# Government of Himachal Pradesh

# Himachal Pradesh Infrastructure Development Board (HPIDB)

Study on mapping the existing skill levels of the employable youth and the skill gap in Himachal Pradesh

*i*MaCS

**ICRA Management Consulting Services Limited**

**June 16, 2008**

**IMPLEMENTATION PLAN**

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# 1. Executive Summary

i. Himachal Pradesh Infrastructure Development Board (HPIDB) mandated ICRA Management Consulting Services Limited (IMaCS) to assist it in mapping the existing skill levels of the employable youth and the skill gap to the State's likely requirement till 2015, factoring in its economic potential. This report projects the human resources requirements of Himachal Pradesh high-growth industries till 2015, maps the human resources skills available currently in the State to such requirements, identifies skill gaps, and suggests measures to bridge the same.

ii. The backdrop to the study is the robust economic growth experienced by Himachal Pradesh over the past few years, driven mainly by the State's manufacturing and services sectors. The economic outlook for the State remains buoyant, with the growth impetus expected to be delivered by a broad base of resident industries (manufacturing and service organisations) over the next few years. Industry in Himachal Pradesh has rightly identified availability of skilled human resources as an enabling factor for the realisation of the State's growth plans, and foresees a widening gap between supply and demand in this regard.

iii. In this exercise, we adopted the following approach:

- Diagnostic analysis of the state
- Identification of industries in the state offering high growth and employment
- Map the skill requirements for the industries
- Map the existing education infrastructure in Himachal Pradesh and the expected human resources availability in 2015.
- Identify skill gaps
- Suggest measures to be undertaken by different stakeholders (Government, Industries and Educational Institutions) to address these skill gaps and draft human resources development plan for the state and district.

iv. The study is proposed to be undertaken in a phased manner with 12 districts spanned over three different phases covering 4 districts each. This report discusses the findings and recommendations for the first phase I, phase II and Phase III covering Shimla, Una, Sirmaur, Solan, Hamirpur, Bilaspur, Chamba, Kangra, Lahaul & Spiti, Kinnaur, Kullu and Mandi. We conducted the study by interacting with the principal stakeholders in Himachal Pradesh and by

building on a secondary research on skill development programmes undertaken in India and select foreign nations. The principal stakeholders we interacted with include:

- Industry: manufacturing and services sector organisations across industries which are on the ground in Himachal Pradesh today, and are expected to drive the State's future economic growth. Educational Institutions: universities, colleges and polytechnics—government/government aided or self-financing
- State Government Officials

v. We envisage that by 2015, the opportunity landscape in Himachal Pradesh will have 3.5 to 4 lakh new (incremental) jobs to offer, considering the likely improvements in economic output and labour productivity. The employment opportunities envisaged are likely to emanate mainly from the construction, pharma, hospitality, IT & ITES[1], light engineering, mineral based industries, textiles, hydro-power and other resident industries. The break-up for such job opportunities in terms of skill level is seen as: about 2.4 lakh skilled and highly skilled professionals[2], and 1.2 to 1.5 lakh unskilled[3] human resources.

vi. The new employment opportunities would not only call for enhanced functional, and to an extent sector-specific, competencies[4] across levels, but also several "soft" skills, such as communication skills, presentation skills, stress management and team building skills.

vii. The state has a high literacy rate of 77% compared to national average of 65%. To support human resource requirements, the state has a network of about 7 engineering colleges, 10 polytechnics, 97 ITI / ITC, 249 SCVT centres, 8 pharmacy colleges offering about 16000 seats to local population. This is complemented by a network of 72 arts and science colleges, 5 MBA colleges, 4 MCA colleges and 4 universities offering educational facilities across various disciplines. Together, these institutions have the potential to turn out around 320,000 skilled human resources by 2015. However, discussions with key stakeholders revealed that the turnout of engineering / diploma students remain low at 65% and vocational training at 60%. Of the total engineering graduates and diploma holders that these institutions turn out every

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[1] Information Technology and Information Technology Enabled Services

[2] Human resources possessing skills developed through a formal education system. Includes arts and science graduates; engineers, diploma holders and ITI trained professionals; and management and finance professionals.

[3] Human resources with no formal training

[4] For instance, knowledge of the latest manufacturing practices and quality control techniques in the light engineering sectors, project management and cost management techniques in the construction sector, and basic/advanced programming skills and project management skills in the IT sector.

year, significant proportion of students remain unemployable even after completing the course. The primary reasons cited for the "unemployability" of students graduating from the State's formal education system are:

viii. Disconnect between academic curricula and industry requirements, resulting in deficiencies in sector specific functional skills, besides lack of practical training, market orientation, and "soft" skills of students graduating from the State's educational institutions.

ix. Shortfall in appropriately trained faculty; this is a concern assuming increasing proportions. Shortfall in trained faculty results in inappropriately trained students, thereby increasing 'unemployability'.

x. Our suggestions for narrowing human resources-availability gaps in Himachal Pradesh over the period till 2015, accordingly address the following questions:

- What is the additional physical infrastructure—that is, the increase in capacity of higher educational institutions—required for meeting the enhanced skilled-human resources requirements of Himachal Pradesh industry?

- What can be done by the various stakeholders, viz. State Government, industry and educational institutions, to improve the employability of the State's unskilled labour?

- What can be done by the various stakeholders to bridge the current and expected gaps in the skills of the State's "skilled" human resources?

xi. While making our recommendations, we have, wherever possible, indicated a timeframe for their implementation.

xii. Our recommendations are structured as human resources development plan which encompasses two broad areas –

- State level human resources development and
- District human resources development plan

## 2. Summary of Skill Development Initiatives – State and District Level

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|-------|------------------------------|-----------------|
| 1. | State Level Skill Development | 1. 1 Capacity Building through additional infrastructure | • Capacity Building of ITI's <br> • Capacity Building of Polytechnics <br> • Capacity Building of Engineering |
| | | 1.2 Skill building initiatives to improve the employability of employable youths | • Large scale skill development initiatives <br> • Employability focussed skill development initiative <br> • Long term skill development initiative through cluster development |
| | | 1.3 Funding Mechanism | • Funding requirement analysis <br> • Identification of alternate sources of funding |
| 2 | District Level Skill Development initiatives | 2.1 Bilaspur | **Transportation** <br><br> • Opening up of a drivers training institute in Bilaspur <br> • Increase the intake for motor vehicle mechanic in ITI Bilaspur <br> • Introduction of Motor driving and Heavy Equipment Operator Training in ITI Bilaspur <br> • Development of auto spare parts retailing in Bilaspur |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | | **Hydro power**<br><br>• Introduction of courses under SCVT particularly aimed at hydro power technicians / operators<br>• Diploma Engineering in Power to be started in Government polytechnic<br>• Supervisor / Operators Training for Hydro and Power Systems can be started under direct certification by NTPI / PMI who offer such training to fresh diploma engineers<br><br>**Tourism & Hospitality**<br><br>• IATA / UFTAA certification in ticketing, tour planning and pricing for school drop-outs after class X<br>• Increase the intake of students at Regional Water Sports Centre in Kangra district to satisfy the demand for professionals / instructors for adventure sports within the state as same infrastructure facility should be put to better use<br><br>**Agro-based**<br><br>• Short term training courses to be organised in floriculture and horticulture activities being carried out in green-houses by District Directorate of Horticulture in collaboration with Y S Parmar University, Solan.<br>• Weekly awareness and sensitisation camps in villages through extension officers |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|-------|-----------------------------|-----------------|
| | | | of Horticulture department. **Dairy farming** <br><br> • Promotion of Dairy farming |
| | | 2.2 Chamba | **Hydro Power** <br><br> • Collaboration of NHPC with ITI and Govt Polytechnic to train local population in semi-skilled jobs such as operation of earth moving equipments and heavy machinery. Chamera-II project has initiated similar training program with ITI Chamba but the scope and the involvement of the local population needs to be increased. <br> • New courses to be introduced at ITI Chamba in the area of hydel power generation such as blasting, concreting and earth moving equipment. <br><br> **IT/ITeS** <br><br> • Introduction of computer science at Govt Polytechnic College, Chamba <br> • Introduction of basic computer literacy, communication and personality improvement courses at Govt Degree College, Chamba so that students can be imparted skills required in BPO companies. |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | | **Tourism**<br><br>• Set up a marketing agency to promote handicraft of Chamba (products such as Chamba Chappals, handkerchiefs) and metal and wood craft<br><br>• Set up an extension branch of the Institute of Hotel Management, Kufri to impart professional courses in tourism.<br><br>• Set up a Regional Mountaineering Centre similar to Kangra to impart training regarding adventure sports. Chamba district offers a lot of avenues for trekking, camping, rock climbing but all round development of these activities requires professional assistance.<br><br>**Floriculture**<br><br>• Promotion of oil extraction units<br><br>**Dairy farming**<br><br>• Promotion of dairy farming |
| | | 2.3 Hamirpur | **Dairy & Poultry**<br><br>• Promotion of dairy and poultry farming |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | | **Tourism**<br><br>• Promotion tourist locations like the historical fort of Sujanpur Tihra under event – based marketing around annual festival of Holi<br><br>**Agro**<br><br>• Setting up of Maize processing plants for production of starch and/or bio-fuels<br>• Promotion of fruit processing units and pinestry for foam<br>• Starting of vocational courses in district ITI to develop technical skills in the above areas<br>• Promotion of polyhouses and formal training on harvest and post harvest practices |
| | | 2.4 Kangra | **Tourism**<br><br>• Promotion of tourism opportunities in adventure sports apart from leisure tourism and religious tourism<br>• The department should intensify restoration and maintenance activities at Kangra Fort to promote weekend tourism<br><br>• HPTDC to aggressively promote Maharana Pratap Sagar reservoir as a destination for water sports such as boating, kayaking, water skiing, bid watching and fishing. For the purpose, HPTDC should organise competitions by |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|-------|----------------------------|-----------------|
| | | | inviting professional athletes from across the world similar to the World Paragliding competition which is organized at Dharamsala.<br><br>• Increase intake at Regional Mountaineering Centre, Dharamsala to induct more professional trekkers, guides in the tourism sector in order to provide a more enriching experience to the customers. HPTDC to also make it mandatory for all guides to be professionally trained at the Regional Mountaineering Centre.<br><br>**Dairy farming**<br><br>• Animal Husbandry department should conduct ground level training programs to educate the local population about dairy farming and provide technical support in the form of information about better feed, better cattle management. Further, the department should also encourage formation of local milk co-operatives.<br>• Training local people in milk co-operatives and collection process.<br>• Encourage entrepreneurs to set-up central dairy plant<br><br>**IT/ITeS**<br><br>• IT/ITES industry to be promoted in the district by setting up IT park. The district has potential to attract BPO sector as well as medium sized IT companies involved in software engineering. The district can also source skilled manpower from Punjab due to its proximity with the state |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | 2.5. Shimla | **IT/ITeS**<br><br>• Compulsory inclusion of computer education in government schools for XI and XII students with a basic functioning knowledge of operating systems<br><br>• Computerisation of government colleges and introduction of computer training in specific BPO processes for different courses<br><br>    – ***Bachelor of Commerce***: Revenue Accounting and MIS, Insurance Claims Processing, Tele-marketing for financial products<br><br>    – ***Bachelor of Science***: Medical Transcription<br><br>    – ***Bachelor of Arts***: Customer Support for credit card, telecom services, consumer durable<br><br>    – ***Bachelor of visual communications***<br><br>    – ***Bachelor of Science: Animation, Media etc.,***<br><br>    – ***Bachelor of Arts: Journalism***<br><br>• To invest in computer labs and voice training labs in the colleges.<br><br>**Tourism and Hospitality** |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|-------|-----------------------------|-----------------|
| | | | • IATA / UFTAA certification in ticketing, tour planning and pricing for school drop-outs after class X<br>• Food craft training in cooking, baking and bartending after class XII to be started under SCVT certification in collaboration with leading hotel chain / private players<br>• Craftsmen Food Production and Steward, one of the recognised trades under NCVT can be started in ITI<br><br>**Agro**<br><br>• Preservation of Fruits and Vegetables, Refrigeration and air-conditioning mechanic with focus on HVAC technology can be initiated in ITI<br>• Propose setting-up of **Centre for Retail Management of agro products**<br><br>**Light Engineering**<br><br>• Commissioning of ITI in Shoghi itself with focus on engineering trades such as Electrician, Wireman, Sheet Metal Worker, Welder, Plumber<br>• Increase the intake for Machinist, Refrigeration and Air-conditioning mechanic, electronics mechanic in other ITI in the district |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | 2.6. Sirmaur | **Textiles**<br><br>• Maintenance courses for spinning and weaving machines as well as captive power plants to be introduced for Fitters in ITI<br>• Fashion Technology trade to be started under NCVT in ITI in the district<br>• Weaving courses with specific focus on weaving preparatory activities to be started under SCVT<br>• Textile Chemistry courses to be started in Polytechnic / Private Engineering Colleges, quality techniques and time and motion studies to be included in engineering courses<br><br>**Tourism and Hospitality**<br><br>• IATA / UFTAA certification in ticketing, tour planning and pricing for school drop-outs after class X by Department of Tourism<br>• Craftsmen Food Production and Steward, one of the recognised trades under NCVT can be started in ITI<br>• Food Technology to be introduced in few ITI in the district<br><br>**Light Engineering**<br><br>• Commissioning new engineering trades under NCVT such as Mechanic Electrician, Wireman, Sheet Metal Worker, Refrigeration and Air-conditioning Mechanic, Auto Electrical and Electronics |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|-------|------------------------------|-----------------|
| | | | • Increase the intake for existing courses such as fitter, turner, Plastic Processing Operator in the existing ITI<br><br>• Certain course level changes to be implemented such as training on CNC machines, Arc and Submerged welding for Welders, CAD/CAM for electronics and mechanical trades<br><br>• Quality techniques to be made an integral part of the engineering degree / diploma courses across all specialization.<br><br>**Pharmaceutical and Chemical Industry**<br><br>• Maintenance and Instrument Mechanic for Chemical Plant, Laboratory Assistant, Refrigeration and Air-conditioning Mechanic for pharma and chemical companies<br><br>• Diploma in Pharmacy to be started at Government Polytechnic, Nahan<br><br>• Increase the intake for plastic processing operators which is currently offered in the district |
| | | 2.7.Solan | **Tourism**<br><br>• Solan can be developed as entertainment hub aimed at transit tourist travelling by road from Delhi and Chandigarh to Shimla.<br><br>**IT and Media**<br><br>• Introduction of following courses as part of regular courses: |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|-------|----------------------------|-----------------|
| | | | - ***Bachelor of Commerce***: Revenue Accounting, Insurance Claims Processing, Tele-marketing for financial products<br>- ***Bachelor of Science***: Medical Transcription<br>- ***Bachelor of Arts***: Customer Support for credit card, telecom services, consumer durable<br>- ***Bachelor of visual communications***<br>- ***Bachelor of Science: Animation, Media etc.,***<br>- ***Bachelor of Arts: Journalism***<br>-<br><br>• Directorate of Education / Department of IT to invest in computer labs and voice training labs in the colleges.<br><br>**Pharmaceuticals**<br><br>• Propose setting-up of Centre for Excellence (CoE) in the area of biotechnology and bioinformatics in Solan<br><br>**Light Engineering**<br><br>• Setting-up of Skill Development Centre for providing advisory support to local light engineering companies and train local students in best practices in light engineering industry.<br><br>• Invest in upgradation of ITI Solan and Govt Polytechnic College Solan to |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | | modern machinery such as Modern welding techniques, CNC machines. |
| | | 2.8. Una | **Light Engineering**<br><br>• New trades to be introduced in ITI Una for Motor mechanic, Automobile Engineering, Electronics Mechanic.<br>• Introduce automobile engineering course at Govt. Polytechnic College,<br>• Una should be promoted to as automobile education hub of the state by encouraging automobile as well as ancillary companies to undertake Research and Development activities apart from manufacturing.<br>• HPIDB to promote setting up of hardware park to attract companies in manufacturing of electronics and consumer goods such as Printed Circuit Boards, Telecom equipments, Monitors, Cathode Ray tubes, Television, Refrigerator, Washing Machines, CD and DVD players.<br><br>**Dairy farming**<br><br>• Promotion of dairy farming<br><br>**Tourism**<br><br>The district has few attractions for religious travellers such as Dera Baba Bharbhag Singh and Chintpurni Temple. These places are frequented by thousands of devotees every year. However lack of hospitality infrastructure deters many people from |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|-------|----------------------------|-----------------|
| | | | visiting these places. Further, event based marketing during festival season can help improve the tourist inflow to Una. |
| | | 2.9. Lahaul & Spiti | **Agriculture**<br><br>• Promotion of usage of glasshouses and polyhouses<br><br>**Tourism**<br><br>• The district presents tremendous opportunities for promoting Buddhist tourism as lot of monasteries and Gompas are present in Lahaul and Spiti valleys.<br>• Keylong in Lahaul valley lies on the Manali-Leh route and should be promoted as an important way-side tourism with avenues for adventure and religious tourism. |
| | | 2.10. Kinnaur | **Hydro Power**<br><br>• Training of local manpower in short-term courses such as blasting, drilling, heavy earth moving machinery, concreting<br><br>**Tourism**<br><br>• The district offers tremendous scope for adventure sports such as camping, trekking, mountaineering and rock climbing. Skiing as an avenue can also be explored for development. The district needs to be promoted aggressively by |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | | Dept. of Tourism, Himachal Pradesh as presently there is not enough information or brand recall of the various destinations amongst tourists, domestic as well as foreign.<br><br>**Handlooms**<br><br>• Promotion of traditional handlooms and Kinnauri caps |
| | | 2.11. Kullu | **Tourism**<br><br>• Promotion of tourism cluster in Kullu<br>• Promotion of courses in hang gliding and para gliding<br><br>**Agro**<br><br>• Promotion of setting-up of industries in the field of Ayurvedic products<br><br>**Handlooms**<br><br>• Propose innovative marketing programs to promote handloom products<br><br>**Light Engineering**<br><br>• Promotion of carton manufacturing units |
| | | 2.12. Mandi | **Agro Processing** |

| # | Focus | Principal Initiatives/Focus | Sub-initiatives |
|---|---|---|---|
| | | | The district has substantial agro production but very few companies are presently functioning in agro processing. Opportunities are present in tea processing and packing, spices production and packaging, pickles and starch production. Manufacturing of Apple Cider can be also be promoted. **Tourism** Mandi district has a few scenic places such as Nerchowk and other places in Beas valley which can be promoted for Health tourism by setting of Spas, Aromatherapy and Naturotherapy units. Further, the cultivation of herbs and Ayurvedic plants should be encouraged in the district to build up the brand image for Health Tourism. |

The implementation of above recommendations would require interaction various departments. To ensure focus and ease of implementation, we have grouped the above recommendation into department wise recommendations.

# 3. Summary of Skill Development Initiatives – Department Level

## 3.1.1. Department of Technical Education - Industrial Education Wing

| # | Principal | Sub-initiatives | Implementation Agency | Reference |
|---|---|---|---|---|

| | Initiatives/Focus | | Lead Agency | Supporting Agency | |
|---|---|---|---|---|---|
| 1. | Capacity Building of ITI's | • Incremental increase in capacity of ITI to 4000 primarily through introduction of shift system in Shimla, Mandi, Kangra and Hamirpur. | Industrial Education Wing | | Capacity building initiative |
| | | • Increase in intake for motor vehicle mechanic in ITI Bilaspur | Industrial Education Wing | | District Development Report |
| | | • Introduction of Motor driving and Heavy Equipment Operator Training in ITI Bilaspur | Industrial Education Wing | | |
| | | • Introduction of courses under SCVT particularly aimed at hydro power technicians / operators | Industrial Education Wing | NTPI/ PMI | |
| | | • New courses to be introduced at ITI Chamba in the area of hydel power generation such as blasting, concreting and earth moving equipment | Industrial Education Wing | NTPI | |
| | | • Introduction of courses in ITI Hamirpur in the area of fruit processing and pinestry | Industrial Education Wing | Department of Agriculture | |
| | | • Introduction of craftsmen food production and steward under the NCVT system or modular employable skills in select ITI's | Industrial Education Wing | Leading Hotel Chain | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| | | • Food craft training in cooking, baking and bartending after class XII to be started under SCVT certification in collaboration with leading hotel chain in ITI Shimla | Industrial Education Wing | Leading Hotel Chain | |
| | | • Preservation of fruits and vegetables, refrigeration and air-conditioning mechanic with focus on HVAC technology in ITI's Shimla | Industrial Education Wing | | |
| | | • Commissioning of ITI in Shoghi itself with focus on engineering trades such as Electrician, Wireman, Sheet Metal Worker, Welder, Plumber<br>• Increase the intake for Machinist, Refrigeration and Air-conditioning mechanic, electronics mechanic in other ITI in the district | Industrial Education Wing | | |
| | | • Maintenance courses for spinning and weaving machines as well as captive power plants to be introduced for Fitters in ITI Sirmaur<br>• Fashion Technology trade to be started under NCVT in ITI Sirmaur<br>• Weaving courses with specific focus on weaving preparatory activities to be started under SCVT in ITI Sirmaur | Industrial Education Wing | Leading Textile company | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| | | • Food technology to be started in few ITI's in Sirmaur district | Industrial Education Wing | In association with CFTRI Mysore | |
| | | • Commissioning of new engineering trades under NCVT such as Mechanic, Electrician, Wireman, Sheet Metal Worker, Refrigeration and Air-conditioning Mechanic, Auto Electrical and Electronics in ITI Sirmaur<br>• Increase the intake for existing courses such as fitter, turner, Plastic Processing Operator in the existing ITI<br>• Certain course level changes to be implemented such as training on CNC machines, Arc and Submerged welding for Welders, CAD/CAM for electronics and mechanical trades | Industrial Education Wing | | |
| | | • Upgradation of ITI Solan with modern equipment such as modern welding and CNC machines | Industrial Education Wing | | |
| | | • New trades to be introduced in ITI Una for motor mechanic, automobile engineering and electronics. | Industrial Education Wing | | |
| | | • Training of local manpower in short-term courses such as blasting, | Industrial Education | | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| | | drilling, heavy earth moving machinery and concreting | Wing | | |
| 2 | Creating Market Awareness | • Short term exchange programme (duration of 4 to 6 weeks) with leading educational institutions and companies in India | | | Employability focussed skill development initiative |
| | | • Participation in World Skills Competition which focuses on vocational training and facilitates learning and benchmarking of vocational education. Over 40 trades are currently available in the competition. This initiative would be co-ordinated through CII. | | | Employability focussed skill development initiative |
| 3 | Skill Assessment and Monitoring | • Identification of assessment agency<br>• Identification of students<br>• Testing<br>• Administration<br>• Review and Monitoring | Industrial Education Wing | Industry Department | Employability focussed skill development initiative |
| 4 | Improving course curriculum | • Propose introduction of following specialisation as part of regular courses in tourism, agri-procurement, IT/ITeS, Tourism, Light Engineering, Construction and Textiles | Industrial Education Wing | | Employability focussed skill development |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| | | | | | initiative |

## 3.1.2.   Department of Technical Education - Technical Education Wing

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 1. | Capacity Building of Polytechnics and Engineering | • Incremental increase in capacity of polytechnics to around 3000 in select polytechnics in Shimla, Solan, Sirmaur, Mandi, Chamba and Kangra (primarily through shift system) <br> • Incremental increase in capacity of engineering colleges to 1500 primarily through introduction of shift system | Technical Education Wing | | Capacity Building Initiatives |
| | | • Opening up of drivers training institute in Bilaspur | Technical Education Wing | Department of Transport and Leading OEM's | District Development Plan |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 2 | Introduction of new courses | • Diploma in Power to be started in Government Polytechnic in Bilaspur | Technical Education Wing | NTPI | District Development Plan |
| | | • Supervisor / Operators Training for Hydro and Power Systems can be started under direct certification by NTPI / PMI who offer such training to fresh diploma engineers | Technical Education Wing | NTPI | |
| | | • Introduction of computer science at Govt Polytechnic College, Chamba | Technical Education Wing | | District Development Plan |
| | | • Textile Chemistry courses to be started in Polytechnic / Private Engineering Colleges, quality techniques and time and motion studies to be included in engineering courses<br>• Introduction courses in polytechnics in the area of Instrument Mechanic for Chemical Plant, Laboratory Assistant, Refrigeration and Air-conditioning Mechanic for pharma and chemical companies<br>• Diploma in Pharmacy to be started at Government Polytechnic, Nahan | Technical Education Wing | | District Development Plan |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| | | • Increase the intake for plastic processing operators in Sirmaur | | | |
| | | • Quality techniques to be made an integral part of the engineering degree / diploma courses across all specialisation | Technical Education Wing | Leading Quality Certification Agency | District Development Plan |
| | | • Introduce automobile engineering course at Govt. Polytechnic College, Una | Technical Education Wing | SIAM / Leading OEM | District Development Report |
| | | • Collaboration of NHPC with Govt Polytechnic to train local population in semi-skilled jobs such as operation of earth moving equipments and heavy machinery. | Technical Education Wing | NHPC | District Development Plan |
| 3 | Creating Market Awareness | • Short term exchange programme (duration of 4 to 6 weeks) with leading educational institutions and companies in India | Technical Education Wing | | Employability Focussed Skill Development Initiative |
| 4 | Skill Assessment and Monitoring | • Identification of assessment agency<br>• Identification of students | Technical Education | Industry Department | Employability Focussed Skill |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| | | <ul><li>Testing</li><li>Administration</li><li>Review and Monitoring</li></ul> | Wing | | Development Initiative |

## 3.1.3. Department of Education

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 1. | Introduction of new courses | • Introduction of basic computer literacy, communication and personality improvement courses at Govt Degree College, Chamba so that students can be imparted skills required in BPO companies. | Department of Education | | District Development Plan |
| | | • Compulsory inclusion of computer education in government schools for XI and XII students with a basic functioning knowledge of operating systems | Department of Education | | |
| | | • Computerisation of government colleges and introduction of computer training in specific BPO processes for different courses<br><br>– ***Bachelor of Commerce***: Revenue Accounting and MIS, Insurance Claims Processing, Tele-marketing for financial products<br><br>– ***Bachelor of Science***: Medical Transcription<br><br>– ***Bachelor of Arts***: Customer Support for credit card, | Department of Education | | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | telecom services, consumer durable<br><br>– ***Bachelor of visual communications***<br><br>– ***Bachelor of Science:*** Animation, Media etc.,<br><br>– ***Bachelor of Arts:*** Journalism<br><br>• To invest in computer labs and voice training labs in the colleges | | | |
| | | • IATA / UFTAA certification in ticketing, tour planning and pricing for school drop-outs after class X in Shimla, Solan and Sirmaur | Department of Education | Department of Tourism | District Development Plan |
| 2 | Creating Market Awareness | • Short term exchange programme (duration of 4 to 6 weeks) with leading educational institutions and companies in India | Department of Education | | Employability Focussed Skill Development Initiative |
| 3 | Skill Assessment and Monitoring | • Identification of assessment agency<br>• Identification of students<br>• Testing<br>• Administration<br>• Review and Monitoring | Department of Education | Industry Department | Employability Focussed Skill Development Initiative |

## 3.1.4. Directorate of Horticulture

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| 1. | Introduction of new courses | • Short term training courses to be organised in floriculture and horticulture activities being carried out in green-houses by District Directorate of Horticulture in collaboration with Y S Parmar University, Solan.<br>• Weekly awareness and sensitisation camps in villages through extension officers of Horticulture department. | Directorate of Horticulture | Y.S.Parmar University | District Development Plan |
| 2 | Promotion of Industrial Cluster | • Promotion of oil extraction units in Chamba<br>• Promotion of agro processing in the area of tea processing and packing, spices production and packaging, pickles and starch production and manufacturing of apple cider | Directorate of Horticulture | Dept of Industries | |
| 3 | Training | • Promotion of poly houses and formal training on harvest and post-harvest practices | Directorate of Horticulture | | |
| 4 | Centre of | • Setting-up of Centre for Retail Management of Horticultural | Directorate of | Y.S.Parmar University | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| | Excellence | Products in Shimla | Horticulture | | |
| 5 | New Technology Application | • Promotion of usage of poly houses in Lahaul & Spiti | Directorate of Horticulture | | District Development Plan |

## 3.1.5.   Department of Rural Development

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 1. | Unorganised retail and household business | • Provide technical support to unorganised retail trade in Himachal Pradesh | Rural development | Animal husbandry, Dept of Tourism | District Development Plan |

## 3.1.6. Department of Animal Husbandry

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 1. | Dairy Farming | • Promotion of dairy farming in Bilaspur, Chamba, Hamirpur, Kangra and Solan <br> • Provide technical support in the form of information about better feed, better cattle management. Further, the department should also encourage formation of local milk co-operatives. <br> • Training local people in milk co-operatives and collection process. <br> • Encourage entrepreneurs to set-up central dairy plant | Animal Husbandry | Rural Development and Industry | District Development Plan |

## 3.1.7.    Department of Tourism

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| 1 | Cluster development initiative | 1. Promote HP tourism with specific focus on options, differentiation and experience.   In this context, we are proposing segmentation of HP tourism industry into number of tourist circuits targeting various special categories of tourists.<br><br>   a.  Leisure Tourism focusing on Parwanoo, Chail, Kasauli, Shimla and Kullu/Manali<br><br>   b.  Adventure Tourism focussing Chamba, Lahaul & Spiti (Camping and Trekking), Kangra (Water Sports), Bilaspur (Water Sports) and Manali<br><br>   c.  Cultural Tourism focussing on Hindu temples and Buddhist temples<br><br>   d.  Rural Tourism to experience the local culture<br><br>   e.  Agri Tourism to experience the farming practices<br><br>2. Establish Arts & Crafts village in Dharamsala and Chamba and | Dept of Tourism | | Cluster Development Initiative |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| | | organise following activities:- <br><br> a. **Themed Evening Entertainment: -** <br> b. The themed evening entertainment featuring lifestyle of local people with authentic dinner and entertainment can be created to visitors especially coach tours. The themes for consideration might include rituals of HP performed by local people with local costume and entertainment. <br> c. Potential venues could include an existing bungalows or mansions or proposed Arts & Crafts village. <br> d. **Arts & Crafts Training: -** To experience the arts & crafts of Kangra, Chamba and Lahaul and Spiti handicrafts, special training can be organised to visiting tourist. <br> e. **Food Festivals:** Provide local cuisine to tourists and conduct food festival <br><br> 3. To provide support to visiting tourist, we propose setting-up of: <br>      a. Self-service information points at a number of strategic locations e.g. Airports, Railways Stations, Hotels etc., | | | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| | | b. Consider the provision of information kiosks at high density tourist spots | | | |
| | | c. Consider promotion of Radio Taxi in important tourism locations - Shimla and Kullu - Manali | | | |
| | | d. Introduce a system of information tourist signage | | | |
| | | e. Have dedicated information and transaction oriented website to provide one stop solutions to tourist in terms of accessibility, reservation, booking packages, linkage to tourist operators, local guides, taxi operators etc. | | | |
| | | f. Recruit a network of volunteer as informational guides. | | | |
| | | g. Set up a common call centre to provide tourist information – a cost effective means that can be accessed from all tourist destinations and the entry points | | | |
| | | 4. To drive tourism activities in Himachal Pradesh, we propose setting-up of Heritage Tourism Development Authority under the HPTDC at the district level to promote various tourism | | | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| | | circuits focusing on marketing, product, infrastructure and investment strategy | | | |
| 2. | Training Course | • Increase the intake of students at Regional Water Sports Centre in Kangra district to satisfy the demand for professionals / instructors for adventure sports within the state as same infrastructure facility should be put to better use<br><br>• Set up a Regional Mountaineering Centre similar to Kangra to impart training regarding adventure sports. Chamba district offers a lot of avenues for trekking, camping, rock climbing but all round development of these activities requires professional assistance.<br><br>• Increase intake at Regional Mountaineering Centre, Dharamsala to induct more professional trekkers, guides in the tourism sector in order to provide a more enriching experience to the customers. HPTDC to also make it mandatory for all guides to be professionally trained at the Regional Mountaineering Centre | Dept of Tourism | | District Development Plan |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| 3 | Specialised Centre for Higher Education | • Set up an extension branch of the Institute of Hotel Management, Kufri to impart professional courses in tourism. | Dept of Tourism | | District Development Plan |
| | | • Promotion tourist locations like the historical fort of Sujanpur Tihra in Hamirpur under event – based marketing around annual festival of Holi<br>• Promotion of tourism opportunities in adventure sports apart from leisure tourism and religious tourism<br>• The department should intensify restoration and maintenance activities at Kangra Fort to promote weekend tourism<br>• HPTDC to aggressively promote Maharana Pratap Sagar reservoir as a destination for water sports such as boating, kayaking, water skiing, bid watching and fishing. For the purpose, HPTDC should organise competitions by inviting professional athletes from across the world similar to the World Paragliding competition which is organized at Dharamsala.<br>• Solan can be developed as entertainment hub aimed at transit tourist travelling by road from Delhi and Chandigarh to Shimla. | | | District Development Plan |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| | | • Una has few attractions for religious travellers such as Dera Baba Bharbhag Singh and Chintpurni Temple. These places are frequented by thousands of devotees every year. However lack of hospitality infrastructure deters many people from visiting these places. Further, event based marketing during festival season can help improve the tourist inflow to Una.<br>• The district presents tremendous opportunities for promoting Buddhist tourism as lot of monasteries and Gompas are present in Lahaul and Spiti valleys.<br>• Keylong in Lahaul valley lies on the Manali-Leh route and should be promoted as an important way-side tourism with avenues for adventure and religious tourism.<br>• Kinnaur offers tremendous scope for adventure sports such as camping, trekking, mountaineering and rock climbing. Skiing as an avenue can also be explored for development. The district needs to be promoted aggressively by Dept. of Tourism, Himachal Pradesh as presently there is not enough information or brand recall of the various destinations amongst tourists, domestic as well as foreign. | | | |

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | **Lead Agency** | **Supporting Agency** | |
| | | • Promotion of tourism cluster in Kullu<br><br>• Promotion of courses in hang gliding and para gliding in Kullu<br><br>• Mandi district has a few scenic places such as Nerchowk and other places in Beas valley which can be promoted for Health tourism by setting of Spas, Aromatherapy and Naturotherapy units. Further, the cultivation of herbs and Ayurvedic plants should be encouraged in the district to build up the brand image for Health Tourism. | | | |
| | | • Increase in reach and penetration of handicraft products of HP through web based market place like e-bay | Department of Tourism | Web-based market place | District Development Plan |
| | | • Application of UNESCO Seal of Excellence for handicrafts products | Department of Tourism | UNESCO | District Development Plan |

## 3.1.8. Department of Industries - focussing on Pharma, IT/ITeS, Power sectors

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 1 | Cluster development initiative - Pharmaceuticals | To facilitate development of pharmaceutical industry, we propose setting-up of centre for excellence in biotechnology and bioinformatics | Industry Dept | Industry Association | Cluster Development Initiatives |
| 2 | Cluster development initiative – IT/ITeS | Propose setting-up of **Centre for Data Analytics** (CDA) in Shimla to provide high end skilled human resources to IT/ITES companies. This would help in attracting new investments and also improve the employability of students. | Industry Dept | Industry Association | Cluster Development Initiatives |
| 3 | Cluster development initiative – Power | Propose setting-up of training centre in association with investing companies to provide skilled human resources. This centre will act as a source of trained human resources for the state. | Industry Dept | Industry Association | Cluster Development Initiatives |
| 4 | Skill Development Centre | Propose skill development initiative in Pharma, Light Engineering, IT/ITES, Tourism, and Construction clusters | Industry Dept | Industry Association | Cluster Development Initiatives |

## 3.1.9. Department of Labour & Employment

| # | Principal Initiatives/Focus | Stage | Activities | Implementation | Reference |
|---|---|---|---|---|---|
| 1 | Large Scale Skill Development Initiatives | Identification of Trainees (minimal educated youths) | • Registration of target group (minimal educated youths) | • Employment Exchanges | Large Scale Skill Development Initiatives |
| | | | • Screening and short listing | • Employment Exchanges | |
| | | Administration of training | • Preparation of course material | • Technical education under SCVT system | |
| | | | • Identification of education infrastructure | • Technical education | |
| | | | • Identification and Registration of NGO's | • CII Skill Development website<br><br>• ASSOCHAM<br><br>• FICCI | |
| | | | • Certification | • CII | |
| | | Employment Market Linkage | • Identification of target companies and staffing companies | • CII Skill Development website<br><br>• ASSOCHAM<br><br>• FICCI | |

| # | Principal Initiatives/Focus | Stage | Activities | Implementation | Reference |
|---|---|---|---|---|---|
| | | | • MoU with companies and staffing agencies | • Labour & Employment | |
| | | Review and Monitoring | | • Labour & Employment with regular feedback from staffing agencies and companies | |

## 3.1.10. Department of Planning

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 1 | Budget Estimate | Initiative wise budget proposals for skill development initiatives (as per the budget estimate) | Department of Planning | Focus Department | Funding requirement and mechanism |
| 2 | Funding mechanism | Propose PPP initiatives in the area of infrastructure creation, skill assessment and monitoring, skill development centres and cluster development initiatives | Department of Planning | Industry Department | Funding requirement and mechanism |

## 3.1.11. Department of Healthcare

| # | Principal Initiatives/Focus | Sub-initiatives | Implementation Agency | | Reference |
|---|---|---|---|---|---|
| | | | Lead Agency | Supporting Agency | |
| 1 | Paramedical Opportunities | Initiatives to improve the skill level of paramedical staff in HP | Department of Health | Dept of Education | |

# 4. Prioritisation of Skill Development Initiatives

## Prioritisation Criteria

1. Impact on employment generation
2. Ease of implementation
3. Scalability of skill development initiatives
4. Cost of Implementation

Based on the above prioritisation criteria, we have shortlisted following initiatives.

| # | Initiative | Sub-initiative | Cost / Trainee | No. of Trainees | Potential Employment Opportunities | Funding |
|---|---|---|---|---|---|---|
| 1 | Large Scale Skill Development Initiative | Basic & Advanced Training Programme | 6000 | 21,000. | 20,000 | PPP |
| 2 | Employability Focussed Skill Development | Introduction of new courses | 700 | 20000 | Qualitative Improvement in Skill Level | Govt Funded |

| # | Initiative | Sub-initiative | Cost / Trainee | No. of Trainees | Potential Employment Opportunities | Funding |
|---|---|---|---|---|---|---|
| | Initiative | | | | | |
| | | Shift System in ITI's and Polytechnics | Nil | 4000 | | Govt funded |
| | | Shared Service Model | Nominal | 10,000 Students every year will benefit | Qualitative Improvement in Skill Level | PPP |
| | | Skill Assessment of unemployment youths | 5000 | 10,000 unemployable youths | 8000 | Trainee fee reimbursable on successful placement |
| 3 | Cluster Development Initiative | Tourism | Rs.50 Crore for development | | 100000 | |
| | | Drivers | Nil | 500 / year | 500 | PPP |

| # | Initiative | Sub-initiative | Cost / Trainee | No. of Trainees | Potential Employment Opportunities | Funding |
|---|---|---|---|---|---|---|
| | | Training Institute | | | | |
| | | Power Training Institute | Nil | 500/ year | 500 | PPP |

## 4.1. Initiative Name:

Large Scale Development Initiative

### 4.1.1. Sub-Initiatives:

1. Basic Training Programme
2. Advanced Training Programme

### 4.1.2. Focus Industries

1. Construction
2. Food Processing
3. Repair Services
4. Drivers Training
5. Poly house Training

6. Hospitality Training

## 4.1.3. Target Sample Size: 20,000

| Districts | Focus Industry | | | | | |
|---|---|---|---|---|---|---|
| | **Construction** | **Food Processing** | **Repair Services** | **Drivers Training** | **Poly house Training** | **Hospitality Training** |
| | Industry wise break up | | | | | |
| | **7000** | **1000** | **750** | **750** | **500** | **10000** |
| Bilaspur | | | ▓ | ▓ | ▓ | |
| Chamba | ▓ | | | | | |
| Una | | | | | ▓ | |
| Sirmaur | ▓ | | | | | |
| Shimla | | ▓ | ▓ | | | |
| Solan | ▓ | | ▓ | | | ▓ |

| Districts | Focus Industry | | | | | |
|---|---|---|---|---|---|---|
| | Construction | Food Processing | Repair Services | Drivers Training | Poly house Training | Hospitality Training |
| | Industry wise break up | | | | | |
| | 7000 | 1000 | 750 | 750 | 500 | 10000 |
| Hamirpur | | | | | | |
| Kangra | | | | | | |
| Kinnaur | | | | | | |
| Lahaul & Spiti | | | | | | |
| Kullu | | | | | | |
| Mandi | | | | | | |

## 4.1.4.  Implementation Plan

| # | Stage | Activities | Responsibility |
|---|---|---|---|
| 1 | Identification of Trainees | • Registration of target group | • Employment Exchanges |

| # | Stage | Activities | Responsibility |
|---|-------|-----------|----------------|
| | (minimal educated youths) | (minimal educated youths) | |
| | | • Screening and short listing | • Employment Exchanges |
| 2 | Administration of training | • Preparation of course material | • Technical education under SCVT system |
| | | • Identification of education infrastructure | • Technical education |
| | | • Identification and Registration of NGO's | • CII Skill Development website<br>• ASSOCHAM<br>• FICCI |
| | | • Certification | • CII |
| 3 | Market Linkage | • Identification of target companies and staffing companies | • CII Skill Development website<br>• ASSOCHAM<br>• FICCI |
| | | • MoU with companies and staffing agencies | • Labour & Employment |

| # | Stage | Activities | Responsibility |
|---|---|---|---|
| 4 | Review and Monitoring | | • Labour & Employment with regular feedback from staffing agencies and companies |

## 4.1.5. Cost of Training Programme  (Break up of Cost per Person)

| Sl. No | Particulars | Responsibility | Rate | No | Amount (Rs.) |
|---|---|---|---|---|---|
| I | Identification and Registration of Candidates & Trainers | Employment Exchanges | | | 25 |
| | Screening of Candidates | Employment Exchanges | | | 50 |
| II | Administration of Training | Employment Exchanges | | | |
| III | *Preparation of Training Material, Identification of Training Infrastructure* | Industrial Training Wing | | | 100 |
| IV | *Testing & Certification* | Industrial Training Wing/Association | | | 150 |
| V | *Accommodation, food during the Training period* | Employment Exchanges | 40 | 30 | 1200 |
| VI | Stipend | Employment Exchanges | 50 | 30 | 1500 |
| VII | Faculty Cost | Industrial Training Wing | 100 | 30 | 3000 |
| | **Total** | | | | **6025** |

**4.1.6.** **Funding Mechanism:** The above training can be funded through public private partnership model.  The reimbursement of training fee can be linked to success of finding a suitable employment on completion of training course

**4.1.7.** **Employment Potential: 20,000**

## 4.2. Initiative Name:

Capacity Building of ITI's

### 4.2.1. Sub-Initiatives:

| # | Sub-initiatives | Implementation Agency | |
|---|---|---|---|
| | | Lead Agency | Supporting Agency |
| 1. | • Incremental increase in capacity of ITI to 4000 primarily through introduction of shift system in Shimla, Mandi, Kangra and Hamirpur. | Industrial Education Wing | |
| 2. | • Increase in intake for motor vehicle mechanic in ITI Bilaspur | Industrial Education Wing | |

| # | Sub-initiatives | Implementation Agency | |
|---|---|---|---|
| | | Lead Agency | Supporting Agency |
| 3. | • Introduction of Motor driving and Heavy Equipment Operator Training in ITI Bilaspur | Industrial Education Wing | |
| 4. | • Introduction of courses under SCVT particularly aimed at hydro power technicians / operators | Industrial Education Wing | NPTI/ PMI |
| 5. | • New courses to be introduced at ITI Chamba in the area of hydel power generation such as blasting, concreting and earth moving equipment | Industrial Education Wing | NPTI |
| 6. | • Introduction of courses in ITI Hamirpur in the area of fruit processing and pinestry | Industrial Education Wing | Department of Agriculture |
| 7. | • Introduction of craftsmen food production and steward under the NCVT system or modular employable skills in select ITI's | Industrial Education Wing | Leading Hotel Chain |
| 8. | • Food craft training in cooking, baking and bartending after class XII to be started under SCVT certification in collaboration with leading hotel chain in ITI Shimla | Industrial Education Wing | Leading Hotel Chain |
| 9. | • Preservation of fruits and vegetables, refrigeration and air-conditioning | Industrial | |

| # | Sub-initiatives | Implementation Agency | |
|---|---|---|---|
| | | Lead Agency | Supporting Agency |
| | mechanic with focus on HVAC technology in ITI's Shimla | Education Wing | |
| 10. | • Commissioning of ITI in Shoghi itself with focus on engineering trades such as Electrician, Wireman, Sheet Metal Worker, Welder, Plumber<br>• Increase the intake for Machinist, Refrigeration and Air-conditioning mechanic, electronics mechanic in other ITI in the district | Industrial Education Wing | |
| 11. | • Maintenance courses for spinning and weaving machines as well as captive power plants to be introduced for Fitters in ITI Sirmaur<br>• Fashion Technology trade to be started under NCVT in ITI Sirmaur<br>• Weaving courses with specific focus on weaving preparatory activities to be started under SCVT in ITI Sirmaur | Industrial Education Wing | Leading Textile company |
| 12. | • Food technology to be started in few ITI's in Sirmaur district | Industrial Education Wing | In association with CFTRI Mysore |
| 13. | • Commissioning of new engineering trades under NCVT such as Mechanic, Electrician, Wireman, Sheet Metal Worker, Refrigeration and Air-conditioning Mechanic, Auto Electrical and Electronics in ITI Sirmaur | Industrial Education Wing | |

| # | Sub-initiatives | Implementation Agency | |
|---|---|---|---|
| | | Lead Agency | Supporting Agency |
| | • Increase the intake for existing courses such as fitter, turner, Plastic Processing Operator in the existing ITI <br> • Certain course level changes to be implemented such as training on CNC machines, Arc and Submerged welding for Welders, CAD/CAM for electronics and mechanical trades | | |
| 14. | • Upgradation of ITI Solan with modern equipment such as modern welding and CNC machines | Industrial Education Wing | |
| 15. | • New trades to be introduced in ITI Una for motor mechanic, automobile engineering and electronics. | Industrial Education Wing | |
| 16. | • Training of local manpower in short-term courses such as blasting, drilling, heavy earth moving machinery and concreting | Industrial Education Wing | |
| 17. | • Short term exchange programme (duration of 4 to 6 weeks) with leading educational institutions and companies in India | | |

### 4.2.2. Cost of Capacity Building

| Sl. No | Particulars | Responsibility | Rate | No. of courses | Amount (Rs.Lakh) |
|---|---|---|---|---|---|
| 1 | Introduction of Courses | Industrial Training Wing | 20000 | 40 | 8 |
| 2 | Introduction of Courses - Polytechnic | Industrial Training Wing | 20000 | 20 | 4 |
| 3 | Introduction of Courses - Colleges | Higher Education | 20000 | 10 | 2 |

### 4.2.3. Benefits: 20,000 students covering ITI, Polytechnic and Engineering based on revised projected capacity requirement

## 4.3. Initiative Name:

Capacity Building of ITI's

### 4.3.1. Sub-Initiatives:

Shared service model of ITI and Polytechnic to reduce infrastructure funding of new ITI's

### 4.3.2. Focus Districts:

1. Shimla

2. Mandi
3. Kangra
4. Solan

### 4.3.3. Implementation Plan

| # | Stage | Activities | Responsibility |
|---|-------|------------|----------------|
| 1 | Identification of Facilities | • List of infrastructure and equipment facilities | • Department of Technical Education |
| 2 | Identification of faculty | • Screening and short listing | • Department of Technical Education |
| 3 | Administration of training | • Preparation of course material | • Technical education under SCVT system |
| | | • Identification of education infrastructure | • Technical education |
| 4 | Review and Monitoring | | • Technical Education |

### 4.3.4. Cost of Shared Service Model: Rs. 5 Crore

### 4.3.5. Benefits: Saving on account of reduced infrastructure spending on creation of new ITI' s and Polytechnics

## 4.4. Initiative Name:

Employability Linked Skill Development Initiative

### 4.4.1. Sub-Initiatives:

Skill assessment and linkage with employers

### 4.4.2. Focus Districts:  Covering all districts

### 4.4.3. Target Sample: 20000 employable youths

### 4.4.4. Implementation Plan

| # | Stage | Activities | Responsibility |
|---|-------|-----------|----------------|
| 1 | Identification of | • MoU with leading soft skill trainer e.g. British Council, | • Department of |

| # | Stage | Activities | Responsibility |
|---|-------|-----------|----------------|
|   | assessment agency | University of Cambridge<br><br>• Agree on service level performance | Higher Education<br><br>• Industry Department |
| 2 | Identification of students | • Segmentation of Unemployable youths | • Employment Exchange |
| 3 | Testing | • Screening of unemployable youths | • Training organisation |
| 4 | Administration of training |  | • Training organisation |
| 5 | Job Mela | Placement Mela with prospective companies | • Labour & Employment |
| 6 | Review and Monitoring |  | • Labour & Employment |

**4.4.5.     Cost of Skill Assessment & Employee Linkage:** Rs.5000 per employable youth

**4.4.6.     Benefits:** Employment opportunities to 10000 employable youths.

## 4.5. Initiative Name:

Cluster Development Initiative

## 4.5.1.  Sub-Initiatives:

Cluster Development Initiative focussing on Tourism

ii.  Promote HP tourism with specific focus on options, differentiation and experience.  In this context, we are proposing segmentation of HP tourism industry into number of tourist circuits targeting various special categories of tourists.

a. Leisure Tourism focusing on Parwanoo, Chail, Kasauli, Shimla and Kullu/Manali

b. Adventure Tourism focussing Chamba, Lahaul & Spiti (Camping and Trekking), Kangra (Water Sports), Bilaspur (Water Sports) and Manali

c. Cultural Tourism focussing on Hindu temples and Buddhist temples

d. Rural Tourism to experience the local culture

e. Agri Tourism to experience the farming practices

iii.  Establish Arts & Crafts village in Dharamsala and Chamba

### 4.5.2. Focus Districts: Covering all districts

### 4.5.3. Implementation Plan

| # | Stage | Activities | Responsibility |
|---|-------|-----------|----------------|
| 1 | Develop cluster development plan | • Identify key industries attributes<br><br>• Identify forward and backward linkages to sustain competitive advantage of cluster<br><br>• Facilitate creation of forward and backward linkages<br><br>• Identify key performance gaps | • Project Manager, Industry Department |
| 2 | Perspective plan for skills development | • Identify current and future skill requirement | • Labour & Employment<br><br>• Project Manager, Industry Department |
| 3 | Administration of | | • Project Manager, |

| # | Stage | Activities | Responsibility |
|---|-------|-----------|----------------|
| | skill development initiative | | Industry Department |
| **4** | Review and Monitoring | | • Project Manager, Industry Department |

**4.5.4.** **Cost of Building Tourism Cluster:** Rs.50 crore

**4.5.5.** **Benefits:** Direct & Indirect employment opportunities to over 1 lakh people

**4.5.6.** **Funding Mechanism:** PPP opportunities are available in the area of Arts & Village and Training Centre.

## 5. Fund Requirement (Initiative wise District wise and Department wise)

| Districts/ Departments | Initiative | Large Scale Skill Development initiative | Employability Focussed Skill Development | | | | Cluster Development Initiative | | |
|---|---|---|---|---|---|---|---|---|---|
| | Sub-initiative | Basic and Advanced Training Programme | Introduction of new courses | Skill Assessment | Shift system in ITI's / Polytechnic | Shared Service Model | Tourism | Drivers Training Institute | Power Training Institute |
| | Cost (Rs.Cr) | 12.7 | 1.4 | 5 | Nominal | 5 | 50 | 5 | 5 |
| District wise Fund Requirement | | | | | | | | | |
| Bilaspur | | 0.47 | | | | | | 5 | |
| Chamba | | 0.84 | | | | | | | |
| Una | | 0.12 | | | | | | | |
| Sirmaur | | 0.84 | | | | | | | |
| Shimla | | 1.83 | | | | 1.25 | | | |

| Districts/ Departments | Initiative | Large Scale Skill Development initiative | Employability Focussed Skill Development | | | | Cluster Development Initiative | | |
|---|---|---|---|---|---|---|---|---|---|
| | Sub-initiative | Basic and Advanced Training Programme | Introduction of new courses | Skill Assessment | Shift system in ITI's / Polytechnic | Shared Service Model | Tourism | Drivers Training Institute | Power Training Institute |
| Solan | | 2.43 | | | | 1.25 | | | |
| Hamirpur | | 0.60 | | | | | | | |
| Kangra | | 1.23 | | | | 1.25 | | | |
| Kinnaur | | 0.60 | | | | | | | |
| Lahaul & Spiti | | 0.10 | | | | | | | |
| Kullu | | 1.38 | | | | | | | |
| Mandi | | 2.27 | | | | 1.25 | | | 5 |
| Department wise Fund Requirement | | | | | | | | | |
| Departments | | | | | | | | | |
| Labour & Employment | | 5 | | 4.5 | | | 3 | | |
| Industrial Training Wing and Technical Education Wing | | 5 | 1.0 | | | 5 | 2 | | |

| Districts/ Departments | Initiative | Large Scale Skill Development initiative | Employability Focussed Skill Development | | | | Cluster Development Initiative | | |
|---|---|---|---|---|---|---|---|---|---|
| | Sub-initiative | Basic and Advanced Training Programme | Introduction of new courses | Skill Assessment | Shift system in ITI's / Polytechnic | Shared Service Model | Tourism | Drivers Training Institute | Power Training Institute |
| Higher Education | | | 0.4 | 0.5 | | | | | |
| Tourism | | | | | | | 45 | | |
| Industry | | | | | | | | | 5 |
| Dept of Horticulture | | 1 | | | | | | | |
| Dept of Animal Husbandry | | 1 | | | | | | | |
| Dept of Transportation | | 1 | | | | | | 5 | |

**End of Document**