

District wise skill gap study for the State of Madhya Pradesh

Contents

- **Objectives of the study**
- **Methodology**
- **State Analysis**
- **Recommendations**

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Objective of the study

Madhya Pradesh District Skill Gap Study objectives would include a review of the following at an overall state and for all districts:

- Socio-economic profile – demography, economic profile of district by industry, state of education.
- Identify developmental opportunities keeping in mind factor endowments and stakeholder perspectives.
- Identify specific developmental initiatives/projects which have an impact on employment generation.
- Articulate the aspirations of the youth.
- Identify the current and future (2012- to 2022) skills and manpower requirements by industry and estimate the gap that exists.
- Study the existing VT infrastructure booth in the private sector and the government domain.
- Suggest suitable interventions/recommendations to address the skills gap.
- Recommendations have to be specific and actionable.
- Recommendations should also include specific initiatives that NSDC can take based on the mandate of the organization.
- Create an action plan with indicative timelines

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Methodology

KPMG has adopted a structured methodology to understand the skill ecosystem in Madhya Pradesh, assess incremental manpower needs, and collate insights, to arrive at recommendations to address the manpower skill gaps in the districts of the state.

- Salient Features of the Study include:
 - Socio-economic Profile: State/Districts
 - Sectoral Focus: NSDC priority sectors along with district level potential sectors
 - Voice of Stakeholders: Capturing insights from stakeholders involved in skill training
 - Estimation of Manpower Supply: State/Districts
 - Assessment of Existing Skill Training Capacity: State/Districts
 - Computation of Incremental Employment Potential: Using a sector specific approach
 - Manpower Supply-Demand Gap: State/Districts

Methodology

Research Methodology of the Study

The study was carried out through both primary and secondary research methodology, as well as qualitative and quantitative techniques.

Primary Research: Primary research inputs were collected through research techniques such as in-depth discussions, formal interviews, and Focus Group Discussions (FGD). Interview schedules, FGD Guidelines and points for field observations were developed in accordance to the study objectives. Consultation meetings were conducted with State Government Departments, District Administration Officials, Skill Training Providers, Skill Training Beneficiaries, Industry Representatives, Migrant Labour to understand their perspectives on skill development

| Activity | |
|-------------------------------|-----|
| Primary Interactions | 720 |
| FGDs across Madhya Pradesh | 40 |
| Students participated in FGDs | 700 |

Secondary Research: Secondary Data were collected from number of sources including central, state and district government/administration agencies, especially the Department of Economics and Statistics, Department of Industries - and program specific information from departments with a mandate in skill training, and from studies commissioned by funding agencies, NGOs etc.,

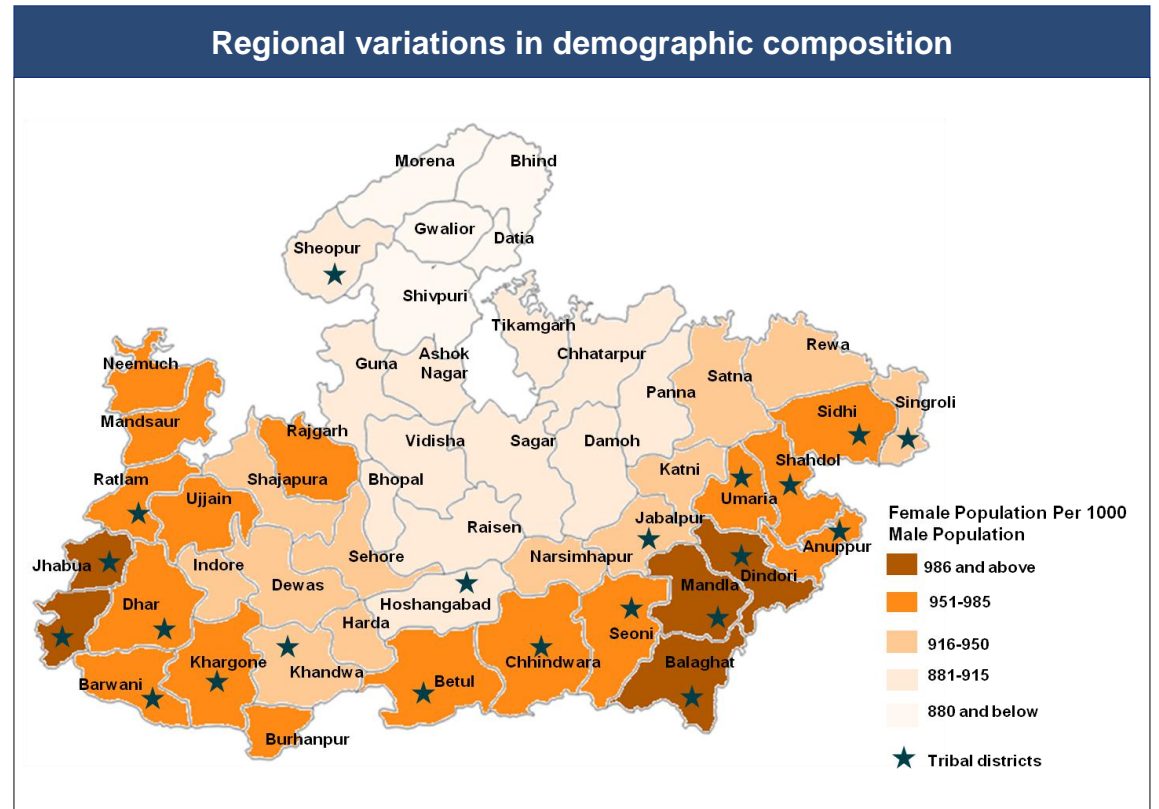
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State Analysis-Social Profile

| Socio-economic indicator | Madhya Pradesh | India |
|---|-----------------------|-----------------------|
| Gender Ratio (2011) | 930 female/1000 males | 940 female/1000 males |
| Overall Literacy Rate(2011) | 70.63% | 74.02% |
| Male Literacy Rate (2011) | 80.53% | 82.14% |
| Female Literacy Rate (2011) | 60.02 | 65.46% |
| Infant Mortality Rate(IMR), 2010 | 62 | 47 |
| Crude Birth Rate, 2010 | 27.3 | 22.1 |
| Crude Death rate, 2010 | 8.3 | 7.2 |

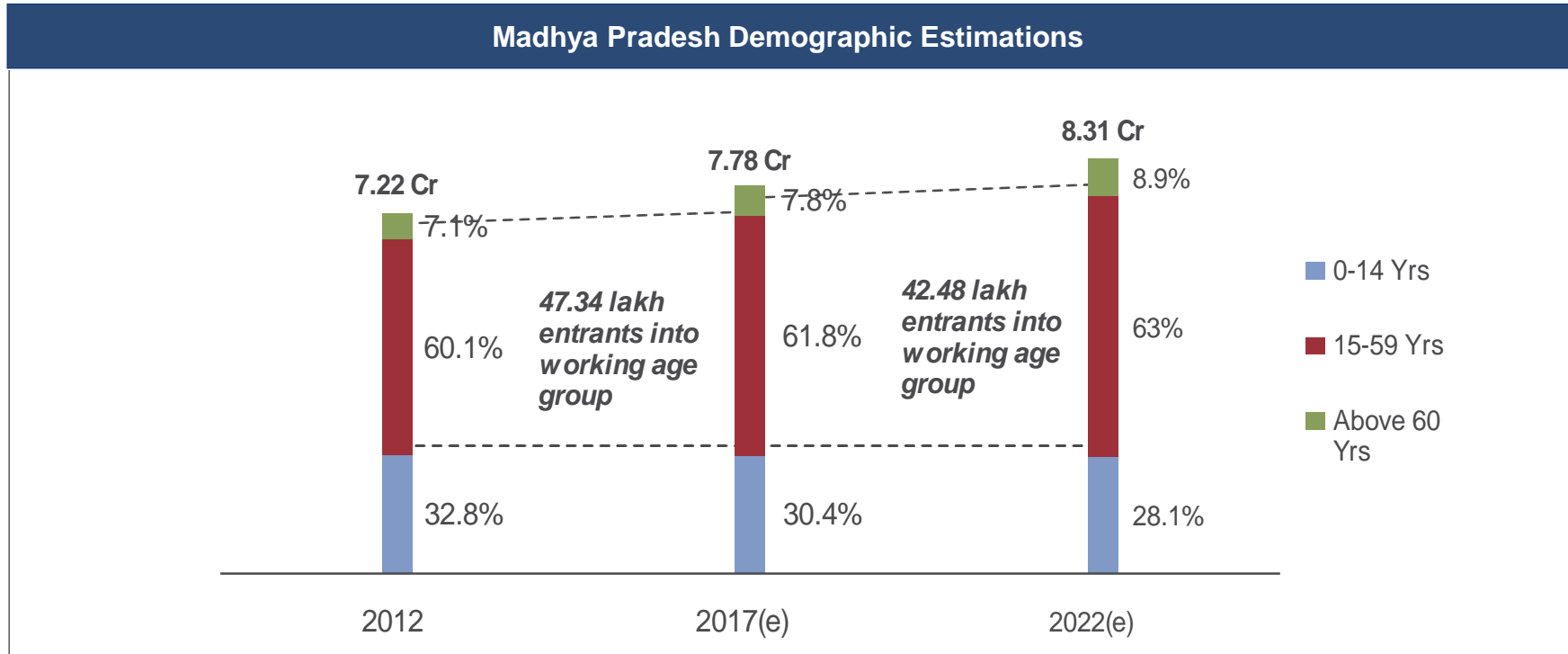
Source :Census 2011, Madhya Pradesh Human Development Report



Source :Census 2011, Census 2001

...with significant variations in social composition of demographics

State Analysis-Social Profile

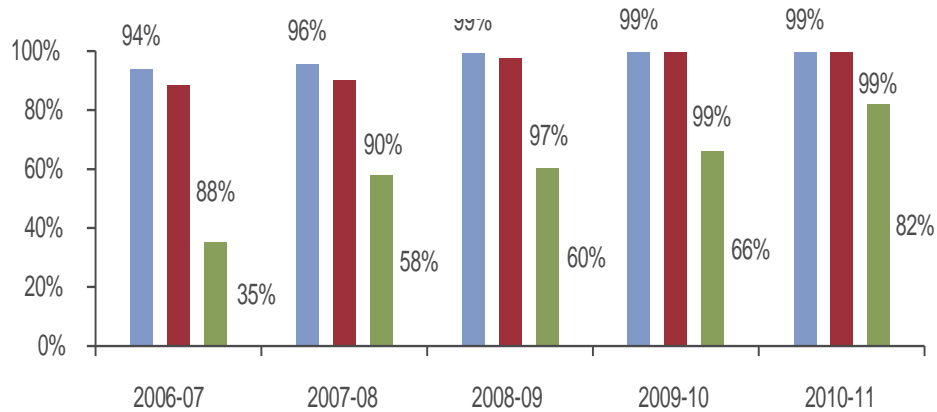


Source :MP Planning Commission, KPMG Analysis

...experiencing an addition of around 9 million to the workforce in the next decade

State Analysis-Social Profile

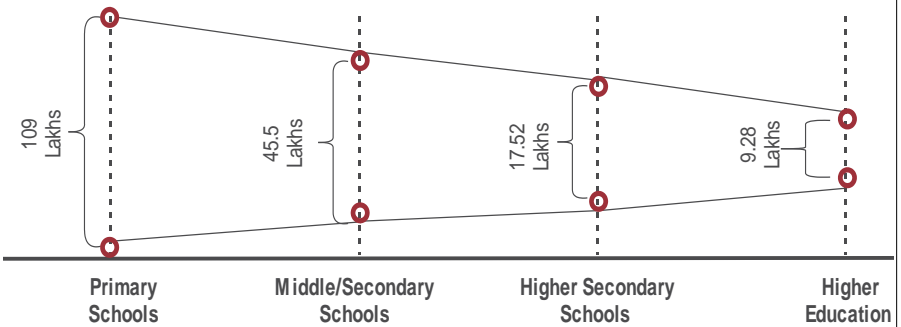
Enrolment in K12 Institutions of Madhya Pradesh



■ NER in Primary Classes ■ NER of Upper Primary Classes ■ Transition from Upper Primary to Secondary Classes

Source :Madhya Pradesh Educational Statistics 2010-11

Current State of Institutional Capacities



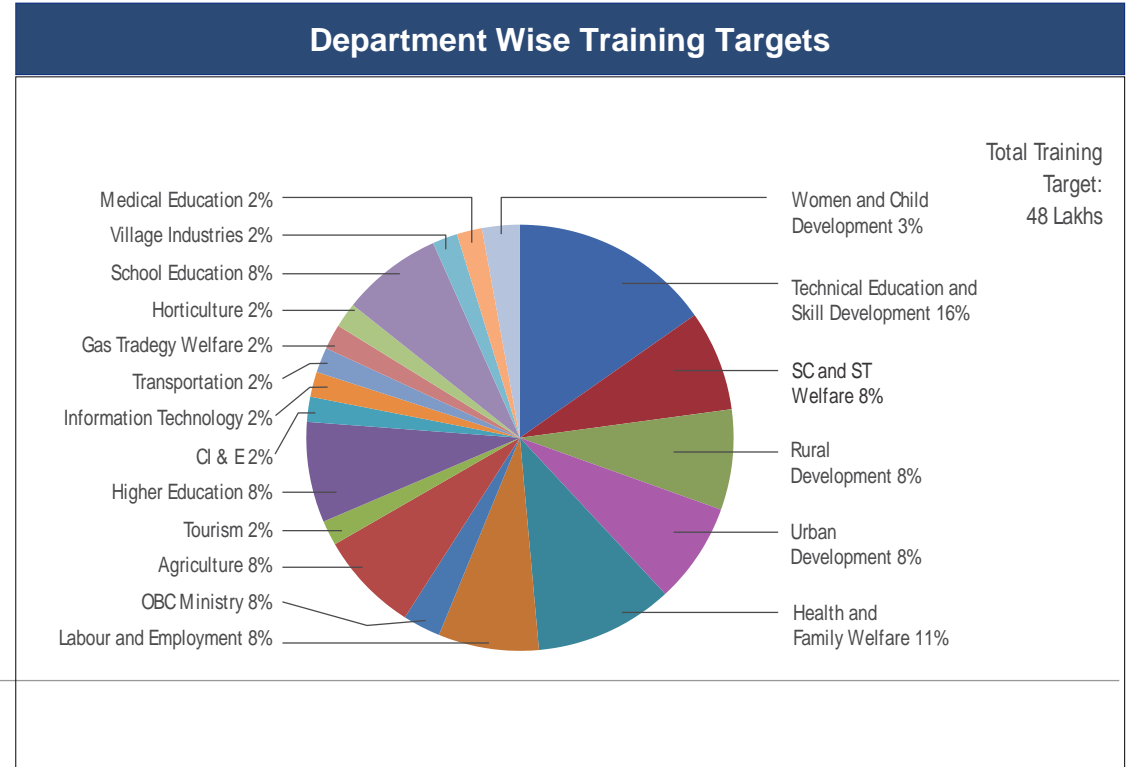
Source :Madhya Pradesh Educational Statistics 2010-11

Limited growth of higher education capacities in comparison to K 12 institutions has created significant gap in the educational system of the state

State Analysis-Social Profile

| Category of Institutions | Number of Institutions | Intake |
|--------------------------|------------------------|--------|
| BE/Architecture | 222 | 82,400 |
| Management | 218 | 18,490 |
| MCA | 94 | 6,348 |
| Pharmacy | 127 | 8,829 |
| Medical Colleges (MBBS) | 11 | 1070 |
| Polytechnic(Vocational) | 58 | 13,630 |
| ITI/ ITC | 279 | 38,880 |

Source :Madhya Pradesh Educational Statistics 2010-11



Source :Madhya Pradesh Skill Development Mission

Vocational education from current levels of low penetration is expected to play a key role to bridge the gap in educational system riding on Government thrust...

State Analysis-Social Profile

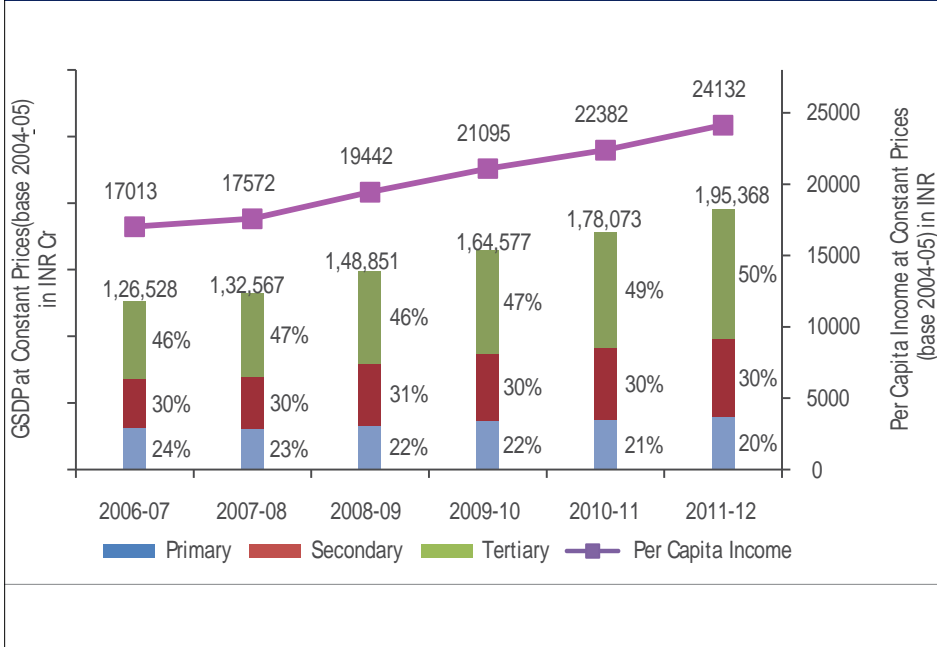
Construction Workers Welfare Cess, Dept Agriculture, Dept of Labour based training schemes have large potential in the state...

| Ministry under Central Govt / Schemes | Scheme Details | Training Potential 2012-17 |
|---|---|----------------------------|
| Building and Other Construction Workers' Welfare Cess | Skill Training for Construction Activity based on the availability of Construction Cess with the State Government, of which around 50% can be deployed in manpower training initiatives | 2,50,000 |
| Ministry of Agriculture | Skill Training for agri and allied sectors based on national targets of the sector and state's employment share in the agriculture and allied activities | 97,336 |
| Ministry of Labour | the state is expected to receive funds based on national targets set for Modular Employability Scheme under Skill Development Initiative Scheme, proportionate to its contribution to secondary sector activities | 72,000 |
| Ministry of Communication and IT | Scheme wise national targets for software export industry including setting up of DOEACC Centres/RIELIT and upgradation of existing centres, Special Manpower Development Programme in the area of VLSI Design and related software (SMDP-II); Estimations are based on national targets and the state's aspiration to sectoral growth in IT/ITEs | 44,000 |
| Ministry of MSME | National MSME manpower development targets apportioned to state based on state's employment share in MSME segment | 36,000 |
| Ministry of HUPA | Physical training targets from an estimated allocation of INR 38.86 crores towards skill training component STEP-UP under Swarna Jayanthi Shahari Rozgar Yojana | 21,118 |
| Ministry of Textiles | Manpower training targets under Integrated Skill Development Scheme for Textiles and Apparel Sector including Jute and Handicrafts, apportioned based on state's contribution to textile sector | 15,000 |

Source :Madhya Pradesh Skill Development Mission, KPMG Analysis

State Analysis-Economic Profile

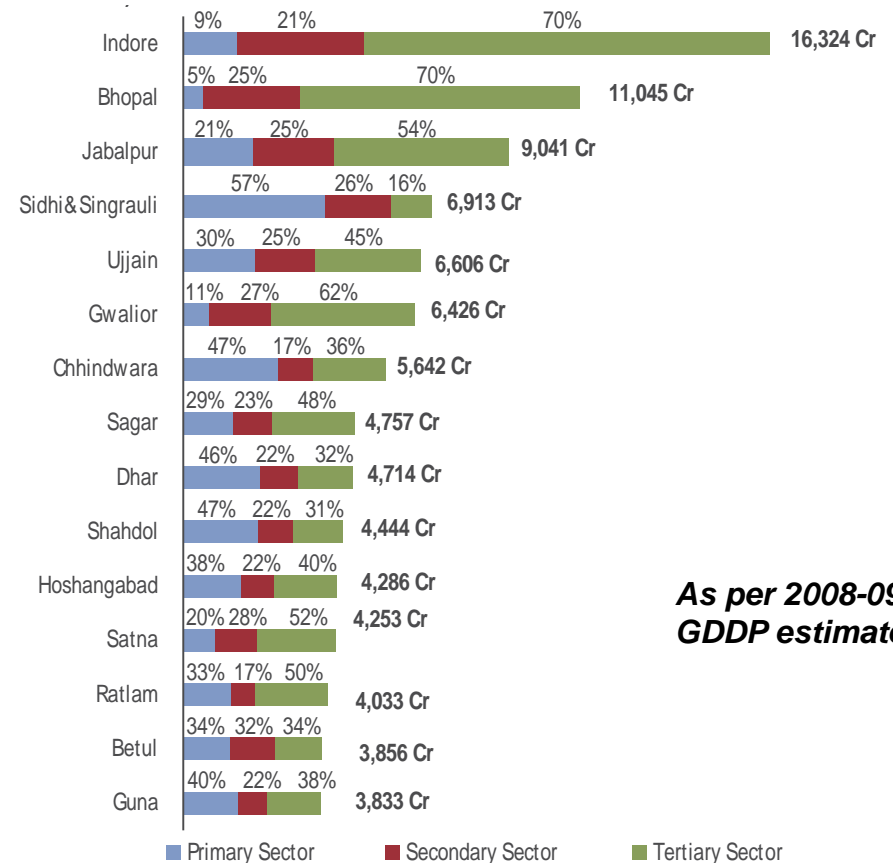
Economy of key districts in Madhya Pradesh



Source :MP State Planning Commission

State economy has grown at 9.7% CAGR during 2006-12 driven by secondary and tertiary sectors...

Economy of key districts in Madhya Pradesh



As per 2008-09 GDDP estimates

Geographically concentrated economy with key district economies accounting for more than half of GSDP

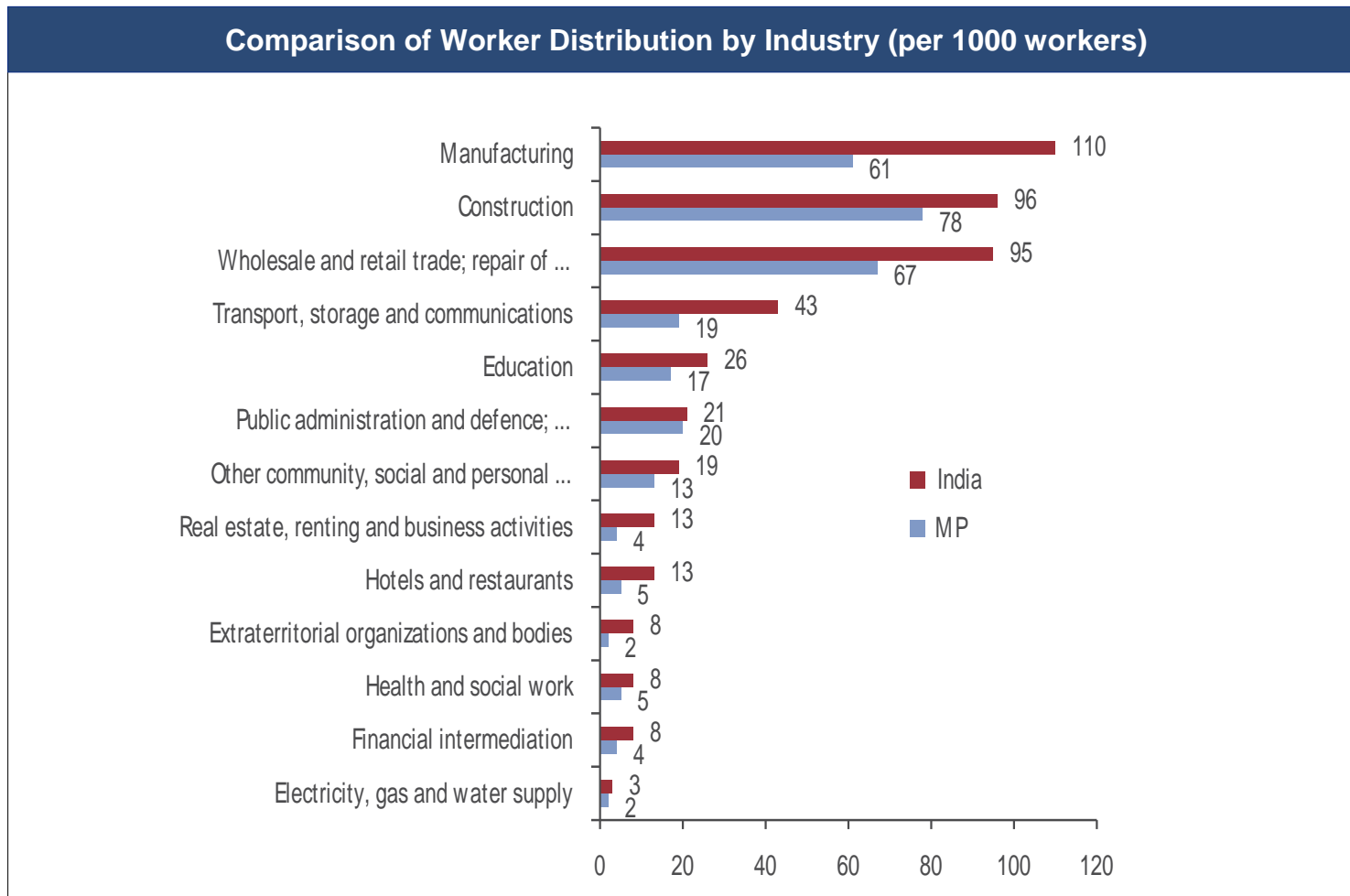
State Analysis-Economic Profile

| Sector | Activities | Districts |
|--|---|--|
| Primary(Agriculture and Allied) | <p>Agricultural Crops: Rice, wheat, maize, mustard, sugarcane, soyabean, jowar and bajra.</p> <p>Agri-Allied Crops: Horticulture and Sericulture</p> <p>Agri-Allied Activities: Diary, Poultry, Piggery, Goatery and Fisheries</p> | Dhar, Ujjain,Chindwara, Jabalpur, Hoshangabad, Guna and Ashok Nagar, Dewas, Indore, Shajapur, Vidisha, Sagar, Ratlam, Sehore, Mandsaur, Khargone |
| Secondary(Manufacturing) | Agro-products, Chemical and Chemical Products consumer goods, drugs and pharmaceuticals, mines and minerals, manufacturing and textiles sectors | Indore, Bhopal, Jabalpur, Ujjain,Gwalior, Dhar, Satna, Dewas, Sagar, Khandwa |
| Tertiary(Services) | Trade, Retail, Hospitality and Tourism, Financial Services, Healthcare, Transportation and Logistics, Education | Indore, Bhopal, Jabalpur, Gwalior, Ujjain,Sagar, Satna, Ratlam,Chindwara, Rewa |

Source : KPMG Analysis

Further, regional prominence of specific economic activities is witnessed...

State Analysis-Economic Profile



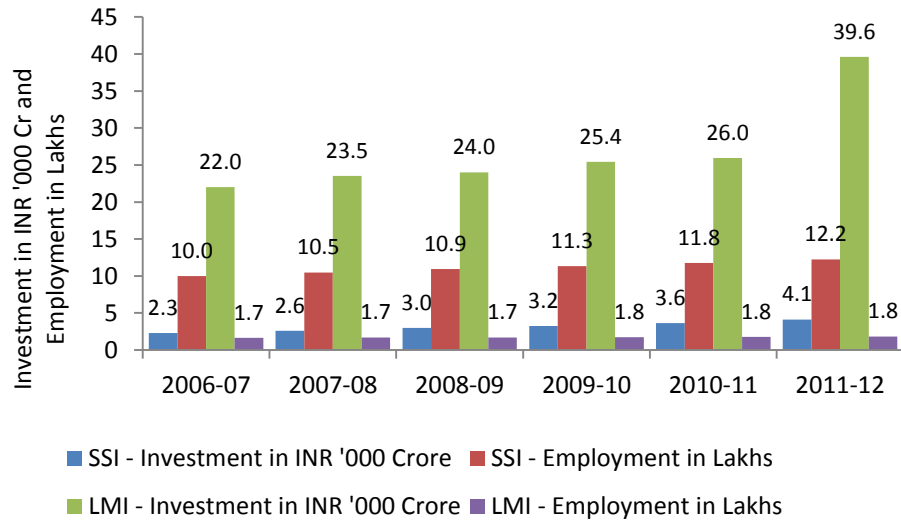
Source : NSSO 66th Employment Survey, KPMG Analysis

Madhya Pradesh, an agrarian workforce economy has lower penetration of manufacturing and services sectors compared to national average...

State Analysis-Economic Profile

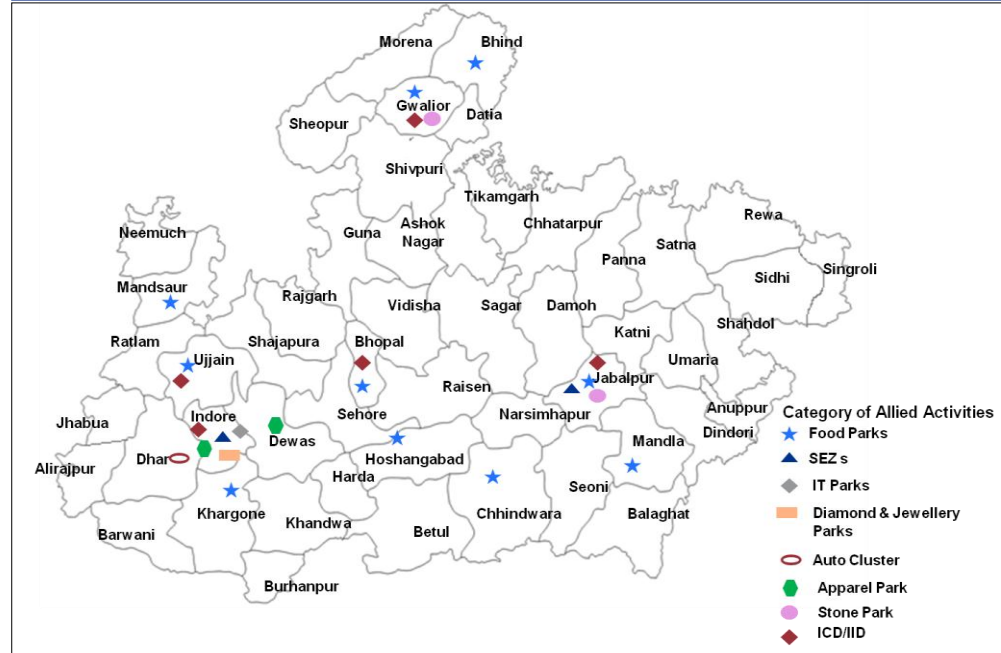
State is poised to witness significant industrial growth over the next decade...

Investment and Employment Trends



Source :MP Industries & Commerce Department

Industrial Infrastructure in Madhya Pradesh



Source :MP Industries & Commerce Department

...supported by conducive Government policies and improving industrial infrastructure

State Analysis-Economic Profile

Witnessing emergence of new employment generating sectors including allied services like security services and house keeping...

| Sector | Policy Thrust | Growth Regions |
|-------------------------|---|---|
| IT-ITES | Employment and Land Rate Concessions , Exemption of stamp duty , Exemption on tax and acts , Power Related Incentives , Special incentive to invest in E-governance projects | Indore, Bhopal, Gwalior, Jabalpur |
| Renewable Energy | Special package for mega projects , Industrial investment promotion assistance , 5 year electricity duty exemption on captive power generation , 25% capital subsidy | Gwalior, Indore, Bhopal, Jabalpur and Rewa for solid waste based power. Rajgarh, Neemuch, Mandsaur for solar power. Narmada Basin area for geo thermal energy. Ratlam, Dewas for wind energy |
| Wellness Tourism | Tourism is a thrust sector for the State Government | All major tourist destinations in Madhya Pradesh have potential for the growth of Rejuvenation, Yoga & Meditation, Diseases Management , ayurvedic treatment and spa industries. |
| Logistics | Madhya Pradesh Warehousing & Logistics Corporation (MPWLC) is appointed as the nodal agency for the development of logistics sector. Growth thrust on Road ways through encouragement of BOT contracts etc., | Multi Modal Logistics Hub –Pitampur, Composite Logistics Hubs -Bia, Ujjain, Jabalpur Construction of Modern Warehouses -Balaghat, Katni, Shahdol, Shivpuri, Morena . Operating & Maintaining CPC –Indore Composite Logistics Hub –Hoshangabad |

Source : KPMG Analysis

...expected to result in realignment of workforce distribution over the next decade

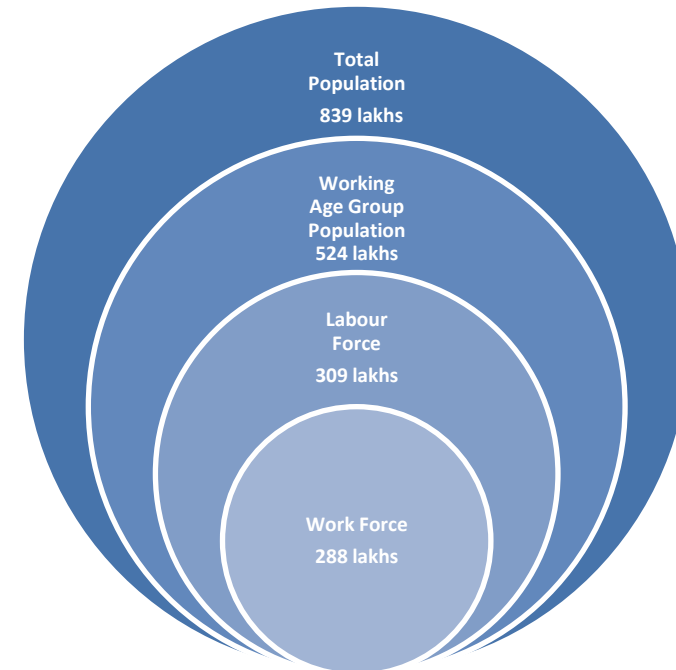
State Analysis- Labour Force Estimations

Madhya Pradesh Workforce Estimations (in lakhs)

| Year | Population | Working Age Population | Labour Force | Work force | Incremental Supply 2012-17 | Incremental Supply 2017-22 |
|------|------------|------------------------|--------------|------------|----------------------------|----------------------------|
| 2012 | 722 | 434 | 256 | 239 | | |
| 2017 | 788 | 481 | 283 | 265 | 47 | |
| 2022 | 839 | 524 | 309 | 288 | | 43 |

Source : Census 2001, NSSO 66th Round of Employment Survey, KPMG Analysis

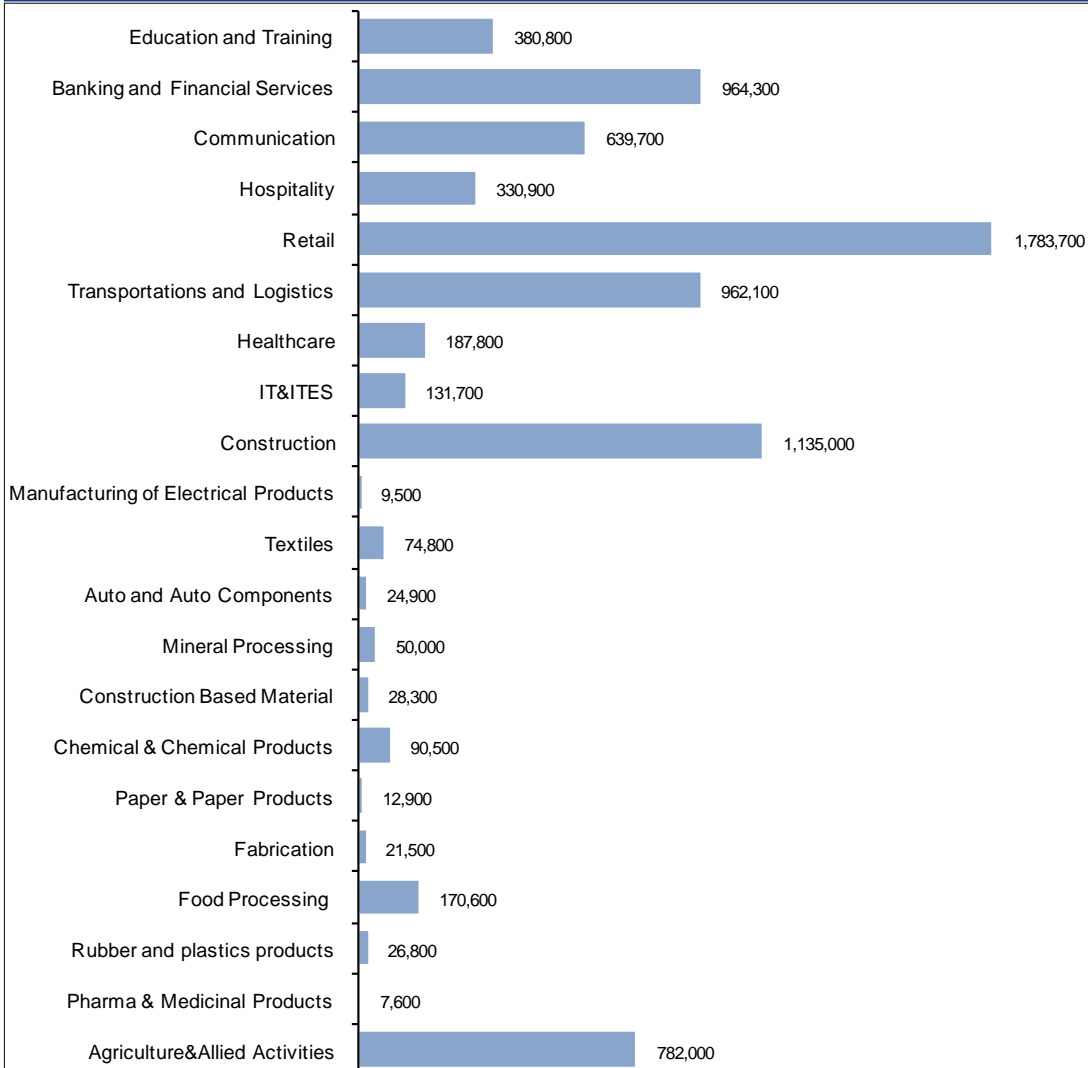
Human Resource Supply-2022



Madhya Pradesh workforce would reach 28.8 million by 2022 from current estimates of 23.9 million...

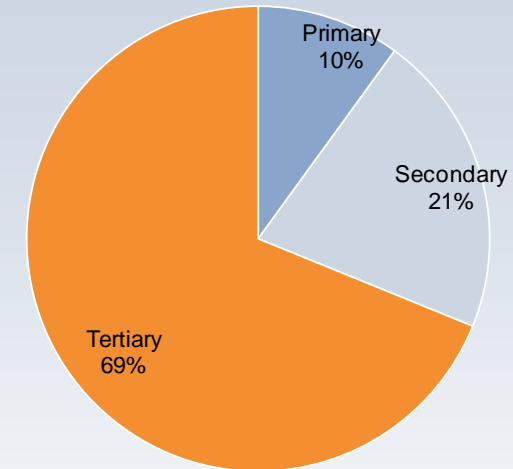
State Analysis-Incremental Manpower Requirement

Incremental Manpower Requirement 2012-22



Sector wise Break-Up

100% = 78,16,000



Predominantly tertiary sector driven job market with Construction being major employment generating area within secondary...

Source: KPMG Analysis

State Analysis- Incremental Manpower Requirement

| Sector | 2012-17 | | | | 2017-22 | | | |
|---------------------------------|------------------|-----------------------|--------------------|--------|------------------|-----------------------|--------------------|--------|
| | Skilled Category | Semi-Skilled Category | Unskilled Category | Total | Skilled Category | Semi-Skilled Category | Unskilled Category | Total |
| Agriculture & Allied Activities | NA | NA | 422771 | 422771 | NA | NA | 359915 | 359915 |
| Pharma & Medicinal Products | 204 | 2680 | 1187 | 4071 | 177 | 2326 | 1032 | 3535 |
| Rubber and plastics products | 717 | 6578 | 7036 | 14331 | 622 | 5707 | 6108 | 12437 |
| Food Processing | 4568 | 19227 | 67564 | 91359 | 3966 | 16695 | 58653 | 79314 |
| Fabrication | 575 | 5367 | 5550 | 11492 | 499 | 4660 | 4816 | 9975 |
| Paper & Paper Products | 345 | 3105 | 3451 | 6901 | 300 | 2695 | 2996 | 5991 |
| Chemical & Allied Products | 2420 | 17382 | 28601 | 48403 | 2101 | 15087 | 24828 | 42016 |
| Construction Based Material | 756 | 5425 | 8930 | 15111 | 657 | 4731 | 7753 | 13141 |
| Mineral Processing | 1337 | 11866 | 13542 | 26745 | 1161 | 10300 | 11757 | 23218 |
| Auto and Auto Components | 666 | 8292 | 4355 | 13313 | 578 | 7202 | 3780 | 11560 |
| Textiles | 2002 | 8917 | 29123 | 40042 | 1738 | 7744 | 25285 | 34767 |
| Electrical Products | 253 | 3037 | 1763 | 5053 | 220 | 2635 | 1548 | 4403 |
| Construction | 30022 | 75654 | 494755 | 600431 | 26728 | 67354 | 440473 | 534555 |
| IT&ITES | 3294 | 62588 | NA | 65882 | 3291 | 62520 | NA | 65811 |
| Healthcare | 3806 | 72317 | NA | 76123 | 5588 | 106169 | NA | 111757 |
| Transportations and Logistics | 22444 | 53716 | 372729 | 448889 | 25660 | 61414 | 426128 | 513202 |
| Retail | 48804 | 123446 | 803838 | 976088 | 40381 | 102138 | 665099 | 807618 |
| Hospitality | 9054 | 45556 | 126461 | 181071 | 7491 | 37692 | 104633 | 149816 |
| Communication | 14558 | 81917 | 194681 | 291156 | 17429 | 87804 | 243340 | 348573 |
| Banking and Financial Services | 23536 | 48883 | 398309 | 470728 | 24679 | 51256 | 417650 | 493585 |
| Education and Training | 9135 | 165790 | 7782 | 182707 | 9907 | 178896 | 9343 | 198146 |

- High proportion of semi skilled and un-skilled job market
- Un-skilled employment to emerge from predominantly un-organized industries
- Sectoral skill requirements have considerable regional variations depending on the penetration of mechanization etc.,
- Employment from Agri-Allied activities would be mainly due to complete/partial displacement of workforce from cultivation activities.

Source : KPMG Analysis

State Analysis- Incremental Manpower Requirement

Sector wise focus districts for organized employment opportunities...

| Sector | Focus Districts |
|---|---|
| IT-ITES | Indore, Bhopal, Gwalior, Jabalpur |
| Logistics | Dhar, Ujjain, Jabalpur Balaghat, Katni, Shahdol, Shivpuri, Morena, Indore, Hoshangabad |
| Hospitality& Tourism | Indore, Bhopal, Gwalior, Ujjain, Sagar |
| Retail | Indore, Bhopal, Gwalior, Jabalpur |
| Healthcare | Indore, Bhopal, Satna, Ratlam, Rewa |
| Financial Services | Indore, Bhopal, Gwalior, Jabalpur, Sagar, Ratlam, Chhindwara, Rewa |
| Auto Sector | Dhar |
| Engineering Products | Bhopal, Indore |
| Mineral & Mineral Processing | Balaghat, Singrauli, Panna, Katni, Satna and Sagar |
| Cement Industry | Satna, Damoh, Panna and Rewa |
| Agro and Food Processing | Bhopal, Sagar, Gwalior, Jabalpur |
| Textile Industry | Dewas, Dhar, Ujjain, Bhopal, Indore |
| Logistics | Indore, Dhar (Pitampur), Hoshangabad, Ujjain, Jabalpur, Balaghat, Katni, Shahdol, Shivpuri, Morena |
| Renewable Energy | Gwalior, Indore, Bhopal, Jabalpur and Rewa(solid waste based power) Rajgarh, Neemuch, Mandsaur (solar power), Ratlam, Dewas(wind energy) |

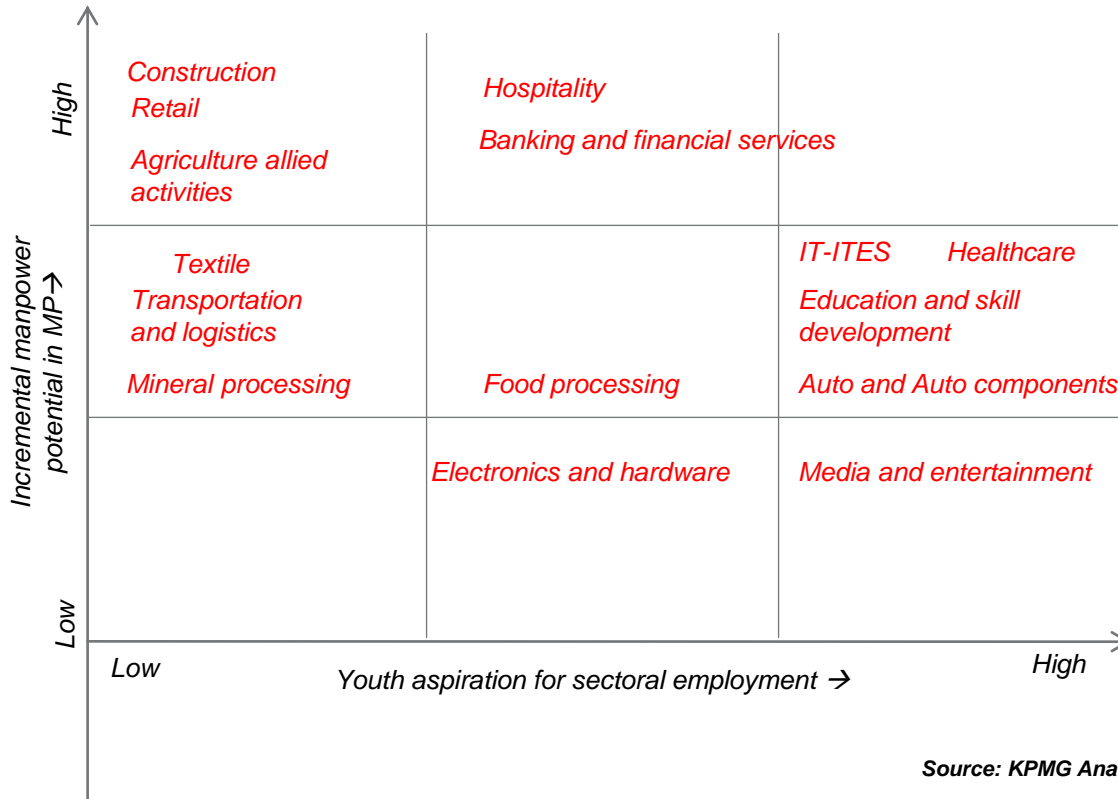
Source : KPMG Analysis

State Analysis- Supply Demand Gap(2012-17)

| Skill Category | Incremental Demand | Incremental Supply | Source of Supply | Training Gap 2012-17 |
|---------------------|--------------------|--------------------|---|----------------------|
| Skilled | 1.78 lakhs | 5.85 lakhs | From higher education institutes | -4.07 lakhs |
| Semi Skilled | 8.21 lakhs | 5.97 lakhs | From Vocational Training Institutes and Various Govt Training Schemes | 2.24 lakhs |
| Un-Skilled | 29.92 lakhs | 31.03 lakhs | School drop-outs without any access to formal skill training | -1.11 lakhs |

- **Significant capacity expansion requirement for semi-skilled category through vocational education in Madhya Pradesh**
- **Vast scope of employment in un-organized sector for un-skilled workers and limitations of the study in terms of sectoral coverage attribute to the surplus manpower in this category.**
- **Excess supply in high skilled category would indicate relatively low employment opportunities in this category within the state expected to result in migration of skilled workforce from the state**

State Overview- Skill Development Attractiveness



... stakeholders need to work on building a positive image of skill development

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Recommendations-Stakeholders

Government

- Setting up Anchor Institutes for Manpower Development in focus industries
- Offering Short term Training Programs Courses through Public Private Partnership
- Incorporating Skill Training in mainstream K12 Education
- Exploiting technology for trainer development activities, as well as to reach out to remote areas
- Transformation of District Employment Exchanges into Skill Management Centers

NSDC/SSCs

- Support training initiatives in the priority sectors of Construction, Mining, Textiles and Apparel, Power, Healthcare, Education and Agri-allied such as Dairy, Poultry Farming and Horticulture
- Setting up a joint forum of NSDC Investee Training Companies, NSDC partner Training companies and representatives of Government of Madhya Pradesh. Aimed at bringing national/global level training providers to Madhya Pradesh

Industry

- Promote cluster based skill training initiatives in PPP mode in industrial clusters
- Short term Training Programs Courses through Public Private Partnership (PPP)
- Setting up of sector skill councils(SSCs)

Training Providers

- Focus on Government endowment training schemes for sectors of Construction, Retail, Transportation and Logistics, Food Processing and Healthcare
- Set up finishing schools for tertiary sectors with a high salary potential, where students will be willing to pay and learn – eg: IT&ITES and Banking and Financial Services

A task committee should be set up by Government to implement the skill development initiatives including all the stakeholders

Thank You



Narayanan Ramaswamy

Head – Education Advisory

KPMG India

+91 (44) 3914 5208

email: narayananr@kpmg.com

Akhil Krishna

Manager– Education Advisory

KPMG India

+91 (80) 30654479

email: ackrishna@kpmg.com

Gaurav Kumar

Manager– Education Advisory

KPMG India

+91 (124) 43075203

email: gauravkumar1@kpmg.com

For Further Details



National Skill Development Corporation
Block-A, Clarion Collection, (Qutab Hotel)
Shaheed Jeet Singh Marg
New Delhi 11 0 016
T: +91-11-47451600
F: +91-11-46560417
Email : skillgapstudies@nsdcindia.org

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