUI 2016).
- e. **National Service Scheme (NSS):** NSS was launched in 1969 under the aegis of the Ministry of Youth Affairs and Sports, Government of India. At present, it has around 3.2 million students working in more than 290 Universities all over the Country. It is considered as one of the successful government schemes for engaging young people across the country. Their main aim is to imbibe democratic values and selfless service in the students (National Service Scheme 1969).
- f. **Youth Councils:** Youth Council is an advisory or advocacy board for the Government containing youth. From small to big development initiatives such as the construction of toilets, development of youth policies, etc., the voices of youth is included by engaging with these councils. The officials can be involved with the youth in various programmes

related to designing, implementing and evaluating the validity of the objective. These councils also help in having a direct conversation with the Government and provide for voices of the young people in the national development discourse.

- g. **The Rajiv Gandhi National Institute of Youth Development (RGNIYD):** Set up in 1993, the RGNIYD offers academic programmes at Post Graduate level in youth development; engages in research in youth development and coordinates training programmes for state agencies and the officials of youth organisations. It is also involved in Extension and Outreach initiatives across the country.

The Institute functions as a think-tank of the Ministry and is a premier organisation of youth related activities in the country. As the apex institute at the national level, it works in close cooperation with the NSS, NYKS and other youth organisations in the implementation of training programmes. The Institute is a nodal agency for training youth as facilitators of youth development activities in rural, urban and also tribal areas.

Though many initiatives like National Programme for Youth and Adolescent Development (NPYAD), National Youth Corps, International Youth Exchange Program, National Youth Festival etc. have been undertaken, there still exists disparity in the vision and the implementation of the set goals. Since all of these bodies are governed by a Board of Directors, there has been news of corruption and politicisation of these bodies. The opinion of the youth are often bogged down and the idea of inclusive growth seems to have been on a downward trajectory, making online participation more relevant. (Development, Rajiv Gandhi National Institute of Youth, Ministry of Youth Affairs & Sports)

Present status

As per data on youth clubs collected in 2014-15, the total number of youth clubs in India is 2.85 lakhs, (National Service Scheme 1969) and it has 80 lakh volunteers in the age group of 13-35 all over the country (Bhardwaj Ashutosh 2015). According to the Central Bureau of Investigation, India has two million non-profit organisations, which is one for every 600 people (Johari Aarefa 2014). However, reports suggest that the figure could be much higher. A study conducted by Central Statistical Organisation (CSO) estimated the number of Non-Government Organisations to be around 1.5 million, with a turnover of Rs. 25,000 Crores (VANI 2013). Organisations registered for the purpose of 'Social Services' account for 41%, which is the highest followed by the organisations working in the field of education and research (19%), and culture and recreation (12%). The lowest share is contributed by the

organisations working in the field of law, advocacy and politics, and international activities (VANI 2013). International Institute for Population Sciences, Mumbai and Population Council in 2010 conducted a study to know the participation of youth in civil society in six states of India. This survey measured participation of youth in community-led activities and membership in an organised group. The survey findings reveal that 45% of young men and only 15% of young women participated in community-led activities (Jejeebhoy Shireen, K.G. Sathya 2011). In addition, there is an apparent lack of coordination between these NGOs, which increases the problem in the sector of community service.

Youth and Political Participation

Background

According to the 2011 census, of the total population of 1.2 billion, 333 million people are in the age group of 15-29 (28%), where men and women are in the ratio of 4:3. The population in the age group of 15-34 increased from 353 million in 2001 to 430 million in 2011. Current predictions suggest a steady increase in the youth population to 464 million by 2021, making India the world's youngest country (Shivakumar 2013).

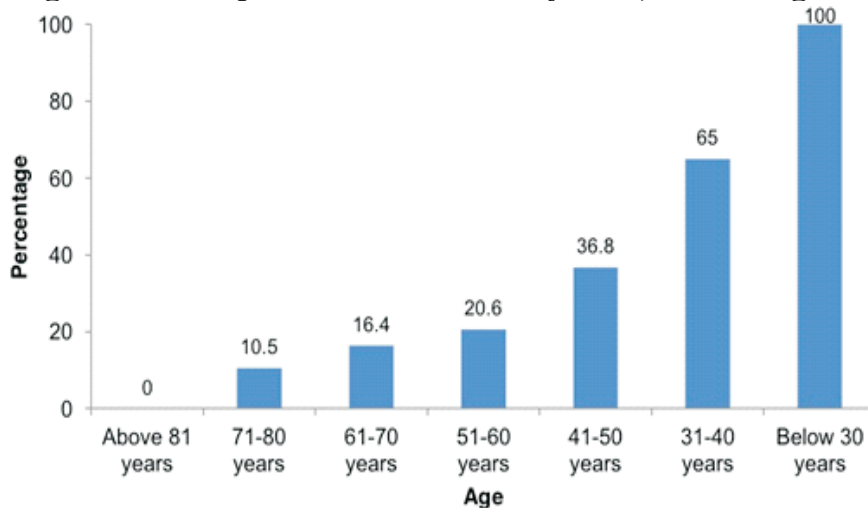
In addition, according to a survey by UN State of the World Population report in 2007, by 2030, 40.76% of country's population is expected to reside in urban areas. This increase in urbanised population coupled with a projected literacy rate of 91% doesn't account for an increase in the number of people and literacy alone, but an unprecedented spike in the aspirations, problems, demands and wants of the people. The youth also represent new values, new thinking and the new ways of life, most of which might not find conducive conditions for full expression under a government with just over 8% of youth representation. The Youth and Political Survey 2011 reports that 31 percent of the youth who were interviewed fall into the category of no awareness. The same study also revealed that urban youth (Young men -38%, young women -19%) are more aware than rural youth (Young men - 25%, young women – 5%) (Kumar 2014).

Present status

A disaggregated analysis of the political background of Members of Parliament (MPs) with age suggests that there is a direct linear relationship between age and hereditary MPs. A greater proportion of younger MPs has a family political background, in comparison to others. Youth and politics in India are directly linked to dynastic politics that prevails. In current th

years, much concern has been shown by the fact that a large number of MPs or MLAs in India are from a political background. As per Youth and Political Survey 2011, 61 percent of the youth opposes dynasty politics and the study reveals that opinions of young and older people regarding dynastic politics are alike (Kumar 2014). The following graph brings forth the facts that contradict the idea of youth representation in the parliament. This, in turn, creates a situation where there are no role models the youth can look up to or whose path they can trace to find themselves in the political machinery (The India 2013).

Figure 8.1 Proportion of Hereditary MPs, according to age



While the reasons for the non-participation might be any of the following, certain systems in existence also hinder the participation of the youth in politics.

1. Non-encouragement by parents and educational institutions
2. Lack of institutionalisation in the system of selection of candidates for elections
3. Corruption
4. Peer pressure
5. Unavailability of visible rewards

However, the participation of the youth in elections, signing petitions, joining hands in civil protests and fasts across the country have increased. The movement that asked for the introduction of Jan Lok Pal bill gained its strength and energy only by the participation of youth in huge numbers. This clearly demonstrated that the Indian youth do engage themselves in programs and movements of National and Public interest.

The potential has to be channelised better and efforts have to be made to engage the interested youth in effective participation and to imbibe interest and sense of responsibility from childhood itself. With renewed faith, belongingness to the nation and active involvement, the social capital of India can be better harnessed and the nation-building process effectively catalysed.

Youth and their interest in Political Participation

Youth and Political Survey 2011 reports that the youth compared to other respondents have more interest in politics while one-third of the youth do not have any interest in politics. Over 60 percent of the Indian youth are interested in politics compared to older age group (Kumar 2014). Regarding politics as their career option; 34 percent had political interest, 54 percent were uninterested and 12 percent were neither for or against a political career. About 34 percent of the youth being interested in politics as a career option is significant considering the various other career choices available in a market driven economy and a globalised world order (Kumar 2014).

Obstacles to Youth Participation

The political participation of youth is limited to electoral processes such as voting, filing petitions, staging protests and so on. The participation of youth in elections and the participation in the parliament is scarce and there are many factors that bog down the youth and hinder their participation.

- a. **Perception:** Politics has been used more as a verb than a noun and it has been made synonymous with “compromised”, “spoilt” and “corrupt”. Shallow but shrill political ideas, people with an abundance of wealth and people with lineage are increasingly occupying the political sphere. The participation in elections has also been considered “life threatening” at times, for the involvement of anti-social elements and bribery is often heard in the news during elections. The perception of a common man is that politics is only for the wealthy, powerful, old and well connected/endowed, which curb them from even trying, let alone winning.
- b. **Lack of constitutional provisions:** In order to be a Member of Parliament in Lok Sabha the minimum eligibility is 25 years and 30 years for the Rajya Sabha. This is one of the main reasons for the low representation of members in Parliament. People below 35 years are rarely found in political leadership positions. According to UNDP Global are in

Parliamentary Report, only 1.65% of Parliamentarians are in their 20s and 11.87% are in their 30s all over the World (Power 2012).

- c. **Culture:** The Indian culture as adopted by parents, mentors and a major part of the society is one that believes in the idea “experience comes with age” and axiomatically “the aged are always experienced”. The youth, with proper systems in place, can acquire the experiences that would make them “experienced as the aged”. Society still continues to view a non-youth candidate in a more acceptable light than a young candidate in electoral situations.
- d. **Lack of political institutions:** Except for the RGNIYD there exists no proper institution to train the youth in matters related to governance and policy matters. Civil Service examinations are considered in most cases the gateway for youth participation in policy, but there exists no alternate forum for nurturing or training the youth in matters of public interest.
- e. **Lack of education:** Though civics might be a part of the curriculum for students in schools, there exist no formal mechanisms for the education and institutionalisation of processes for training students in matters of community service, enforcement of civil rights and responsibilities, political involvement, policy implementation, participation in debates, conferences, workshops and the like.
- f. **Youth organisations being compromised:** Many youth organisations exist where the youth can enroll and work for the betterment of oneself and of the society, but many organisations for the youth are politicised and are being used as political fronts for parties and/or for religious/ideological objectives. The Boards governing the bodies are more often constituted by loyalists of major political parties, thereby constraining the scope of the youth in the organisation to mere campaign work.
- g. **Personal compromises:** The youth believe that ethical compromises have to be made if he/she has to participate in elections – endorsing a corrupt candidate, bribery, false propaganda, illegal use of funds, illegal procurement of funds and so on tarnish the idea of a free-and-fair politics, which more often nips the idea of participation right in the bud.
- h. **Peer Pressure:** Owing to the lack of an institutionalised system for youth participation, there exist extremely thin odds for the youth candidate to secure any position. Also, since there exist no proper reward system in terms of recognition of work, money or anything as such, there exist no incentives for better youth participation.

- i. **Lack of role model:** This is a lacuna for both the contestant and for the parties/system. Since there is no example of a youth candidate who made it all the way through the process, there is no example to follow or to inspire the participation in politics and also the acceptance of a youth candidate as a leader.
- j. **Lack of technological involvement:** The use of technology for political/community based projects are restricted to the use of websites and online registration for newsletters. There exists no innovation or forum offered by technology to ensure a more streamlined system for better enrolment of candidates, promulgation of information, maintenance of transparency and social media participation, which more than any other platform can engage the youth.

The above-mentioned reasons contribute to a few factors that restrict youth participation in politics. These are the reasons from the macro level and there exist many more cultural, sociological and ideological reasons that further curb their participation.

Summary and Policy Recommendations

1. Education

The introduction of government approved & enforced curriculum/ syllabus in schools and colleges that focus on imparting both theory-based and on-field experience in community service and proper conduct of civic responsibilities is imperative.

Schools and colleges must collaborate with organisations for community service and have the students volunteer/intern at various organisations throughout their course so as to ensure the nourishing of moral, ethical and social views/responsibilities. The exposure to various scenarios and societal conditions will give the students a perspective of the ground realities, which will better help them, understand the policies at grassroots and participate in the proper implementation of the same.

The mixture of theory and on-field experience will also enhance the communication, leadership and organisation skills in addition to improving the overall personality and sense of responsibility in students.

Universities for higher studies considering the work was undertaken by a candidate at various such NGOs and NPOs as incentives for admission/scholarships might serve as incentives to ensure better participation of the youth.

2. Encouraging Social Entrepreneurship

The last decade has witnessed the disruption caused by the start-up community. The exponential growth in the number of start-ups and the billions of dollars used for funding has created an environment of extreme competition and the emergence of a community with renewed aspirations. More and more youth are participating in the process of starting up a company and working in it without monetary gains for durations of 6-8 months, the driving force being the prospect of getting funded and making a difference in the community. However, even though social enterprises make a huge difference in the community, not many youth are setting up service oriented organisations, the reasons being the lack of monetary gains, lack of incentives, lack of tangible returns, reduced social acceptability and no prospect of scaling up.

If funding for social enterprises are initiated and the youth taking up social initiatives are encouraged to innovate, then significant progress can be made by youth taking up new ideas in service. Youth-run social enterprises will help inculcate leadership skills, team-building skill, social responsibility, management of resources, knowledge of grievances, and generate internship/employment for other youth to participate. The youth volunteering/interning can work in a more nurturing environment, participate inclusively on policy matters and work for the betterment of the society. Such organisations with proper funding, either through targeted CSR or the support of the government with the promise/backing of rewards will help bring anew trend in the social sector.

3. Centralised Online Job Portal for NGOs and NPOs

The world and the society, in general, are becoming more and more connected. With over 330 million internet users in India, of which 125 million users are on Facebook, 33 million on Twitter and 70 million on Whatsapp and so on, the penetration of social media (almost 35% of the population) has become an integral part of everyday life and it is on an exponential rise. Of the 125 million people on Facebook, about 89% belong to the age group of 15-35. With over 30 million followers for the PMO, 8 million for political parties and so on, there has been an increase in participation and engagement on the political front. The Pew Research Studies in 2012 also established that nearly 45% of Indian users connect online to discuss politics and this number too is on the rise. In addition, with 33 million accounts, India stands second in the number of members registered on LinkedIn and seeking jobs/internships. A study by The Pew Research Center also found that 65 percent of internet users in India using social networking sites such as Facebook or Twitter while 55 percent has used the internet to look

for or apply for a job. However, there exists no proper centralised screening or connects between the social/civil society organisations and the volunteers in India, leading to the creation of multiple redundant non-profit/non-government entities.

Also, over 40% of the youth online search for jobs/internships on Linked In, Angel List, and such online portals. A centralised online portal for better connect between organisations for community service, curated a presentation of pertinent information on NGOs and NPOs, internship/job opportunities and so on will help in building a nexus between the youth, civil society organisations and the society. This will further help non-profits and the youth alike identify the organisation that better resonates with their values and their curiosity, thus nurturing further the growth of the individual.

4. Inclusive Participation

The youth, who have been theoretically educated in schools, kept up-to-date in matters of public interest, worked as volunteers/interns at various non-profits/service organisations and practiced social entrepreneurship can be put through a systematic selection process that would enable to work with the existing ministers or ministries as legislative aides to the lawmakers / decision-makers. Such people can get a first-hand experience on policy matters and the functional mechanisms of the government/departments. This will enable the well-educated and experienced youth to better their knowledge of the field and thereby improve their visibility.

5. Social visibility

The youth, through conferences, workshops, training and collaborative participation with experts and fellow students/universities might better learn and understand the intricacies of our complex political structures and also improve the network. This will help create visibility for an individual and imbibe a feel-good factor, which might also incentive the participation.

Conclusion

In conclusion, when the youth are taught to be socially responsible and are made aware of the happenings of the society, they grow up to be educated adults who will be given the opportunity to volunteer/intern at civic organisations that nurture their leadership skills, brotherhood and imbibe a sense of national belonging. These youth must have easy access to various job opportunities in the service sector or they must have the means, resources and

incentives to take up social entrepreneurship. Key information on developmental theories and policy matters must be disseminated through seminars, conferences or in the media, from where the youth can gather pertinent information and stay current with the society. Also, training sessions, paper presentations, debates and such activities in recognised and well-monitored youth forums must be set up in not just the urban areas, but in the rural as well.

Co-operation between the various youth clubs, NGOs / NPOs, Panchayat and every organ of state governance must be brought about for the successful implementation of all the schemes and programmes. The youth must play a part in the management of the youth forums and they must be ensured to be bias-free. The government officials must have institutionally selected youth work with them on policy matters, discussions and so on so that in addition to theoretical and civic involvement, a close chord can be struck on the political front. In addition, opportunities must be given to the marginalised youth so as to encourage the emergence of a powerful, democratic youth-front to brave a new tomorrow and to be a part of the grand change process.

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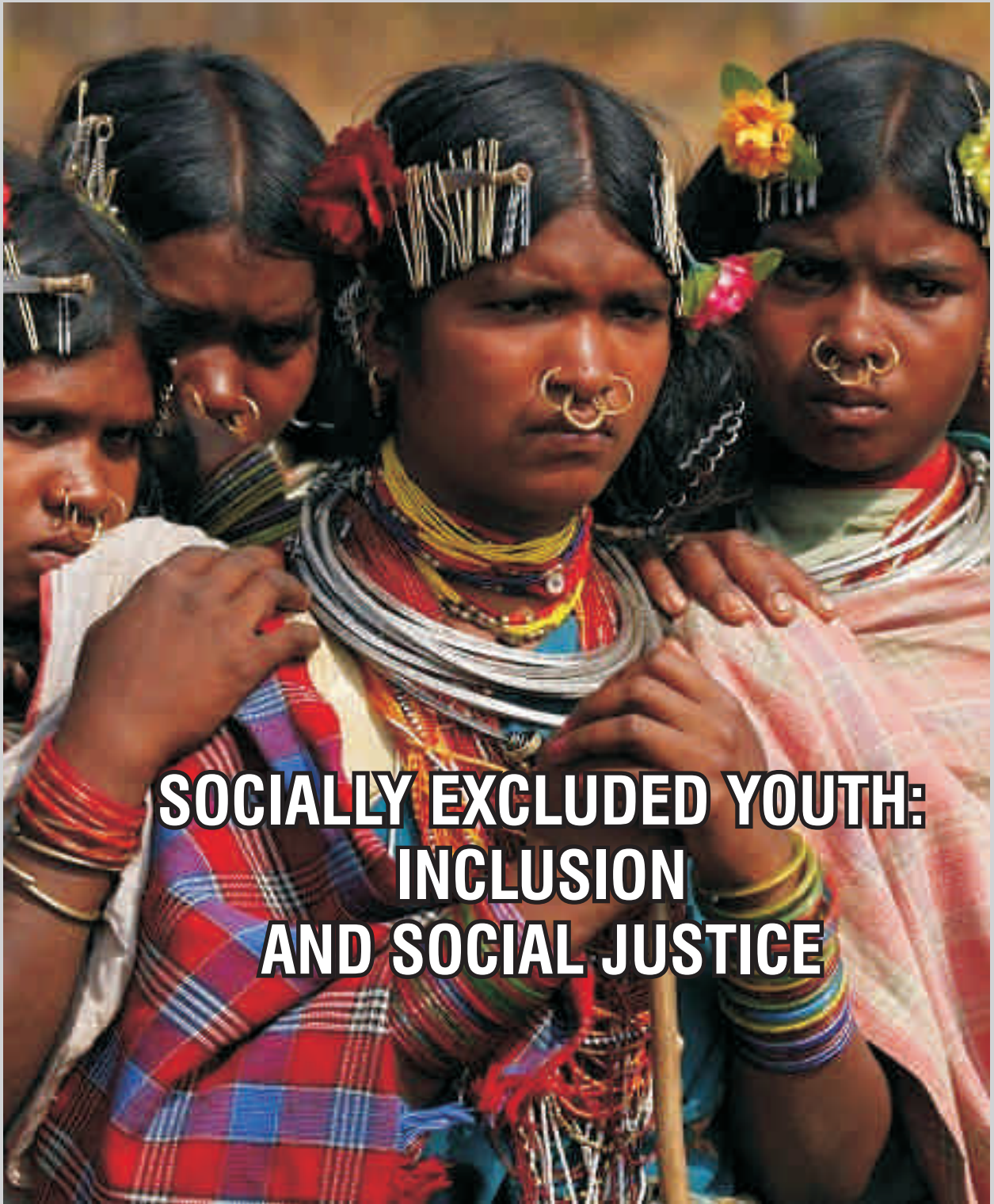
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**SOCIALLY EXCLUDED YOUTH:
INCLUSION
AND SOCIAL JUSTICE**

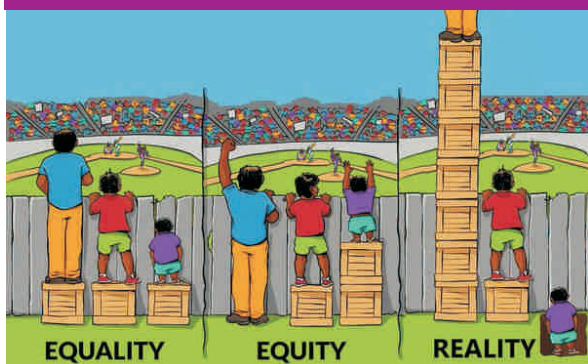


CHAPTER IX

SOCIALLY EXCLUDED YOUTH: INCLUSION AND SOCIAL JUSTICE

SECTION - C
STATUS PAPERS

Introduction



*We the people of India, having solemnly resolved to constitute India into a sovereign socialist secular democratic republic and to secure to all its citizens; **Justice**, social, economic and political; **liberty** of thought, expression, belief, faith and worship; **Equality** of status and of opportunity; and to promote among them all **fraternity** assuring the dignity of the individual and the unity and integrity of the nation.*

This mandate and promise is fundamental to the youth population of our country from

whom we expect much; 'empowering the youth of the country to achieve their full potential and through them enable India to find its rightful place in the country of nations' (NYP2014). The Constitutional promises of Justice, Liberty, Equality and Fraternity provides us an over-arching framework in which to design and implement what we as a nation can do to empower our youth and how they can contribute to build the nation. However, a large proportion of this youth population is located among the socially and economically disadvantaged sections of our population. This paper explores the nature of their social exclusion, its impact on them and strategies that can be adopted to promote, with particular reference to the Ministry of Youth Affairs and Sports (MoYAS), a more socially inclusive and just society.

Social Exclusion among Youth

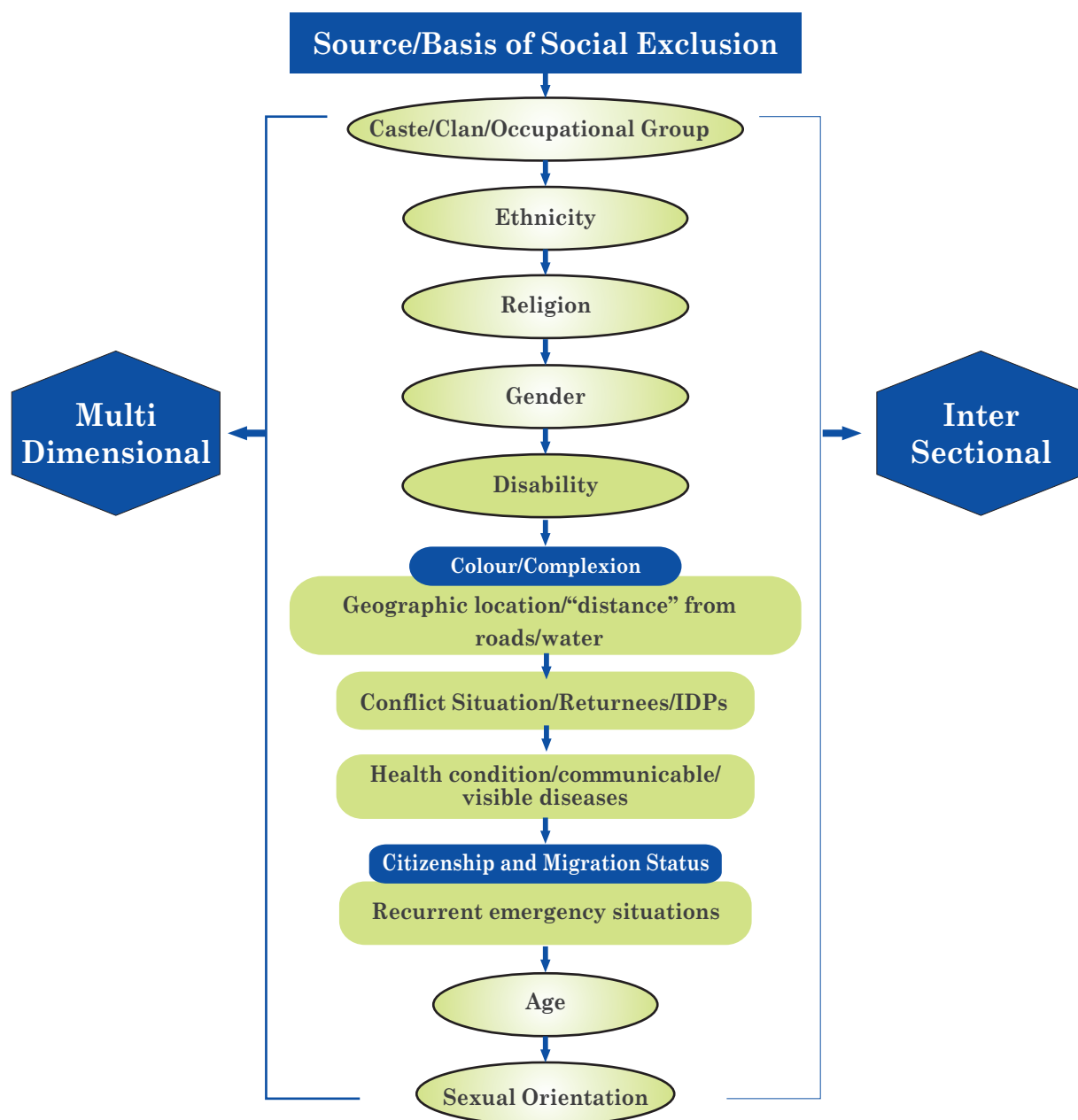
Vectors of Social Exclusion

The Ministry of Youth Affairs and Sports (MoYAS) has defined youth as persons in the 15-29 years age group. About 27.5% (333.3 million) of the population come under this youth category, i.e more than one in four persons in the country is a youth. However, as the NYP-2014 recognises "... all young persons within this age-group are unlikely to be a homogenous group. Different segments of the youth would have different needs and concerns, which needs to be addressed". In fact the diversity among the youth in the country is immense. Unfortunately, only a small percent of this diverse youth is endowed with the opportunities and resources to pursue their aspirations, talents and needs. For the large majority the diversity is embedded in disadvantages. They face challenges at every step – in affirming their identities, in accessing basic services, in accessing quality education, in career guidance and employment opportunities, prohibitions in their social interface, in making choices in their lives and many more. Further, they are at the risk of stereotyping, discrimination, violence and exploitation.

Social exclusion provides a critical window to analyse and understand the disadvantages and deprivation faced by youth from the disadvantaged sections. Social exclusion is broadly defined as processes that exclude, prevent or deny equal opportunities to groups or individuals from participating fully in the societies they live in based on their identity or ascribed characteristics. Exclusion is practiced on the basis of various vectors as seen below and is multiplied and overlapped too, creating a complex matrix of deprivation among such youth.



Figure 9.1 Sources/Basis of Social Exclusion



Social exclusion may occur through intentional actions or by default, as they may be embedded in cultural practices, norms and values. Social exclusion helps focus attention on social relations and the processes and institutions that underlie and are part and parcel of chronic deprivation. In today's context, social exclusion is (a) multidimensional: encompassing social, political, cultural and economic dimensions, and operating at different social levels; (b) intersectional: in that young people in diverse contexts are impacted in a complex manner by all the different vectors of social exclusion – for example a poor Adivasi girl located in a remote area with disability faces social exclusion in multiple ways and has multiple challenges to participate, access resource and opportunities and is less benefitted from various provisions. Her exclusion is highly complex compared to a dominant community, rich girl living in an urban location. (c) dynamic: impacting in different ways to differing degrees at different social levels over time; and (d) relational: which focuses on exclusion as the rupture of relationships between people and society resulting in a lack of social participation, social protection, social integration and power. As such, the impacts of social exclusion are inter-generational poverty, unequal development, low Human Development Index, low participation and unequal benefit share, discrimination, violence and conflict to name a few.

The above multi-level mapping of exclusion demonstrates that the multi-faceted layers of social exclusion are systemic and occur in multiple spaces and multiple forms. Different youth groups are impacted differentially.

Stereotyping, discrimination and violence are embedded in the process of social exclusion and needs special attention. Societal norms deny value and worth to excluded youth. This makes it easy to perpetuate stereotypes and myths against them. It also rationalises the discrimination and violence, which serve as the foundations for creating and perpetuating development inequalities and limited social participation. For example, it is assumed that Musahar youth (Musahar community is one of the most disadvantaged community among Dalits, predominantly found in Bihar, UP and Jharkhand) or youth who are visually challenged will not be able to cope up with current forms of education and knowledge. This rationalises not providing additional and adequate equity measures for their participation and learning. It also leads to socially excluded youth self-exclusion and limited engagement with other youth. Distinction needs to be made between the self-exclusion by socially excluded youth and social exclusion practiced by others towards them. When socially excluded young people keep themselves aloof and do not engage with other youth, it needs to be understood as self-protection or defense because there exists no formal or informal space to engage across social boundaries. Social exclusion practiced by dominant others including youth, on the

other hand, needs to be recognised as social exclusion in keeping with existing social norms/values and beliefs. Public education on social inclusion, building formal spaces and mechanisms to promote inclusion and equity measures to address disadvantages faced by socially excluded youth are strategies to promote inclusion, given the embedded social hierarchies and boundaries.

Excluded on the basis of their Identity

A number of studies and reports show that various social groups/communities in India face social exclusion on the basis of their social identity. Prime among them are the Scheduled Caste (Dalit), Scheduled Tribe (Tribal/Adivasi), Muslim minority communities. While the above three social groups are fairly defined and recognised, the Nomadic-Denotified communities and Particularly Vulnerable Groups (PTGs) who face severe forms of social exclusion are dispersed across the Scheduled Castes, Scheduled Tribes, Other Backward Castes and even the general communities and hence difficult to draw conclusive data. The social exclusion and discrimination faced by these communities is reflected in their unequal development indicators compared to other social groups. As per census 2011, scheduled caste constitute 16.6% (201.4m) of the population, Scheduled tribe 8.6% (104.3m), Muslim minority 14.23% (172.2m), together constituting 39.4% of the population. The youth from these three social groups in the 15-29 years age group add up to 133.4 million. If one were to include youth who are excluded on other vectors like gender, sexual orientation, disability to name some, these numbers would spike up sharply. Serious attention to this large youth population is absolutely important for youth empowerment and national development.

Table 9.1 Youth Population across Sex and Social Groups

Population Group	15-29 years		Total
	Male	Female	
All Population	172.7m	160.3 m	333.3m
SC population	29.3 m	27.1 m	56.4 m
ST population	14.0 m	14.0 m	28.0 m
Muslim population	24.5m	24.5m	49.0m

Source: Census 2011

i. Scheduled Caste Youth: The erstwhile untouchable communities, located at the bottom of the social hierarchy have been excluded from the mainstream society for generations – ghettoised into excluded habitations, prohibited from commensality with other communities, pushed to particular stigmatised occupations, prevented from aspiring social mobility and equality. The Constitution made untouchability a punishable offence and prohibited discrimination. Positive provisions like reservation, social and economic policies, and provisions and protection against violence and discrimination are provided through the Constitution. However the changes have been hard to come by given the deep religious and cultural roots of untouchability and exclusion/exploitation of the Dalit communities. The burden of being at the lowest rung of the caste hierarchy, untouchability and discrimination continue to play out in core areas of their development needs, potential and aspirations and negatively impact the youth of these communities.

ii. Scheduled Tribe Youth: The Adivasi/Tribal youth in the country also face the exclusion and disadvantages of their communities. The Tribal communities are by and large located in difficult and hard to reach areas. The administrative systems and development provisions made in the regions are far below what is available in other geographical locations. Thus availability of roads and transport systems, electricity, market, information are not adequate for the optimum development of these youth. Sad to say that even after all these years of independence, school text books in their native language is yet to be made in a majority of Tribal languages. The Tribal/Adviasi youth are further disadvantaged by their languages, culture and traditions that are not recognised as valuable. Their habitations are not linked to the ever widening knowledge systems available. An added vulnerability faced by the Tribal youth is erosion of their natural environment and culture, and large scale projects that displace them. 'Left-wing extremism' also places a heavy burden on the Tribal youth.

iii. Muslim Minority Youth: The continuing narrative of terrorism place the Muslim youth in a precarious situation in their engagement with other youth and communities. Thus Muslim youth are ghettoised into separate habitations, child labour is high among them, many drop out and enter into employment before completing schooling, low in formal employment and dependent primarily on self-employment. The ease with which communal tensions and riots take place reflects the social exclusion faced by Muslim youth. The global anti-Muslim narrative fuels this exclusion. Young Muslim girls have additional vulnerability of exclusion within the community as well as outside the community. Even for those who complete education, accessing employment and career development remains challenge.

iv. Nomadic-De-notified Tribe Youth: The Balakrishna Renake Commission (2008) estimated that 10% of the population belong to nomadic and semi-nomadic communities and they further constitute multiple groups. These communities are dispersed across different population categories – Scheduled Castes, Scheduled Tribes, Other Backward Castes and even General castes. Majority of them have practiced nomadic life style and a large majority also bear the burden of being 'notified criminal communities' by the British Government. Even as they have been de-notified, the prejudices and disadvantages continue. There is limited information and data on their socio-economic conditions and development progress. It may not be wrong to say that the youth in these communities may be among the most marginalised and disadvantaged in today's context. While a small proportion of these communities live in Delhi, the national capital, they are not identified and included in the state population data.

v. Further Disadvantaged Youth Sub-Groups within the above Social Groups: It must be recognised that the above social groups are not homogenous even within themselves. Each of the above social groups – be they – Scheduled Castes, Scheduled Tribes, Muslim Minorities and De-notified-nomadic communities include within them a large number of sub-groups. Thus the Musahars among the Scheduled Castes, the Saharias among the Tribals, the Halal Khor communities among the Muslim minorities are much more disadvantaged compared to other sub-groups within the larger social group.

vi. Exclusion on the basis of common characteristics: Another group of youth who are disadvantaged are so because of certain common characteristics. Women across all social groups face social exclusion within their communities and at large too. Others include youth with disabilities, LGBTQI youth, migrant youth, displaced youth, youth in conflict areas, youth engaged in stigmatising occupations. They share common characteristics which at times include identity connotations too. It is difficult to make water-tight categories in terms of classification and is also not the purpose of this paper. The purpose is more to understand the nature of social exclusion and the associated disadvantages, the classification is used only to present a broad brush of the issues.

vii. Multiple and Inter-sectional Exclusion: It must be recognised that social exclusion is extremely complex and it is not easy to make neat boxes or matrices. One recognises the complex and multiple exclusions faced by a disabled tribal adolescent girl in a remote area of that faced by a young migrant Dalit girl. Social perceptions of them, social value-non value of them is complex. Thus one would find young tribal girls in residential/welfare schools run by government being more vulnerable to abuse by the authorities in charge of them. A girl living in an urban poor area is more vulnerable to exploitation and violence compared to other urban

girls. Social perception of children of sex workers or the LGBTQI youth are complex and cannot be neatly categorised and labelled. Multiple and inter-sectional forms of exclusion are in play and hence their development all the more complex.

Social Exclusion Experiences of Disadvantaged Youth

The following table provides an overview of various forms of social exclusion and discrimination faced by the young people in their education, career, participation and personal development. The table is by no means comprehensive and is indicative, with a greater focus on the SC, ST and Muslim minority youth. Effort is made to present them against important aspects of youth life as well as the priority areas of the National Youth Policy 2014.

Priority Areas under NYP 2014	Forms and Nature of Exclusion
1. Education	➤ Youth with disabilities are refused admissions in education institutions, and when admitted, adequate physical and infrastructure provisions are not available for their participation, and necessary education materials and trained teachers are not available for their learning. Parents forcibly stop disabled girls from pursuing their education after puberty. ➤ Drop out, especially among girls, is very high after 10th grade ➤ Adolescents and young people rarely get a platform to build on their aspiration, career guidance or motivation for further education. ➤ They generally stay within their own segregated groups and do not cross social boundaries ➤ They find it difficult to take active role in schools/college, and their talents and leadership roles are not recognised or nurtured there. ➤ Schools/colleges do not create opportunities or spaces for marginalised youth to participate in school/college processes or decision making ➤ Schools/colleges do not help raise the concerns or

	constraints of the marginalised youth. ➤ Residential schools, welfare hostels, college hostels run by the government are poorly maintained and youth stay there in inhuman conditions. ➤ Due to poor economic conditions, they are forced to engage in 'labour work', sometimes alongside their studies. ➤ They often have to/try to hide their identities to join the mainstream, which further causes anger, mental stress and dilemmas. ➤ Migration of the families often disrupts their studies and development. ➤ Many youth from Dalit, tribal and Muslim minority communities face violence due to caste, religion and ethnicity based conflict or due to their geographical locations and their education is disrupted. ➤ State resources meant to overcome their deprivation and inequalities with other young people are poorly implemented, not implemented on time and many are not able to avail them. ➤ Early and child marriage owing to traditional mind-set, and also protection and safety issues of girl children limits their education and other opportunities negatively. ➤ Girls have reported low mobility and freedom to make education and career choices.
2. Employment and Skill Development	➤ Skill development operations do not provide infrastructure and equipment support to the needs and constraints of youth with disabilities leading to negligible opportunities. ➤ Being first generation learners, many are income earners for their families and do not have the time and opportunity to access skills. ➤ Skills of marginalised youth are not mapped which could be enhanced further.

	➤ Lack of career guidance and information accessibility on skill development opportunities. ➤ Many are located in remote areas, difficult to access state provisions and resources in the skill development. ➤ Lack of information/knowledge and incomplete education push them into unorganised labour work. ➤ Skill development programmes do not typically contain provisions for disabled youth who may want to participate. ➤ No hand-holding support to help them pursue and access employment or skills training.
3. Entrepreneurship	➤ Marginalised youth are largely engaged in caste based/family based occupations or small informal business units. ➤ Lack of information on entrepreneurship types, opportunities, agencies, resources etc. ➤ Poor availability and accessibility of finances/loans. ➤ Lack of entrepreneurial education and support towards initiating entrepreneurial unit. ➤ Many types of enterprises may not have facilities to support disabled youth.
4. Health and Healthy Lifestyle	Youth, both boys and girls, rarely get avenues to understand their body and health concerns while growing up ➤ Youth with disability do not have support systems to come to terms with their disabilities and explore further opportunities. ➤ Lack of knowledge on Sexual and Reproductive Health Rights (SRHR) leads to abusive relationships. ➤ Many young girls in their reproductive age group are anaemic and malnourished. ➤ Marginalised youth are prone to addiction as they live in such environment where alcoholism and addictions are quite common (forced or intentional)

	➤ Poor living conditions lead to disease such as TB, typhoid etc. ➤ Marginalised young people are generally under nourished due to their poor economic conditions and the lack of adequate state provisions and services, including discriminatory access to them.
5. Sports	➤ Youth with disability get excluded from all forms of sports, games or physical activities. ➤ Very few have access to extra- curricular activities where they could explore their interests and talents. ➤ Existing sports, games and extra-curricular talents among excluded youth/youth with disabilities are hardly recognised or awarded. ➤ Poor nutrition, anaemia prevents marginalised youth to pursue their interest and talents in sports and there are no state provisions to address them. ➤ There are no special promotional schemes for marginalised youth to explore/enhance their traditional skills into sports skills. The same is true for youth with disabilities. ➤ Lack social network, support and information to make sports as career. ➤ Very limited opportunities for youth with disability to enter into sports and games or their competitions. ➤ They are unable to pursue their sports talents, as current sporting programmes are costly and do not have adequate equity measures.
6. Promotion of Social Values	➤ Socially excluded youth hardly get opportunity to explore their identity and values with youth from other communities for lack of common spaces. This continues to promote discrimination and stereotypes on the basis of caste, religion, ethnicity, disability, language etc.

	➤ The lack of common spaces between young people across social groups limits promoting Constitutional values of fraternity, social justice and social inclusion. ➤ There is fear, hesitation and non-engagement among marginalised youth to articulate and demand norms and values associated to equity and inclusion. ➤ CLOs and marginalised youth leaders are not adequately linked to youth activities undertaken by NYKS or state departments.
7. Community Engagement	➤ Socially excluded youth generally engage in some or other forms of volunteering work for the community benefits as their commitment. ➤ They do not get opportunities to further these community engagements into career or professions and skills. ➤ Socially excluded youth rarely get chance to know other communities and their issues. ➤ Community led organisations or religious organisations provide spaces for youth to engage with their communities and are often the first and only opportunities.
8. Participation in politics and governance	➤ Do not have adequate functional knowledge of PRIs, PESA, ULB or functioning of local governance which restrict their political participation. ➤ The primary space for engagement comes from political parties, who often engage them in their election process or political activities and not into organisation or leadership spaces. ➤ Non-political/non-religious spaces are not available.
9. Youth engagement	➤ Community based youth platform are there but largely informal and connected to youth development issues. ➤ Lack of youth platform for youth development. ➤ Little interface to provide awareness about their rights, government schemes and programmes that could directly benefit them.

	➤ Youth have to explore and find out these schemes and also about any target programme for themselves. ➤ Excluded young girls are unable to participate in various volunteering and development activities, restrictions in mobility and community controls prevent them doing so.
10. Inclusion	➤ Inclusion of youth with disabilities need infrastructure that need to be made available by the state and institutions. ➤ The hierarchal structure of society, conflict affected areas, caste and communal violence affected areas do not provide social inclusion environment or culture. ➤ Lack of inclusion perspective among excluded and non-excluded youth/communities. ➤ Inclusion needs to be actively promoted through social and public education to create a conducive environment for youth to engage in.
11. Social Justice	➤ Lack of pro-active measures from the state to publicise rationale and relevance of social justice provisions. ➤ No analysis of privileges and power associated with birth and hence no dialogue on privileges and dis-privileges and the need for social justice to address dis-privileges. ➤ Marginalised youth are not aware about relevant laws, constitutional safeguards and other mechanism to protect their rights and work for justice. ➤ Excluded youth face social stigma and negative propaganda about their involvement in caste/communal, naxal affected areas, youth from Muslim minority communities are often suspected about their patriotism. Youth from the north-east region are excluded on the basis of their ethnic identities. There are no mechanisms to break these myths. ➤ Lack of spaces for youth to participate in formal/non-formal institutions at the local levels to promote social justice

Impact of Social Exclusion and Discrimination on Disadvantaged Youth

The impact of social exclusion and discrimination faced by young people in the disadvantaged communities is reflected in their lower education rates, lower enrolment in higher education, higher proportion in the unorganised sector etc.

Inequalities in Literacy Levels: Despite education being made compulsory and free, there continues to be a gap between these communities and the general community in literacy. Census 2011 reports 73 percent literacy rate at the national level, while it remains 66.1 percent for Scheduled Castes and 59 percent for Scheduled Tribes. The literacy rate among Muslim communities is lowest at 57.3 percent.

Gender gap in literacy: In addition to the community level literacy inequalities, women within the disadvantaged communities have further lower literacy levels. The gender gap in literacy level is 16.3 points at the national level; it is 18.7 in the Scheduled Caste communities and 19.1 in the Scheduled Tribe communities. This reflects the additional gender disadvantages faced by women/girls from these communities.

Unequal Access to Higher Education: The literacy inequality is carried forward in the youth as seen in the higher education for youth from 18-23 years. The All India Survey on Higher Education (AISHE) 2014-15 reported enrolment across various social groups in higher education. This shows that the enrolment rates of youth from SC and ST communities is below their population proportion despite proportionate reservation in higher education. Here again Muslim youth report the lowest enrolment in higher education compared to their population proportion, being just 4.5 percent

Table 9.2 Enrolment in Higher Education, AISHE (Percentage)

SC enrolment	13.4%
ST enrolment	4.8%
Muslim enrolment	4.5%
Other Minority enrolment	1.9%
OBC enrolment	32.8%
Total	47.4%

Further 79.4 percent of the students are enrolled in undergraduate level programme. Maximum students are enrolled in the BA programme followed by B.Com and B.Sc programmes. Almost 85 percent of the students enrol in just about 10 out of the approximately 180 available programmes. It is not surprising that the majority of the SC, ST and Muslim minority or other disadvantaged youth are enrolled in the BA programmes. They do not have guidance or support from their families/communities or the schools and colleges on how they can access other courses that are in keeping with their interests and also with emerging opportunities.

High Levels of Unemployment among Disadvantaged Youth: Review of unemployment among the youth also reflects the higher levels of unemployment among the disadvantaged youth groups. Unemployment among Educated Muslim Men in urban areas is highest at 18.09 percent. This is followed by SC youth.

Table 9.3 Percentage of Unemployed in the Principal Status for Persons aged 15 to 29 NSS 68th Round

		Hindu ST	Hindu SC	Hindu OBC	Hindu Others	Muslim OBC	Muslim Others	Other Religions	All Groups
Rural Male	Below HS	1.63	3.64	2.43	2.59	3.55	4.79	3.42	2.90
	Above HS	6.26	8.91	7.09	7.59	2.86	6.13	10.52	7.45
Rural Female	Below HS	0.84	0.64	0.55	0.51	1.85	0.96	1.58	0.75
	Above HS	3.45	5.10	4.68	4.55	8.86	7.66	7.95	5.19
Urban Male	Below HS	3.25	3.97	2.50	2.80	3.34	5.40	3.82	3.35
	Above HS	5.21	7.72	8.09	7.50	8.55	18.09	9.55	8.43
Urban Female	Below HS	0.71	0.78	0.96	1.03	0.66	1.27	3.22	1.03
	Above HS	5.54	6.41	4.43	4.44	4.01	3.03	6.08	4.69

Source: Post Sachar Committee – Prof Amitabh Kundu Report

The disadvantages experienced by these youth have their basis in the unequal access of their communities to resources and social participation for generations. Land ownership and being cultivators and landlessness and labour are closely linked to their cumulative disadvantages.

Table 9.4 Workers among Social Groups

	Total Population (%)	SC Population (%)	ST Population (%)
Cultivators	24.6%	14.8%	34.5%
Agricultural Labour	30.0%	45.9%	44.5%
Other workers	41.6%	36.1%	19.2%

Source: Census 2011

Various studies by the Indian Institute of Dalit Studies (IIDS) report how candidates from Scheduled Caste and Muslim minority communities were discriminated at all levels of recruitment from interview calls to interviews and recruitment. IIDS studies also report dominant community managers and executives' prejudices and stereotypes about youth from the excluded communities. These perceptions negatively impact the participation and opportunities of these youth and limit their development.

National Youth Policy 2014 – (Non) Recognition of Socially Excluded Youth

As mentioned above, the disadvantaged youth are not homogenous and come from diverse backgrounds, reporting diverse sets of exclusions and discriminations. The following table reviews the NYP 2014 and its (non) recognition of the diversity among the disadvantaged youth. It is important to recognise the different groups and their particular forms of disabilities to make necessary corrective steps as we implement the policy, review the policy and make fresh policies in the five year period.

NYP 2014: Objectives and Priority Areas

The NYP 2014 outlines 5 objectives and 11 priority areas for youth empowerment and national development. It must be mentioned that the central approach in the NYP 2014 for empowering youth is their inclusion in the labour force; – “in order to capture the demographic

dividend, it is important that the economy has the ability to support the increase in the labour force and the youth have the appropriate education, skills, health awareness and other enablers to productively contribute to the economy”. (NYP pg 3).

➤ **Objective 1: Creating a productive workforce to make a sustainable contribution to India's development**

- o Priority Area 1: Education
- o Priority Area 2: Employment and skills development
- o Priority Area 3: Entrepreneurship

➤ **Objective 2: Develop a strong and healthy generation**

- o Priority Area 4: Health and healthy life style
- o Priority Area 5: Sports

➤ **Objective 3: Instil social values and promote community service to build national ownership**

- o Priority Area 6: Promotion of social values
- o Priority Area 7: Community engagement

➤ **Objective 4: Facilitate participation at all levels of governance**

- o Priority Area 8: Participation in politics and governance
- o Priority Area 9: Youth engagement

➤ **Objective 5: Support youth at risk and create equitable opportunity for all disadvantaged and marginalised youth**

- o Priority Area 10: Inclusion
- o Priority Area 11: Social Justice

Disadvantaged Youth and the NYP 2014

Social and economic sciences today articulate poverty from the multi-dimensional perspective, recognising that income poverty in itself does not capture the big picture of poverty and vulnerability. Further, social exclusion of population groups from the social, economic and political participation and decision making is identified as important underlying cause for poverty, deprivation and vulnerability. The social structure in India has embedded various processes of privileges and dis-privileges to specific population groups historically. These have resulted in advantages and disadvantages historically and current too. The religious moorings strengthened these as “given” and “non-negotiable”. The Constitution adopted in 1950 turned this hierarchical and exclusionary social structure mandating 'equality, liberty and fraternity' and prohibiting all forms of discrimination and untouchability. Further it laid a 'social justice' framework providing positive discrimination and special provisions in the social, educational, economic, political, religious, gender

dimensions. Scheduled caste and Scheduled tribe and religious minorities were given protective and developmental provisions to aspire to enjoy equality, freedom and equitable opportunities. This framework has been expanded to recognise other forms of vulnerabilities and disadvantages like disability, sexual orientation, economic deprivation etc. Hence it becomes important to review how the NYP 2014 recognises these disadvantaged groups among the youth population and carries forward their empowerment and inclusion. A simplified Social Equity Audit (SEA) of the NYP 2014 given below identifies youth groups that face social exclusion and how the policy addresses this exclusion.

Table 9.5 Review of NYP 2014 from Social Exclusion Lens

SNo	Indicator	Treatment	Equity-Inclusion			Comments
			0	1	2	
1	Link social exclusion to youth deprivation	No reference to social exclusion	0			Does not make the link between SE and deprivation among youth
2.	Recognise excluded youth groups by identity					
2.1	Scheduled castes/Dalits	Passing reference as SC		1		Misses out 16.8% of the youth who face SE
2.2	Scheduled tribes/Adivasi	Reference to MOTA Passing reference as ST		1		One mention, highly inadequate
2.3	Nomadic-Denotified tribes/ Particularly vulnerable tribes	No reference	0			Misses out a most vulnerable group
2.4	Muslim Minority	No reference	0			Misses out 14% of the youth who face SE
2.5	Minority	Passing reference as Minorities		1		Misses out on specific youth group that are vulnerable
2.6	Persons with disability	Recognised as deprived youth category			2	Treated as category, references made
2.7	Women	Recognised as deprived category			2	Treated as category References made
2.8	LGBTQI	Passing reference		1		Passing reference

2.9	Youth in unreachable areas	No reference	0			Misses out large sections of deprived youth
2.10	Youth in conflict affected areas	Reference made		1		Treated as a category
2.11	Substance abusing youth	Reference made		1		Treated as a category
2.12	Trafficked Youth	Reference made		1		Treated as a category
2.13	Migrant Youth	Reference made		1		Treated as a category
2.14	Youth in urban slums	No reference	0			Misses out large and growing sections
2.15	Youth who dropped out before 10th grade	Reference made		1		
2.16	Youth without skills training	Reference made			2	A huge focus
2.17	Youth in disaster affected areas	Reference made		1		Youth role in disaster management focused
2.18	Youth affected by caste violence	No reference	0			Misses out specific vulnerability and social issue
2.19	Youth affected by communal violence	No reference	0			Misses out specific vulnerability and social issue
2.20	Women affected by gender violence	Passing reference		1		Ministry role referred
2.21	Youth in conflict with law	No reference	0			Critical issue missed out
2.22	Youth in institutional care	Reference made		1		Referred to as category
2.23	Homeless youth	No reference	0			A growing social problem missed out
2.24	Youth on the streets	No reference	0			A growing social problem missed out
2.25	Those who are married before permissible age	Reference as an issue		1		
2.26	Displaced youth	No reference	0			Misses out on growing issue
2.27	Unemployed youth	Critical concern			2	Critical concern

2.28	Youth discriminated on the basis of their regions	No reference	0			
2.29	Youth discriminated based on their features	No reference	0			
2.30	Intersectional & Multiple exclusion	No reference	0			Not recognised

(0 – No Reference/treatment, 1 –Nominal Recognition/treatment, 2 –Better Recognition/treatment)

Indicator	Nos of Youth Groups
No Reference (0)	14
Nominal – Indirect Reference (1)	12
Better Reference (2)	4 (women, youth with disability, unemployed youth, youth with no skills)

This simple analysis shows that social exclusion is not recognised and linked to youth deprivation. Further of the 30 indicators on deprived categories and their characteristics there is no mention of 14, there is nominal or indirect reference to another 12 and only 4 groups are somewhat referenced in the policy.

Disadvantaged youth importantly report social exclusion, untouchability, discrimination, stereotyping as critical issues for their development gaps in addition to poverty. They highlight their lack of access to information in education/career, lack of guidance, inadequate material and moral support to enhance their personal capabilities and profession, lack of social capital to gain the confidence to reach out to existing information and resources, and lack of opportunities that are barriers to their development. All these in some way or the other are linked to the structures and processes of social exclusion they experience. The NYP 2014 does not recognise or articulate social exclusion as a basis for youth deprivation and misses out on the critical barriers and constraints faced by a large majority of the youth in our country. The large numbers of such youth in itself makes it imperative to recognise them specifically and include special equity and inclusion measures and ensure social justice. The scheduled caste youth in themselves constitute 16.6 percent of the population, the Scheduled

Tribes (Tribes and Adivasis) constitute 8.6 percent of the population, the Muslim minority 14 percent of the population – together these three groups make up 39 percent of the population. In addition are large groups left out like the nomadic and de-notified tribes, particularly vulnerable tribes, other religious minority groups, women as a whole group etc. Even a simple calculation would bring up this proportion to more than three-quarters of the youth population. At a time when the nation is looking forward to the youth population dividend to spur national development – not making specific measures for their development is a huge gap in the policy.

To that extent, there is danger that further policy making bodies, implementing agencies and monitoring bodies may not consider these dimensions in their interventions. There is every danger that these bodies do not invest in understanding and addressing the specific constraints of the excluded youth and do not make provisions to facilitate their participation and benefit sharing that will emanate from the NYP. Similarly there is every danger that possible agencies that can take pro-active role to support and facilitate the excluded youth are not aware and do not engage. There is every danger that the policy may not lay down a road-map for actually harnessing the population dividend of the majority of the youth who are currently excluded and have to be brought into the process. Hence the objective and potential of the youth population dividend may remain unfulfilled at best and also lead to further inequalities and even conflict.

A Brief Analysis of the NYP from Social Inclusion Lens

Objective	Priority Areas	Social Inclusion
1. Creating a productive workforce to make a sustainable contribution to India's development	(i) Education (ii) Employment & Skill Development (iii) Entrepreneurship	This objective recognises the heterogeneity of youth and states that special attention should be given to disadvantaged and women youth. Moreover, it states that current schemes and programmes must be reviewed to determine whether they can be successfully extended to marginalised youth in order for their access and benefit.
2. Develop a strong and healthy generation	(iv) Health & Healthy Lifestyle (v) Sports	This objective recognises that health care services are unequally located and access to sports is limited in rural and urban poor areas.

3. Instil social values and promote community service to build national ownership	(vi) Promotion of Social Values (vii) Community Engagement	This objective states that India is a “diverse nation with respect to ethnicity, religion, language, caste and culture” and that alongside there is socio-economic disparity and the subsequent need to instil a sense of harmony in youth. Furthermore, it also states the role of youth in mobilising for community service and development programmes – the focus on engagement between different sections of youth has the potential to be a helpful ground for fostering volunteering to promote social inclusion and also the participation of socially excluded youth.
4. Facilitate participation at all levels of governance	(viii) Participation in Politics & Governance (iv) Youth Engagement	This objective notes that it is critical that youth are represented and that they can engage at all levels.
5. Support youth at risk and create equitable opportunity for all disadvantaged & marginalised youth	(v) Inclusion (vi) Social Justice	This objective – being the most important for the purposes of social inclusion acknowledges that there are youth that require special attention to ensure that they can access government programmes. Scheduled Caste, Scheduled Tribe, Other Backward Classes and disabled youth are mentioned specifically. It further states that all youth require social justice, and that an issue that requires addressing is caste -based discrimination.

Objective 5 has direct reference to the youth at risk and disadvantaged and marginalised youth. The youth that are referred to and listed as requiring special attention are – i) economically backward youth, ii) women, iii) youth with disabilities, iv) youth living in conflict affected regions including left-wing extremism, v) youth at risk due to substance abuse, human trafficking or hazardous working condition. Adequate reference is not given to major root causes of marginalisation linked to one's social identity being Scheduled Caste, Scheduled Tribe or Muslim minority.

Clubbing the many socially disadvantaged youth under the generic identity of 'disadvantaged youth' have some drawbacks:

1. It overlooks the distinct disadvantages faced by different categories of disadvantaged youth. It has to be recognised that these specific disadvantages are critical enough to deter the participation and development of the particular youth group. It may also be recognised that in majority of the cases, these are also not comparable and hence the clubbing does not add clarity to their needs and issues.

2. By clubbing them as one large category there is the danger of selective identification in provisioning and implementation, thereby missing out on large sections of the youth. This can lead to new forms of exclusion and inequalities. This would again defeat the purpose of the NYP which is to ensure that youth population dividend spurs national development and every section of youth potential is developed.
3. The danger of clubbing also is that adequate attention is not paid to addressing the specific constraints and hence measures may well fall short of the threshold limit, again a loss in terms of opportunity and resources too.
4. Multiple and inter-sectional issues are lost out which are also critical to ensure youth population dividend.

Review of the NYP 2014 from Diversity Lens

The demographic dividend is the driving imperative and potential for scale of economy. As mentioned 'youth comprise 27.5 percent of the population (15-29 years) and India is expected to become the 4th largest economy by 2025, contributing about 5.5-6 percent of the world GDP, only after the United States, China and Japan'. However, the policy does not recognise and articulate the diverse youth groups and their richness. The passing reference to diversity as – 'it needs to be recognised that all young persons within this age group (15-29 years) are unlikely to be a homogenous group. Different segments of the youth would have different needs and concerns, which need to be addressed' (NYP 2014). The policy does not recognise the diversity of the youth of the country as a matter of richness, knowledge, human resource or matter of celebration. There is no reference to the rich diversity of the youth in different parts of the country, their culture or contribution to the tapestry that makes 'Incredible India'.

Further, diversity is reflected as disadvantages – 'a few segments of the youth population require special attention. These include economically backward youth, women, youth with disabilities, youth living in conflict affected regions including left wing extremism, and youth at risk due to substance abuse, trafficking or hazardous working conditions (NYP 2014). This reference seems more to be on the lines of disadvantages than strengths and potential, when the overall policy is keen to make gains from the large numbers and strength of the youth themselves. Strengths have to be built up from existing knowledge and experience and positive profiling. The NYP does not create a positive profiling of the youth, much less 'disadvantaged youth' and to this extent the implementing agencies may not capture them too.

Youth being such a large population section (more than one in four) –recognising their potential at the individual and group level is important. Social groups have distinct knowledge, skills and approaches. The knowledge base of the tribal groups is different from that of the Dalit or Muslim communities or the OBCs or General community, so also is regional distinctions. Recognising and respecting the diversity makes it possible to include and bring on board these different resources into the development process. Not recognising misses out various possibilities.

NYP from an Equity Lens

If one were to review each of the priority areas – one recognises that while India has been able to do well in each of these dimensions – with IT and silicon valley, our IIT students leading global organisations, our professionals leading innovations – one realises that there are systems that has the potential to reach the highest heights – but only for a small minority. What we need is a mass turning over for the large majority of hitherto excluded sections. These existing systems have not reached them because of the constraints and disadvantages. Once again not recognising them will be missing the opportunity. Hence a deep and serious analysis of the distinct disadvantages is central to getting the population dividend.

One knows that youth is a volatile age with enormous potential for good and bad. Unlike earlier times, youth today have quite independent ways and access to information and resources. They have mind of their own. It is important to develop mechanisms to affirm them, encourage them, facilitate their participation and also ensure their leadership building. Hence important to recognise the diversity

Youth Volunteerism among Socially Excluded Youth

The current institutional mechanisms within the MoYAS to promote youth development are largely through the two volunteering bodies – NYKS and NSS. Hence volunteering becomes an important strategy to reach out and enhance the inclusion of socially excluded youth into the programmes of MoYAS. Volunteering is also gaining recognition globally as a relevant and effective framework for engaging young people and being “universal and accessible to everyone, regardless of their background or social status”(UNV, 2014). The UN General Assembly (UNGA) in 2002 defined volunteerism as activities which are “undertaken of free will, for the general public good and where monetary reward is not the principal motivating factor” (UNGA, 2002). The challenge in our context is to put in place decentralised and democratic structure of volunteering that can promote inclusion of youth from the socially excluded sections.

It needs to be noted that volunteering goes on in all societies and communities, even when it is not formally acknowledged as volunteering. Communities, particularly marginalised ones, survive and support each other through many volunteering activities. Being resource-limited in economic terms, with limited social capital outside their own communities, volunteering becomes an important means of meeting each other's and community needs. Often these are not recorded or reported and hence less known and acknowledged. Importantly, they may also be very different from recognised and reported forms of volunteering and again are in danger of not being counted. Our engagement with young people from the Dalit, Tribal and Muslim communities made us aware of their volunteering activities in their communities. These were limited to their communities and were measures to meet the urgent and explicit needs within their communities. A very recent example brought this home to us powerfully.

The role of youth volunteers in the Chennai floods in 2015 was greatly acclaimed by all. There were stories of how people connected on mobiles and Whatsapp and provided information and support. There were stories of how people opened up their homes and gave shelter and food to outsiders. Youth made news through their innovative efforts to provide safety and relief to local communities in the Chennai floods in 2015.¹ Little was said about how socially excluded youth were engaged in the relief activities or the important role they played in this process. It was well known that the roads were flooded and the drainage blocked. In many places, the slums were totally inundated. It was the young people from the slums who were the first convoys of volunteers and many deaths were prevented by their taking people to safety. In addition, many young people provided support to others in crossing over the dark and filthy waters to safe places. It was the young people from the socially excluded communities who waded through the drainage water and rescued people. Many had innovatively used local tyres and carts to make make-shift transport modes and take people to safety. With the dirtiest of waters swirling around and the gutters blocked, many of the young people from the safaikarmachari community saved and rescued people. This is just one example of how the volunteering activities by youth from the socially excluded communities may not be known outside their communities and may not be recognised or acknowledged. While acknowledging volunteering as probably the best mechanism for promoting youth empowerment and engagement, special attention needs to be made to understand, document, acknowledge, encourage and draw lessons from the volunteering activities among young people from socially excluded communities. Youth volunteering and development/empowerment needs to be spear-headed through the inclusion process at all levels and in all spheres.

¹Indian Express, 8th Dec 2015; Chennai floods: Students to homemakers, citizens, take lead in relief operations downloaded on 30th April 2016

A few examples of volunteering cited by socially excluded youth during this study from different states are cited below:

Social Group	State	Volunteer Activities	Thematic Area
Adivasi youth	Assam	Help community in land registration process	Land right
		Create awareness among community on various government schemes and facilities	Citizenship rights
Muslim youth	Assam	Rescue and Relief during flood	Disaster management
		Promote peace, harmony and mutual co-existence among the two communities during communal clashes	Communal harmony/secularism
		conducting baseline survey about the community	Research
Disabled youth	Delhi	helping people get ration card and other documents from government departments	Citizenship rights
		information dissemination on social media	Citizenship rights
Muslim youth	Delhi	Coaching community children	Education
		Campaign against child labour	Child right
Muslim youth	Bihar	Facilitating in admission of girls into schools	Education
		Assisting people in filling application forms for government services	Citizenship rights
Dalit youth	Delhi	Promote civil rights through rallies and meetings	Civil rights
		City cleaning program with local government	Sanitation & Hygiene
Dalit	Bihar	Career guidance and teaching assistance to community youth	Education & Career development
Tribal youth	Jharkhand	Tree planting drive	Environmental protection
		Mobilising women to protest against forest exploitation and land protection issues	Forest rights
		Motivating girls and boys by helping them to participate in sports tournaments	Sports

Muslim youth	Kerala	Conduct motivation classes to youth and children on higher education and career	Education and Career development
		Free Medical camp and services for the poor	Health
		Protest against sand mining from river	Environmental protection
Tribal youth	Kerala	Tuition classes to community children	Education
		Relief activities during flood	Disaster Management
Dalit youth	Kerala	Social media campaigns on Dalit rights	Civil rights/Human rights
		Book distribution to the needy children	Education

The above list is indicative and provides insight into the nature of volunteering issues identified by the youth to support their communities. It shows strong connect to citizenships, and legal rights as being important to the community. In addition, government services and education are central volunteering contents too.

Volunteering activities are often seen as contributing to the welfare/development of others and hence categorised under youth for development. During the process of this document, youth groups including NYKS youth clubs reported many volunteering activities they undertook within their communities from blood donation camps, tuitions for marginalised children, making roads, building homes, running libraries, providing information to actively supporting people during disasters and conflicts. A very effective volunteering engagement of youth from the Scheduled Caste communities that has stood the test of time is found in the undivided Andhra Pradesh. Here educated young people supported their communities to access government schemes and provisions and their legal rights to land. An important support was at the time of violence and atrocities against community members.

Creating Pathways and Processes for Inclusion of Socially Excluded Youth

Principles for Inclusion of Socially Excluded Youth

Respect for Diversity: Respecting the diversity among youth as a rich resource is a cornerstone for promoting youth inclusion in volunteering. Diversity in volunteering means developing a varied team of volunteers that reflects the diversity of people in the community. A diversity approach ensures that all people are welcomed and that difference is celebrated.

Embracing diversity benefits – i) new approaches and fresh ideas and even new volunteering roles may emerge, ii) brings in skills and experiences from different backgrounds, iii) helps to ensure that the volunteering work is relevant to and benefits people from all sections of your society, iv) plays a role in making society more inclusive, v) creates a wider pool of volunteers, vi) complies with constitutional/legal values².

Rights Based Approach: Youth are citizens with rights and duties. In developing the empowerment framework for young people, the rights based approach which focuses upon their rights and duties are relevant. The Constitution and in particular the pre-amble provides rights to equality, liberty, fraternity, social justice in a secular democratic framework. Various legislations add provisions and strategies to translate these values and rights. In addition, the Constitution provides additional rights to socially excluded youth to protect them from discrimination and violence. There are special provisions to promote their education and economic rights. Art 46 of the Constitution mandates “the state shall promote with special care the education and economic interests of the weaker sections of the people, and, in particular of the scheduled castes and the scheduled tribes, and shall protect them from social injustice and all forms of social exploitation”. The rights framework instills confidence among the socially excluded youth while exploring their own development and role in society. It is suggested that the youth empowerment framework is built on the strong foundation of rights based approach.

Social Equity and Social Justice: It needs to undergird the process of inclusion of socially excluded youth. Social Equity for youth includes all those measures that are to be put in place to facilitate historically excluded youth or those at risk to overcome their historical exclusion in the social, political and economic arenas. It also includes additional measures necessary to protect and promote the socially excluded youth to address discrimination, violence, conflict and development inequalities. Social equity emphasises that equal opportunities can be promoted where the specificities of inequalities are taken into account and are adequately engaged with, on different levels, for different groups. Social Justice recognises historical structures of exclusion and their continuing forms and resultant deprivation as human rights violations. Society at large has obligations to excluded youth groups for injustices committed and being continued. This is based on the understanding of societal responsibility towards supporting marginalised youth to overcome the historical and current challenge and these provisions are based on rights and not charity³. Social justice has to frame the social equity

²Anne Walsh, Mathew Seebach. 'Access All Areas: A Diversity Toolkit for the Youth Work Sector' National Youth Council of Ireland, Dublin 2009.

³Rawls framework of justice as fairness

measures in contextual, relevant, adequate and effective ways to overcome previous and current forms of injustices and inequalities.

Strategies for Inclusion of Socially Excluded Youth

i. Creating Safe Spaces for Excluded Youth: Excluded youth tend to be limited to their own habitations and groups. Their social contact with the wider society and youth groups are limited. The external exclusions also create self-exclusions as a means of self-protection and defense. Trust and engagement across youth diverse groups at present are limited. The widening gaps and increasing inequalities, so visible in every-day life further vitiates the environment. Hence 'Safe Spaces' need to be promoted at the community level or within their own groups for excluded youth as comfort spaces for analysing the nature of social exclusion and its impact on their lives and development. It needs to be guided spaces for addressing identity issues, exploring and peer learning. It needs to promote confidence in the young people to address the constraints and barriers they experience in their own self and the outside world. Long years of experience in gender mainstreaming show the need for safe spaces for exploration and interfaces with others at appropriate times and ways. An added component that can be explored in these safe spaces is to build knowledge about the nature of volunteering among excluded youth, community needs or youth needs. These spaces can provide insights into the different dimensions of needs and community life around excluded youth. They can become piloting spaces to develop and further adapt strategies for their inclusion. The MoYAS could encourage building these safe spaces for young people in their community spaces and groups as pilot model spaces that can be further integrated across different youth groups.

ii. Creating Safe Spaces for non-Excluded Youth: The accident of birth intentionally and through various default mechanisms determines the opportunities in the life journeys of all young people. While the youth from socially excluded communities are at the negative end of the spectrum, the youth from privileged backgrounds are at the positive end of the spectrum. The current social and public discourse do not critically analyse them, rather justifies and further perpetrates these privileges. Such rationalisation prevents any objective space for self or social reflection and young people from privileged backgrounds do not see the necessity to make changes. Even when they may have some indications of larger social issues and the contexts of young people from socially excluded communities, there is negligible space or guidance to further engage with these indications. Caught up in their own contexts and careers with all its market and competitive trappings, they need spaces to analyse and critically review the nature of privileges and opportunities they enjoy, simply because of the accident of birth. Public and social spaces need to be organised where the youth from

privileged sections are supported to understand the privileges they enjoy and their undue advantages based on the same. Both NSS and NYKS can be supported to guide and undertake such processes.

iii. Pro-actively building Interface Spaces: Additional effort is necessary to pro-actively build social interface across diverse youth groups. In our context, interface has to be actively pursued given that social and mutual support interface across caste, religion and ethnic communities had been historically prohibited and limited by cultural norms. Social groups that are placed at the higher end of India's social hierarchy have free and unlimited access to engage/interface/dominate those that are below them. Social groups at the lower rung have limited access/interface to those above them. This constraint has to be recognised when it comes to youth volunteering too. It follows that while dominant youth will have volunteering access towards excluded youth groups, volunteering in the reverse direction is not the norm. It is imperative that interface is built between the dominant and socially excluded youth to expand and make volunteering inclusive and successful.

iv. Engaging YLOs and CLOs: The need for thought leaders from excluded communities to support and facilitate excluded youth groups are essential in the process. An opportunity exists in recognising and identifying Youth-Led Organisations (YLOs) and Community Led Organisations⁴ (CLOs) from the socially excluded communities to create the safe spaces for excluded youth groups. These leaders have deep insights on the barriers and constraints faced by the community and have the potential for long term sustained engagement with the youth to promote change. A study by CSEI and UNDP – 'Making Growth Just and Inclusive: Partnering Community Led Organisations of the Socially Excluded' reported many such organisations spread across the length and breadth of the country. There is much potential for the MoYAS to enlist these organisations and engage with them to include young people from the socially excluded communities into their fold. Effective and constructive interface and collaboration can be promoted between the YLOs and CLOs and the NYKs and NSS to promote youth inclusion. These YLOs and CLOs can also contribute considerably to various programs of the NYKs and NSS in building perspective of the socially excluded youth in their programmes.

CSEI has popularised the term 'Community Led Organisations (CLOs)' to distinguish civil society organisations (CSOs) where the leadership comes from socially excluded communities with the specific intent of addressing the social exclusion of their communities. CLOs are being recognised within the larger CSO populace to acknowledge the distinct demands and challenges they face while undertaking development and rights work. It also recognises the potential and opportunities for deepening democracy and development into unreached areas and communities opened up through the work of CLOs.

v. Promoting Public Education and Public Spaces: Social inclusion of excluded youth will get an impetus when the larger social environment values and promotes social inclusion. Here the role of public education on social inclusion is central. It is essential that the public spaces are made available where discussions on issues of youth, issues of the socially excluded youth, disadvantages and social equity measures, privileges and opportunities of youth from non-excluded social groups, community objectives of social justice are discussed in a sensitive and objective manner. The coming together of youth from diverse social groups and backgrounds is essential to have this dialogue, understand the different perspectives and promote collaboration and inclusion.

vi. Strengthening Institutional Mechanisms: Even as the MoYAS and other line ministries engage with young people through their programmes, there is little recognition of the youth as a category with distinct demands. There has been negligible effort within the ministries to holistically understand the needs and potential of young people and the role and contribution of the particular ministry towards youth empowerment. Hence special institutional mechanisms or human resources most often is not available within line Ministries to fulfill their role in the youth empowerment process. Within this environment of negligible attention, one does not see any existing mechanisms for understanding the disabilities of socially excluded youth or strategies for addressing them. It is thus essential to identify the specific ways in which different ministries engage with socially excluded youth in their overall mandate and designate nodal persons and resources to promote the inclusion of socially excluded youth in their mandate. Internal mechanism for monitoring and course corrections also needs to be created.

vii. Increase Youth Budgeting and Ensure full Utilisation of Special Budget Provisions like SCSP, TSP and MsDP: Budget provisions for youth development need to be re-visited and provisions for population proportionate budgets made. Adequate timely investment needs to be made given the high population proportion of the young people and their contribution – present and future – to national development. The concept of Youth budgeting similar to child budgeting and gender budgeting initiatives can be used as pegs to initiate the process. In addition, special budget provisions available for excluded youth can also be incorporated. The development gaps and development inequalities between scheduled caste/scheduled tribe and dominant communities were recognised as early as 70s. The Scheduled Caste Sub Plan (SCSP) and the Tribal Sub Plan (TSP) was initiated as a strategy to promote development and reduce the inequalities. These are specific budgets available to every Ministry and department at the union and state levels. Similar provisions are made through the Multi-sector development program for the Minority communities. Additional

budgets are also allocated for nomadic tribes in some states. The MoYAS could evolve the necessary frameworks for utilising these budgets for the youth from these communities, which benefits them best. As a nodal agency MoYAS may need specialised cell within the ministry to promote Youth Budgeting and also engage and guide other ministries to formulate, utilise and track their budgets on youth. Youth budgeting can be planned and allocated for including various interventions to strengthen the strategies and result areas for inclusion of socially excluded youth within the MoYAS programmes and across other line ministries.

Conclusion

The youth population dividend has the potential to promote growth and development in an unprecedented manner in our country. However, the potential and the capacities of the youth need to be supported and nurtured. Only a small proportion of this youth have the capabilities and resources to pursue their interests and aspirations. The large majority are disadvantaged owing to historical and current forms of social exclusion, discrimination and marginalisation. Paradoxically, the greatest potential for promoting the youth population dividend also belong here. These youth are again not a homogenous group, but belong to various social groups –predominant among them being youth from Scheduled castes, Scheduled tribes, Muslim minority who together form 39 percent of the youth population. Other youth too are disadvantaged owing to disability, sexual orientation and many others. Women across all social groups face specific vulnerabilities.

The National Youth Policy 2014 provides the framework for youth empowerment and national development focusing on five core objectives and eleven priority areas. However, the NYP 2014 falls short in articulating social exclusion as the basis for the disadvantages and identifying the vectors of disadvantages. To this extent, it misses out in building a detailed architecture for addressing these endemic disadvantages and building necessary social equity and inclusion measures. India has the prototype for various forms of youth development programmes and processes and relevant successful models exist. Our youth do well not just at the national level, but also global levels. It is evident that while these models exist, the large majority of the disadvantaged youth do not access or benefit from them. These youth fall into the school drop-out, unorganised sector labour. The youth population dividend can best be realised by building mechanisms and equity measures for these youth to access and benefit from the national development programmes. It is important to analyse their specific disadvantages and build necessary mechanisms to address them. In the absence of specific and adequate timely mechanisms, these youth will not empower themselves nor contribute to

the national development process. There is enough evidence to show that with support, the youth will be able to pursue their aspirations and also contribute to the national processes. The paper argues that social inclusion and social justice are important cornerstones for this process.

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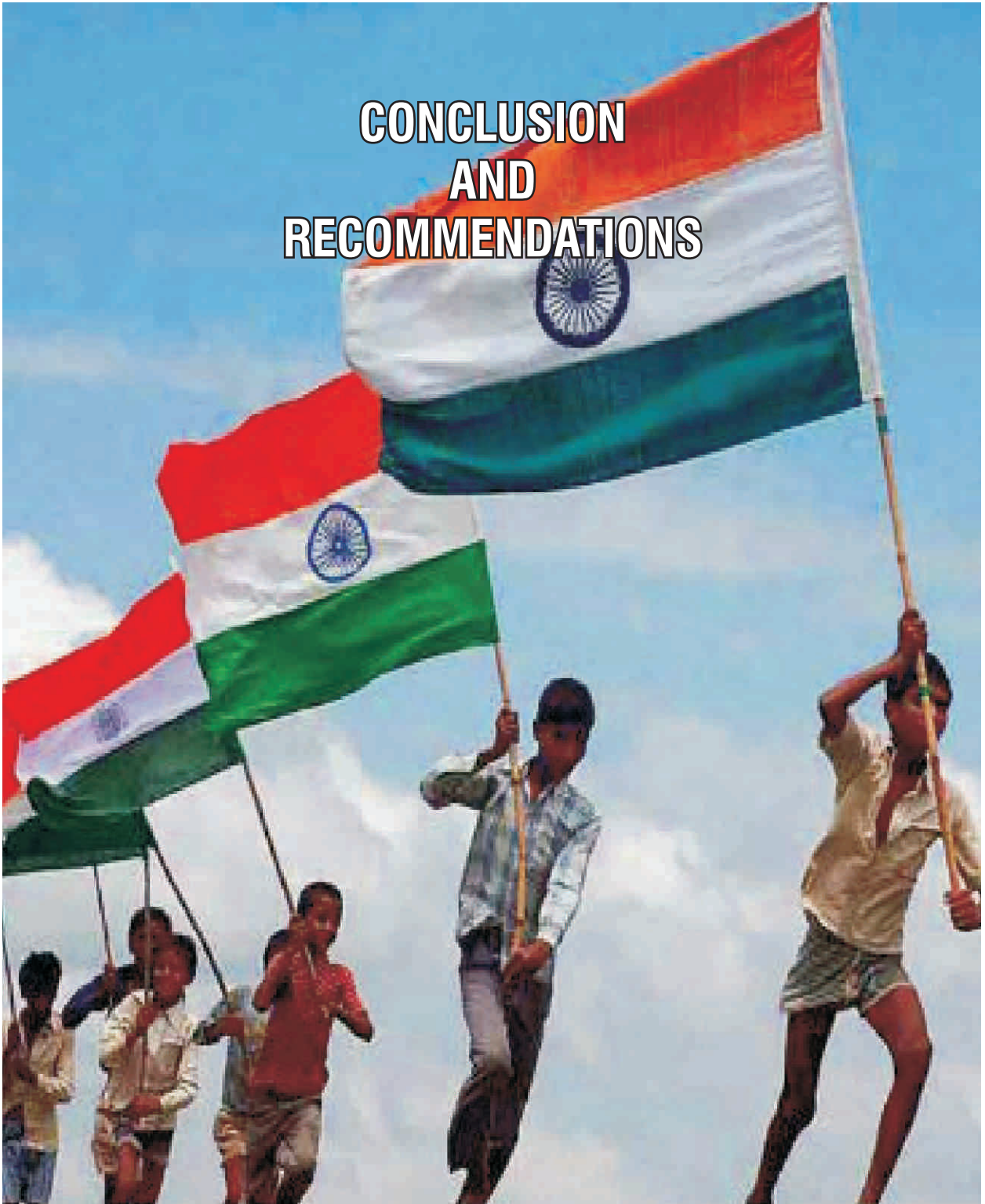
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CONCLUSION AND RECOMMENDATIONS



CHAPTER X

CONCLUSION AND RECOMMENDATIONS

Currently India has approximately 360 million people in the age group of 15-19 years which accounts for nearly 27.5% of its total population. Since young population is the most vibrant and valuable human capital, India can seize the opportunity of capitalising the youth resource for nation building and making India a global power. India can achieve such a goal, provided right policies are in place for harnessing the youth energy, enhancing their skills and encouraging their participation in local and global economy. These can be pursued effectively only with the help of youth Development Index, which is a composite measure of the status of youth. Hence, RGNIYD has made a pioneering attempt to develop India youth Development Index for the first time for the year 2010 and subsequently, as a follow up measure, India youth Development Report- 2017 is

developed. India Youth Development Report – 2017 aims at assessing the current status of youth for the year 2017 as well as tracking the trends in youth development for a time period of 2010-2016 in India and across the states and union territories. In view of the need for global comparison, YDI - 2017 is constructed, using the new definition of youth as specified in the latest National Youth Policy of 2014 and adopting the methodology followed in the Common Wealth Youth Development Index. For ascertaining trends in the youth development in India and across the states for the specified time period i.e 2010 – 2016, Youth Development Index was constructed for the year 2016 using the same definition of youth, more or less same set of variables depending on the availability of the comparable data and same methodology as followed in the YDI – 2010 to facilitate strict comparison. The India YDI Report – 2017 is comprised of primarily with three sections *viz.* Section- A dealing with Youth Development Index – 2017, Section-B

with Trends in youth Development in India during 2010-2016 and Section- C consisting of Status Papers on important domains.

Salient Findings

India Youth Development Index - 2017

India Global YDI score remains at 0.548 which posits India in Medium category. The overall score of India YDI – 2017 is 0.569 in conformity with Global YDI score. The YDI scores of various domains has shown that there is a need for improvement in youth development. The scores also indicate the persistence of gender inequality across the domains in youth development despite the various central and state policies towards Women Empowerment. This remains a major challenge for the country inviting special attention for strategic interventions. Widening disparities across the states resulting in divergence in youth development serves as a barrier for the optimal utilisation of youth resource for the societal development. The performance of the major and minor states in India with reference to youth development is summarised in the following table.

Table No: 10.1 Current Status of Youth in India and across the Indian States – 2017

S. No.	Index / Domains	National Level Score	High Performing States		Poor Performing States	
			Major States	Minor States	Major States	Minor States
1	YDI	0.569 Male: 0.625 Female: 0.535	Gujarat, Kerala, Maharashtra, Punjab, Tamil Nadu and Uttarakhand	Delhi, Meghalaya, Mizoram and Sikkim	Bihar	Nil
2	YGDI	0.856	Punjab and Himachal Pradesh	Puducherry, Arunachal Pradesh and Meghalaya	Bihar, Jharkhand and Rajasthan	Nagaland, Tripura and Goa
3	YEI	0.513	Kerala, Himachal Pradesh and Tamil Nadu	Mizoram and Puducherry	Bihar, Jharkhand and Rajasthan	Arunachal Pradesh and Meghalaya
4	YHI	0.632	Himachal Pradesh, Kerala and Uttaranchal	West Bengal, Assam and Chhattisgarh	Goa, Delhi and Puducherry	Arunachal Pradesh, Sikkim and Tripura

5	YWI	0.572	Gujarat, Maharashtra and Karnataka	Assam, Kerala and Bihar	Meghalaya, Puducherry and Goa	Nagaland, Tripura and Manipur
6	YPPI	0.436	Rajasthan, Chhattisgarh and Jharkhand	Kerala, Bihar and Himachal Pradesh	Arunachal Pradesh, Delhi and Meghalaya	Goa, Puducherry and Nagaland
7	YCPI	0.191	Himachal Pradesh, Punjab and Uttaranchal	West Bengal, Uttar Pradesh and Bihar	Puducherry, Sikkim and Mizoram	Delhi, Tripura and Meghalaya
8	YSII	0.785	Assam, Himachal Pradesh and Kerala	Bihar, Madhya Pradesh and Odisha	Mizoram, Nagaland and Arunachal Pradesh	Puducherry, Sikkim and Manipur

Trends in Youth Development in India, 2010-2016

India Youth Development Index has shown improvement from 0.451 to 0.552 in 2016 by about 10 percent. While in aggregate, the youth development has improved at national level, the progress of the most of the states is relatively low as compared to the top performers such as Himachal Pradesh (0.669), Goa (0.624) and Delhi (0.622).

There is a clear evidence of wide gender disparity in youth development in favour of male than female in the country. The YDI score for male (0.61) is higher than that of female (0.49) with the difference of 12 percentage points. In comparison to YDI - 2010, the YDI Score for men increased by 11.9 percent, while in case of female it is only 8.2 percent.

Among the sub-indices, Youth Education Index (YEI) has the lowest score of 0.509 reflecting the poor status of education at secondary and tertiary levels. Though YEI score is improved by 9.6 percent from 2010 to 2016, the progress is not satisfactory. During the same period, Youth Health Index (YHI) score has increased from 0.521 to 0.598 with 7.7 percent improvement. Similarly, Youth Participation Index (YPI) score is also improved from 0.540 to 0.574 registering improvement by 3.4 percent. The significant progress is witnessed in case of Youth Amenities Index (YAI) with an increase from 0.295 in 2010 to 0.545 in 2016 recording about 25 percent increase. The only domain in which the declining trend found is Youth Work Index. The declining trend in youth Work Index from 0.684 in 2010 to 0.608 by 7.6 points is a matter of great concern, besides the persistent gender disparities in all sub-indices.

The comparison of YDI scores across the states exhibited wide regional disparities in youth development, Himachal Pradesh, Goa and Delhi are the top three states in YDI in 2016, while , Bihar, Jharkhand and Assam are at the bottom. Almost 13 states have recorded improvement in their performance from 2010 to 2016 with the highest gains for Chhattisgarh, Sikkim and Tripura. The least progress was recorded in Kerala, Nagaland and Meghalaya.

Tables 10.2 to 10.4 present the summary of performance of various states in 2016 in relation to overall performance at the national level.

Table 10.2 Interstate Comparison of Youth Development in India - 2016

States	YHI	YEI	YWI	YAI	YPI	YDI
Andhra Pradesh	B	A	A	A	A	A
Arunachal Pradesh	B	B	B	B	A	B
Assam	B	B	B	B	A	B
Bihar	A	B	B	B	B	B
Chhattisgarh	A	A	A	B	A	B
Delhi	A	A	B	A	B	A
Goa	A	A	B	A	A	A
Gujarat	A	A	A	A	B	A
Haryana	B	A	B	A	A	A
Himachal Pradesh	A	A	A	A	B	A
Jammu and Kashmir	B	A	B	A	B	A
Jharkhand	A	N	B	B	B	B
Karnataka	B	A	A	A	A	A
Kerala	B	A	B	A	A	A
Madhya Pradesh	A	B	A	B	B	B
Maharashtra	B	A	A	A	B	A
Manipur	A	A	B	B	A	B
Meghalaya	B	B	A	B	A	B
Mizoram	B	A	A	A	B	A
Nagaland	B	A	B	B	A	B
Odisha	B	B	A	B	A	B
Punjab	A	A	B	A	A	A
Rajasthan	A	B	A	B	B	A
Sikkim	B	B	A	A	A	A
Tamil Nadu	A	A	A	A	A	A
Tripura	B	B	B	B	A	B
Uttar Pradesh	B	B	B	B	B	B
Uttarakhand	B	A	B	A	B	A
West Bengal	A	B	B	B	A	B

Note: Where A-Above All India Score; B-Below All India (National) Score

Table 10.3 Interstate Comparison of Youth Development among Men in India - 2016

States	YHI _m	YEI _m	YWI _m	YAI _m	YPI _m	YDI _m
Andhra Pradesh	B	A	B	A	A	A
Arunachal Pradesh	B	B	B	B	A	B
Assam	B	B	B	B	A	B
Bihar	A	B	B	B	A	B
Chhattisgarh	A	A	A	B	B	B
Delhi	A	A	B	A	B	A
Goa	A	A	B	A	A	A
Gujarat	A	A	A	A	A	A
Haryana	B	A	B	A	A	A
Himachal Pradesh	A	A	B	A	A	A
Jammu and Kashmir	B	A	B	A	A	A
Jharkhand	A	B	A	B	B	B
Karnataka	B	A	B	A	A	A
Kerala	B	A	B	A	B	A
Madhya Pradesh	A	B	A	B	B	B
Maharashtra	B	A	B	A	B	A
Manipur	A	A	B	B	B	B
Meghalaya	B	B	B	B	B	B
Mizoram	B	B	B	A	A	B
Nagaland	B	A	B	B	B	B
Odisha	B	B	A	B	B	B
Punjab	A	A	A	A	A	A
Rajasthan	A	B	B	B	B	B
Sikkim	B	B	A	A	B	A
Tamil Nadu	A	A	A	A	A	A
Tripura	B	B	B	B	A	B
Uttar Pradesh	B	B	A	B	A	B
Uttarakhand	B	A	B	A	A	A
West Bengal	A	B	A	B	A	B

Note: Where A-Above All India Score; B-Below All India (National) Score

Table 10.4 Interstate Comparison of Youth Development among Women in India - 2016

States	YHI _f	YEI _f	YWI _f	YAI _f	YPI _f	YDI _f
Andhra Pradesh	A	A	A	A	A	A
Arunachal Pradesh	B	B	A	B	A	B
Assam	B	B	B	B	A	B
Bihar	B	B	B	B	A	B
Chhattisgarh	A	A	A	B	B	A
Delhi	A	A	B	A	B	A
Goa	A	A	A	A	A	A
Gujarat	A	B	A	A	A	A
Haryana	A	A	B	A	A	A
Himachal Pradesh	A	A	A	A	A	A
Jammu and Kashmir	B	A	A	A	A	A
Jharkhand	A	B	B	B	B	B
Karnataka	B	A	A	A	A	A
Kerala	A	A	B	A	A	A
Madhya Pradesh	A	B	A	B	B	B
Maharashtra	B	A	A	A	B	A
Manipur	A	A	A	B	A	A
Meghalaya	B	A	A	B	A	A
Mizoram	B	A	A	A	A	A
Nagaland	B	A	B	B	B	B
Odisha	B	B	A	B	B	B
Punjab	A	A	B	A	A	A
Rajasthan	A	B	A	B	A	A
Sikkim	B	A	A	A	B	A
Tamil Nadu	A	A	A	A	A	A
Tripura	B	B	B	B	B	B
Uttar Pradesh	B	B	B	B	A	B
Uttarakhand	B	A	A	A	A	A
West Bengal	A	B	B	B	A	B

Note: Where A-Above All India Score; B-Below All India (National) Scores

Moving Forward

Youth Development is a multi-dimensional concept that can only be measured effectively by Youth Development Index. It is a composite measure embodying an aggregate of several indicators which enable the user to gain insights on youth development, understand the big picture, ascertain trends, assess the needs of diverse groups and identify the priority sectors for interventions. Youth Development Index serves as an effective decision support tool for sound policy development, rational resource allocation and driving action. All the state and non-state actors can use the index not only for policy dialogue and policy design but also to promote accountability of the state agencies towards programmatic efforts. Following are the recommendations made based on the insights drawn from the YDI Report – 2017.

Communicating the status of youth

The India YDI Report - 2017 has highlighted the current status of youth at national and sub-national levels, States that are lagging behind in youth development, extent of progress made in youth development over a time period and the weak domains that call for strategic interventions. Thus the YDI serves as a decision support tool. Dissemination of the results of India YDI Report – 2017 across the regions and states through multiple channels will help the concerned states to take appropriate measures to address the issues.

YDI as a policy advocacy tool

Youth development being a multi –dimensional concept, YDI was constructed using various domains that affect the lives of youth. The India YDI – 2017 with sector-wise analysis of youth status pointing to the gaps in each domain serves as policy advocacy tool, indicating the need for indicator specific programmatic interventions involving multi-sectoral approach. Therefore, identifying all the youth centric programmes / schemes implemented by various sectoral Ministries / Departments and giving impetus to these programmes under the umbrella of National youth Policy – 2014 will facilitate effective policy implementation. There is a need to create a platform with the key officials or representatives of the Sectoral Ministries to accomplish the policy goals. This would harness the benefit of inter - ministerial policy dialogue keeping in view of YDI results and the consequent inter - sectoral coordination, convergence of programmes / schemes, improved participation and accountability.

YDI as a monitoring and evaluation tool

The India YDI – 2017 provides a benchmark for tracking the progress in youth development and serves as a Monitoring and Evaluation tool. A broad-based national level committee may

be constituted to review the national and state youth policies, reassess the needs of diverse segments of youth and submit the periodical status reports with recommendations to the nodal / concerned ministries for the follow up measures. Third party evaluation by experts can also be encouraged in this regard. The index can also be used to evaluate the effectiveness of service delivery and identifying the institutional gaps. It can help in redesigning programme content and improving implementation strategies.

Youth information management

The experiences encountered while compiling data for the YDI – 2017 sheds light on the data deficits in several domains. The available data remains un-coordinated, inconsistent and non-comparable for index construction. The absence of age - disaggregated data for certain variables pose a major challenge. Most of the statistical surveys conducted by the government departments are not youth centric and suffer from the variations in the definition of variables. Thus the current gaps suggest the immediate need for addressing the deficiency in the statistical data in India through sound information management system involving coordination with the coordination with the ministries / departments / agencies. Continuous supply of data at all levels with periodical updates be ensured to enable the index construction and monitoring of policy implementation on continuous basis.

Research on youth development

Youth Development Index is just a starting point that provides status of the youth in all the relevant domains across the states / regions in a single snapshot. Based on the inferences drawn one has to dive deep to identify the issues and conduct in-depth studies. A separate research centre can be established at RGNIYD to carry out research on continuous basis on issues and concerns of youth in various priority sectors, problems of the marginalised youth, policy analysis, evaluation studies on policy implementation and impact assessment of the programmes. Some longitudinal and inter regional/state comparative studies can also be undertaken. It is also suggested to carry out National Youth surveys at least once in 5 years. The findings of research carried out can be used as inputs to policy reforms, programme design and even for designing subsequent youth development index. The centre can also document the best practices in all the priority sectors across the country that can be used for replication in other places

Enhancing capabilities

Though, India has made significant progress in terms of education and employment, still there is a long way to go. The state has a greater responsibility of enhancing the capabilities of youth to realise their full potential by improving equitable access and broadening

opportunities. The policy options enhancing capabilities in education sector should move beyond the compulsory enrollment that offer mere literacy and numerical skills. The government should ensure equitable, inclusive and quality education with life-long learning opportunities. Quality education should be fostered with strong focus on reforms in curricula, pedagogic process, learning assessment etc. Inclusive education should focus on tribal, nomadic and migrant youth, youth in difficult circumstances, historically disadvantaged and economically weaker sections.

Enhancing the capabilities of the youth not in education and those who are working in informal sector be ensured with policy options offering second chances. This may include remedial measures and vocational training with diversity of options such as flexible modules and work schedules, equalancy programmes, dual system of schooling and path ways to life-long learning, combined with life skills education. The flagship programmes of Make in India, Digital India and Skill India Mission aiming at fresh skilling, upskilling and reskilling should be upscaled by employing ICT and through linkages with accredited institutions with special focus on drop outs tribal, rural and remote areas.

Social justice

Despite the impressive progress made in Human Development on several fronts, development gains have not been universal in the country. Relative Deprivations, regional imbalances and widening gap in key capabilities have become critical concerns for youth development. Hence, it embodies a social and political commitment to identify and break the deep seated barriers that exclude certain segments of youth. Therefore, it becomes more important to identify the relative deprivations, capabilities and opportunities across the social categories and propose policy options to contextualise the youth development strategies.

Empowering youth

Building human capital needs to be viewed beyond expanding opportunities and enhancing capabilities. Youth cannot reach their full potential unless they engage themselves as active citizenry and development partners. There should be an enabling environment for their active civic and political participation. A wide range of forums such as e-discussions, virtual debates, webinars etc. can be used to reach out the youth across the length and breadth of the country.

About RGNIYD

Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur, Tamil Nadu, is an Institute of National Importance by an Act of Parliament No. 35/2012 under the Ministry of Youth Affairs and Sports, Government of India. The Institute functions as vital resource centre coordinating training, research, orientation, extension, outreach, documentation and dissemination activities in the field of youth development besides offering Post Graduate Programmes in Youth Work viz., M. Sc. Counselling Psychology, M. A. Development Policy and Practice, M. A. Gender Studies, M. A. Social Innovation and Entrepreneurship, M. A. Local Governance and Development, M. A. Social Work (Youth and Community Development) besides offering B. Voc. in Apparel Manufacturing and Entrepreneurship and B. Voc. Fashion Design and Retail. The institute also offers P. G. Diploma in Youth Development, Diploma in Political Leadership and Doctoral Programmes in Youth Work (inter-disciplinary).

The Institute organises training programmes for key youth functionaries and provides core training material and expertise in youth development. Training manuals and special modules to impart specific techniques are brought out by the Institute. As a think tank of the Ministry of Youth Affairs and Sports, the Institute undertakes action research and evaluation studies which help in formulating National Youth Policies, Youth Development Index and Programmes to cater to the current needs and aspirations of the youth.

RGNIYD endeavours to sensitise youth to the concept, power, functions, role and responsibilities of PRIs. The Institute inculcates time-honoured social values through a series of measures including cultural exchange programmes, youth meets and volunteer squads. RGNIYD serves as a national level documentation and information dissemination centre on youth development. As a part of information dissemination, RGNIYD brings out a Journal *Endeavour*, a Newsletter, Research Reports and Occasional Papers.

The consultancy services of the Institute are available to national and international organisations viz., UNICEF, UNESCO, UNFPA, SAARC, Commonwealth Youth Programme (CYP) and others besides various Ministries/Departments of the Central and State Governments, Universities, Research and Training Organisations, SHGs, NGOs, CSOs and CBOs concerned with youth development.

With the vision statement of 'Moulding Young Facilitators of Change', each curriculum is designed with a focus in interdisciplinary training, development, documentation and research. RGNIYD, one of pivotal Institutes, moulds its graduates into future Professionals with sustainable careers. Their tenure at RGNIYD ensures that they evolve as conscientious professionals who also contribute to the development of the people and of their Institutions that they choose for this mandate.

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