Skill Mapping in Two Districts: Gurdaspur (Punjab) and Singrauli (Madhya Pradesh)

A Study based on a Sample and a Census of Vocational Training Providers

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Introduction

The present study was undertaken on behest of NSDC which focuses upon the following issues:

- The current economic activities going on in the districts including farm and non-farm activities
- The types of industries available in the districts and their status of technology adaptation
- Various resources available in the districts which could be exploited for expansion of economic activities which could generate employment
- Assessment of unutilized or partly utilized resources
- The present status of workforce and their levels of education and skills
- The shortage of skills and future demands in the light of the changing labour market
- The status of educational and training facilities available in the district and quality of education and training
- Status of forward and backward linkages in order to generate employment as well as optimally utilized human resources
- The aspirations and employability of youth

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Supplement

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Executive Summary

The study of skill Mapping Survey has been undertaken on behalf of the National Skill Development Corporation (NSDC), New Delhi. The study has been conducted in two districts, namely, Gurdaspur in Punjab, and Singrauli in Madhya Pradesh.

Objectives

The main objectives of the study are:

- Employment status of skilled manpower
- The shortage of skilled personnel and future demands in the light of the changing labour market
- The status of technical educational and training facilities available in the districts, and quality of education and training
- The types of industries available in the districts and their status of technology adaptation
- Various resources available in the districts which could be utilized for expansion of economic activities, and hence, could generate employment
- Assessment of unutilized or partly utilized resources

Methodology

Two different approaches have been adopted to determine the appropriateness and suitability of the methodology, in case such studies are undertaken across the country. In Gurdaspur district the survey has been conducted on sample basis, while in Singrauli a census approach has been adopted. Sampling was done on the basis of two-stage stratified random basis for which sampling framework was prepared separately for vocational training providers (VTPs) and Establishments. In Singrauli district all VTPs were covered. In Gurdaspur District 155 VTPs and 332 Establishments were covered and in Singrauli 36 VTPs and 372 Establishments were covered.

For collecting data mixed methodology has been adopted in the study, wherein both quantitative and qualitative data have been collected and collated. The primary data have been collected through survey, whereas secondary data have been collected from government departments and other sources. Primary data was collected through structured questionnaire. Separate questionnaires were designed for VTPs and Establishments. To solicit the qualitative information various stakeholders were contacted such as government departments, representatives of industries, financial institutions, NGOs, Self Help Groups (SHGs), VTPs etc. Focus group discussions (FGDs) were organized to solicit information on various issues such

as demands of skills, availability of training institutes, problems faced by industries, aspiration of youths and women, government policies and programmes of skill development and so on.

Main Findings

A. Gurdaspur

Gurdaspur district is historically and culturally rich. Its natural resources in terms of rivers and canals make irrigation possible as the district has predominantly agriculture base. Canal water is suitable for agriculture as well as for domestic use. The district is also rich in mineral resources such as stone, sand, salt petre, limestone etc., which can be used for development of economic activities. The literacy rate is higher in the district as compared to the state and national average.

The survey shows that, concentration of industries is in Batala block. Majority of industries are small and most of these are engaged in manufacturing of lathe and other machines, agricultural appliances etc. Private sector is pre-dominant as 90 per cent of establishments are in this sector. Manufacturing industries are employing more workers. A few industries are opting for new technology and machines. About 27 per cent industries are planning for future expansion.

Results of the survey show that concentration of VTPs is more in larger towns (60 per cent), namely in Gurdaspur and Batala. Majority of these institutions are recognized by one or the other agency. The Government aided and government institutions are having good infrastructure and sufficient staff but optimal utilization of these remains an issue. Informal institutions are providing training for such trades which require less space and machines. Computer related courses are more in demand followed by paramedical and beauty-care courses. Formal institutions receive regular grant from Government and hence incur more expenditure per course, and charge lesser fees from students as compared to private institutions.

Skilled persons are preferred by most establishments but quality of training remains an issue. At present, there is a shortage of more than 6,000 skilled persons in the district. Organisations which are planning for expansion, modernization and diversification have also suggested future requirements for skilled persons. The maximum requirements are in the trades like machinist, turner, fitter, CNC operators etc. During the next 5 years, the district may require additional 9,000 skilled persons.

The district has traditional skills in carpet weaving, embroidery, shawl making, preparing handicraft items etc. The major problem in sustainability of traditional skills had been the lack of skill up-gradation, use of new machines, and linkage with markets. Traditional skills are also available in some of the occupations such as mason, blacksmith, porter, shoe maker, weaver etc. but these skills are obsolete now due to technological innovations and demand for modern items.

Discussions with various stakeholders and the survey in general indicated that there is a need for short-term courses for motor mechanic, diesel mechanic, electrical item repairer, plumber, carpenter, mason, electrician and blacksmith etc. Training should be given on modern machines and equipments. There is also a demand for fabrication courses especially in Kadiyan Block. Moulders, turners, mechanical engineers, welders, fitters are also demanded especially in Batala Block, as most of the industries are manufacturing different kinds of machines. Since there is an availability of food crops, training is needed for processing of various food products. The courses may include food processing especially for wheat, rice, sugarcane, potato etc.

The economy of Gurdaspur is agro-based and thus there is a demand for horticulture related courses. Hotel & tourism has vast scope in the district but there is hardly any training course for these activities. Youths of the district lack confidence in marketing skills, leadership qualities and team work. Entrepreneurship programme can be organized with forward linkages with financial institutions. The training should include financial management, project development, communication skill, personality development and knowledge of computer operation. There is also a need for establishing training centres at the doorstep for girl students especially for fashion designing, beauty-care course, painting, interior decoration, embroidery, art and crafts, pickle & *papad-badi* making etc.

Raw material is available in abundance for paper making. There is a vast scope for setting up paper and pulp board industries. Raw material is also available for making light furniture, basket weaving, cookery, rope making etc. Cottage industries can be established by individual entrepreneurs if adequate training and financial support is provided by the government.

Some issues relating to the bottleneck in developmental process in the district are also highlighted. Youths are attracted towards salaried jobs. They are no longer interested in pursuing agriculture as a principal occupation. They are interested in going abroad. Opportunities for employment and training for women are few in the local areas.

So far as development of the industries is concerned, increase in the freight charges, multiple taxation, non-availability of electricity and lack of initiatives on the part of the government are some of the major reasons for closing down of industries in the district.

On the basis of the field survey results, it is evident that the district has potential for development. There are skill gaps and new skill needs are also emerging, which should be taken into consideration for preparing a skill development plan. Specific policy interventions are needed for certification of informally trained persons; courses in ITIs/ITCs should be as per market demand; soft loans from financial institutions should be arranged, quality of training is to be improved and finally, there is a need for backward and forward linkages with training institutions, industry and financial institutions.

B. Singrauli

Singrauli district comprising of three blocks – Waidhan, Deosar and Chittrangi – was carved out as a separate district of Madhya Pradesh in 2008 with its headquarters at Waidhan. It is one of the most backward districts in the country, though it has got rich mineral deposits and other natural resources. Agriculture is the mainstay of economy with paddy, wheat, and *arhar* being the principal crops. Lack of irrigation facility is one of the principal reasons for lower crop yield in the region with only 17 per cent of the net sown area under irrigation. Smallness of size of holdings together with low irrigation intensity has contributed significantly towards the socio-economic backwardness of the district. The predominance of agriculture in economic activity can be highlighted by the fact that 77 per cent of the workers were engaged in agricultural activities, while 23 per cent were non-agricultural workers.

Singrauli is fast becoming the energy hub of the country which is the result of the abundant water resources and coal reserves. National Thermal Power Corporation (NTPC) and Northern Coal Fields Ltd. have been operating in the district for the last 30 years. Since last 7-8 years many private sector establishments have been started constructing power plants and are initiating the process of excavating coal in several parts of the district. This has indeed opened up new employment opportunities, particularly for skilled manpower in the region. With the commissioning of new establishments in the next 3-4 years, demand for skilled manpower is expected to grow significantly. Moreover, with the expansion of economic activities, and ancillary industries coming up, there will be a considerable indirect demand for skilled manpower. The objective of this study is therefore to estimate the requirement of skilled manpower in the region, and also to take stock of existing vocational and technical training institutions in the district.

Among the three blocks, Waidhan is the most developed one, and vast majority of establishments (80% of the 372 establishments) are located here. Highest percentages of establishments are engaged in manufacturing activities (44.62%) followed by Wholesale & Retail Trade; Repair of Motor Vehicles and Motorcycles. An overwhelming proportion (72%) of establishments is extremely small having employment size of up to 5 persons. Only a few large companies (power plants and coal mines) have employment size of more than 500 persons.

Since most of the establishments are extremely small, these do not have the capacity to train their workers, and therefore, only 16 per cent of establishments were providing training to their workers. Further, only one-third of the establishments have plans for expansion/modernization/diversification during the next five years. Even though there is an expansion of market at the local level, skill shortage is one of the reasons why majority of establishments do not have any expansion/modernization/diversification plan during the next five years.

Out of the total workers working in the industries, 71.62 percent were skilled workers and 28.38 percent were unskilled workers. Highest percentage of workers (37.12 percent) was

working in Mechanical trades followed by 12.10 percent in Management trades. Also, maximum shortage of workers was assessed in Mechanical trades. Total shortage of workers was assessed as 4,885 workers in Singrauli district out of which 503 were unskilled workers. At present, 201 trades are in demand by the industries. These trades are in broad disciplines such as Mechanical, Electrical, Civil, Geology & Mining, Electronics & Communication, Control & Instrumentation, Chemical, Computer, Management, Health, Accounts & Finance, Education, Hotel Management, Driving/Operators and Other services. Taking into account the future skill requirement, the study revealed that there 11,060 workers in various categories of skill.

The survey of VTPs revealed that there are 36 VTPs available in the district. Majority of VTPs (89 %) are in Waidhan block and majority of these is in private sector.

Total 80 courses were run by 36 VTPs; 47.50 percent of courses were of certificate level and 45 percent were of diploma level whereas 7.50 percent were informal courses. Majority of diploma level courses (77.78 percent) were conducted in computer discipline. Highest number of (31.58%) certificate level courses was conducted in mechanical disciplines.

During 2010-11, there were 2,358 students enrolled, out of which 1,911 students were passed (81.04%). Highest enrolment (39.48 percent) was in computer related courses. Placement of students has been increased in 2010-11 as compared to that in the previous years. However, even after improvement, placement rate is only one-third (out of the total pass-outs).

Average annual expenditure per student was Rs. 3,671 in the formal VTPS, while the average annual expenditure per student in the informal institutions was Rs. 11,844. Majority of VTPs reported that infrastructure facilities are adequate.

Presently, as many as 64 trades are in demand in the industries of Singrauli district; while VTPs in Singrauli district supply skilled personnel to these industries only in 30 trades. There is no VTP in the district for providing training for the remaining 34 trades.

In view of the Survey the study suggests the following recommendations.

1. For Health related courses at least one institution should be set up in association with Government District Hospital and other big hospitals in the district. All types of health related vocational courses may be started in this institute.

2. For Engineering and Non-Engineering Trades at least one institute at Polytechnic level and three institutes at ITI level may be opened in the district to cater to the need of the skilled persons in the district. It is also suggested that ITI level institutions may be opened one in each of the three blocks. In ITI level institutions, in addition to above-listed courses, other trades which are also in demand must be started in consultation with the local industries. These institutions may be opened in the Government or in Private sector or in Public Private Partnership (PPP) model.

Up-scaling of such Studies

- If such studies are to be up-scaled, the mix methodology approach followed in this study appears to be appropriate wherein both quantitative (through structured questionnaires) and qualitative data (through FGDs) have been collected and collated.

- Whether the study in a district should be census or sample would depend upon a number of factors in different states which are as follows:

  i) Size of the district – To replicate such study in bigger blocks (more than five) sample study is recommended.
  ii) Area of the district – If a district has five or less blocks but the area is big, sample study is recommended.
  iii) Number of VTPs – If there are more blocks but, VTPs are limited; census is recommended.
  iv) While doing sample study sampling should be done at the block level itself in general. But if VTPs are limited, then all blocks should be covered.

- For sample studies about Rs.10-12 lakh per district on an average for census studies about Rs.15-18 per district.

Chapter 1

Objectives and Methodology

This section details with the genesis of the study, its objectives, methodology and tools for study. In two districts, namely, Gurdaspur and Singrauli where the studies were done, two different approaches have been followed; details as well as explanation of which have been provided.

Genesis of the Study

The Government of India attaches great importance to skill development in the country. India has a large population base of 1.14 billion with a demographic shift in favour of working age group. Over the next five years, working age group is expected to grow at 2.15 per cent. The net addition to the workforce is, therefore, expected to grow to 89 million, of which 13 million are likely to be graduates and postgraduates, and 57 million are school drop-outs or illiterates. This will lead to an incremental demand for skilled labour. Graduates and vocationally trained people are expected to meet only 23 per cent of this demand. The country's vocationally trained workforce is one of the lowest in the world and productivity of the Indian workers is also lowest owing to low skill levels. India has set a target of skilling 500 million people by 2022 (Eleventh Five Year Plan).

With India's integration into the global market and the industry can benefit from globalization in terms of price, quality, safety and productivity, only if the country acquires globally competent labour force. This calls for a re-look at the existing state of affairs in the skill-imparting system of the country. Efforts have to be made to develop market -driven functional skills amongst its potential labour pool. The Prime Minister's National Council on Skill Development has been formulated to coordinate action on skill development.

The National Skill Development Corporation (NSDC) has been set up under Public- Private-Partnership (PPP) mode which is functioning under the Ministry of Finance to provide viability gap funding and coordinate private sector initiatives. The corporation has constituted Sector Skills Councils for identification of skill development needs, development of a sector skills development plan and establishment of a well-structured sector-specific labour market information system.

NSDC, inter-alia, aims at determining the gaps between the demand and supply of human skills at micro level through survey studies. In this context, Institute of Applied Manpower Research (IAMR) has been entrusted by NSDC on a pilot basis to study two districts to establish a sound methodology so that later such survey could be undertake across the country. These two districts are Gurdaspur in Punjab and Singrauli in Madhya Pradesh. In Gurdaspur, the survey of vocational training providers (VTPs) has been conducted on a "sample" basis while in Singrauli a "Census" approach has been followed.

Objectives:

The main objectives of the study are:

i) To assess the status of the existing economic activities and potential for expansion.
ii) To assess the status of training facilities.
iii) To map skill demands for future.
iv) To match the aspirations of youth with employment opportunities.

Structure of the Report

This report is divided into two parts. The first part provides information about the Gurdaspur district of Punjab and second part relates to Singrauli district of Madhya Pradesh. Gurdaspur report has seven sections. First section details the objectives and methodology adopted for survey in both the districts. Section two relates to Gurdaspur wherein demographic and social status of the district has been described. In section three major economic activities, information regarding industries and their modernization has been mentioned in the light of survey results. Section four details the vocational training facilities available in the district and problems therein. Section five indicates skill gaps and skill demands. In section six other issues such as aspirations of youth, problems of industries etc. have been discussed. Section seven provides a summary of findings and suggestions.

Part II of the report relates to survey of Singrauli.

Major Findings

Based on the field survey, following are the major findings:

- Both the districts have agriculture as their base occupation. While agriculture in Gurdaspur is modernized, whereas that in Singrauli is yet to take place.
- Gurdaspur is less industrialised as compared to Singrauli, which is emerging as energy hub of India. Industries in Gurdaspur are suffering due to lack of adequate industrial policies and erratic power supply.
- Both the districts do not have adequate training facilities in the light of changing labour market needs.
- Both physical and human resources in both the districts are under-utilized, which can be exploited for imparting demand based training and generating employment.
- There is demand for skill development in both the districts. While in Gurdaspur the demand for skills relates to manufacturing of machines and tools, in Singrauli skill requirements are for power plants.
- In both the districts traditional skills need up-gradation.
- In both the districts there is a demand for functional skills, which means that people should have practical skills besides having theoretical base.

- In Gurdaspur, establishments are small (no establishment employing 100 workers), while in Singrauli establishments are big (the power plants employing more than 100 workers). These big establishments in Singrauli can be encouraged to start their own technical institution for imparting training.
- As Gurdaspur is a relatively prosperous district, youth have high aspirations in terms of salaries and type of work assignments.
- Utilisation of manpower is possible through forward linkages of trained youth with Government schemes. For example the technically trained youth may be linked with the government schemes under which loans are provided to start self employment ventures.
- Infrastructure in terms of school buildings and other training institutions building and equipments is underutilized and can be used to impart training.
- There is need for certification of informally trained persons.

Methodology

- ***Which approach is more suitable - Census Vs Sample***

  The studies have been conducted in two districts, namely, Gurdaspur in Punjab and Singrauli in Madhya Pradesh by following two different approaches. In Gurdaspur, the survey has been conducted on sample basis while in Singrauli a census approach has been followed. In census approach all the vocational training providers (VTPs) providing training to at least 5 persons at a time, were covered in all the three blocks.

  In Gurdaspur district, information was collected by adopting a sample design approach. Sampling was done on the basis of two-stage stratified random basis for which sampling frames were prepared separately for VTPs and establishments.

  Two different approaches have been adopted to determine the appropriateness and suitability of the methodology, if such studies were taken to scale across the country.

- ***Collection and Collation of qualitative and qualitative data***

  Mixed methodology has been adopted in the study wherein both quantitative and qualitative data have been collected and collated. The data have been collected through primary survey as well as using available secondary data from various sources. Primary data were collected through structured questionnaires; separate questionnaires were designed for Vocational Training Providers (VTPs) and Establishments. These questionnaires were pre-tested twice at different locations before finalization. Vocational Training providers (VTPs) and Establishments, District/Block level officials, elected members of local bodies, NGOs, Industries, self-help groups and other stake holders, were contacted to elicit information on various issues such as quality of skill training, skills demanded, emerging occupations and economic activities etc.

A brief description about each questionnaire is given below:

Research Tools

i) VTP Questionnaire

Through this questionnaire, information was collected from Vocational Training Providers (VTPs) about type of institutions, status of affiliations, courses offered and level of courses. Information was also collected about fee structure, faculty status, placement records and adequacy of infrastructure etc. The questionnaire also included questions on demand for new courses which have potential for employment in the near future. Questionnaires had close ended as well as open-ended questions.

ii) Questionnaire for Establishments

The questionnaire for establishment was designed to capture the skill demands and gaps in skills. The questions, inter-alia, included questions on major activities of the establishment, number of technical and non-technical employees, technological changes and subsequent needs for skills, status of skill development in the district and so on.

Focus Group Discussion (FGDs)

To solicit qualitative information from various stakeholders such as government employees, industry representatives, representatives from financial institutions, NGOs, SHGs, Vocational Training Providers, etc. checklists were designed to organize FGDs. Points were also chalked out for discussions with youth to understand their aspirations and skill needs. Interactions took place specifically with women groups to know their problems and requirements. Details of these checklists have been given below:

i) For District Level Officials:

This checklist has six parts. First part relates to economic activity status of the District, especially non-farm activities, scope for expansion, diversification and potential for future employment generation etc. Second part centered on the availability of human and natural resources and infrastructure and status of their utilization. Third part contained the status of training facilities in the district, skill shortages, emerging requirements, quality of training, availability of qualified trainers, status of traditional skills and requirement of up gradation of available manpower etc. In the fourth part forward linkages after training, employability of persons trained, government intervention in increasing employability and skill development etc. were covered. Future plans and interventions of district policies for new investment, 'fading' and 'sunrise industries', labour market information system, status of unemployment, etc.

were covered in fifth part and lastly aspiration of youths etc. were covered in the sixth part.

(ii) Discussion Points for Industries

Discussion points for industries had four sections. Through the first section, information was collected from the industry representatives about emerging occupations, extension of existing activities, setting up of additional unit, diversification and modernization of existing units etc. resulting in skill needs. Skill requirements and shortage of skills, up-gradation of skill mechanism, existing skill development status, etc. were sought in the second section. In the third section, issues regarding quality of available trained manpower, availability of raw material and labour turnover etc., were listed. In the last section, opinions about initiatives from industries in connection with skill development under PPP mode were discussed. The section also included issues like bottlenecks in industrial development of the district.

(iii) *For Block Development Official, Block Education Official, Self-help Group NGO's*

For collecting opinion from block officials, Self Help Group (SHGs), NGOs, etc., various aspects such as role of NGOs in skill development, satisfaction about existing training programmes in the block, emerging training needs in the area, status of family occupation, problems of youths and constraints in imparting training etc., were collected.

(iv) *Discussion Points for Youth*

Discussions points in this checklist included aspirations of youth, their skill needs, perspective about unemployment and salary issues, their present status of training, problems in getting adequate training, etc.

It may be noted here that in case of Singrauli District, the census survey was carried out. In addition, FGDs were carried out. One FGD was carried out with the District officials, three FGDs were carried out at the Block level (one in each Block). Also, 7 FGDs were carried out at the village level with artisans (in different trades).

Sampling the Procedure

- **Sampling for VTPs**

For identifying the universe (Sample frame) for VTPs, data from Economic Census 2004-05, lists obtained from District Industries Centre (DIC), Industrial Training Institutes (ITIs), Employment Exchanges, Education Department, Deputy Commissioners' Office and other sources were compiled as complete information was not available from one source. A total of 526 educational institutions and vocational Training providers (VTPs) were thus identified in

Gurdaspur District in its 11 blocks. After preparing the universe, a two way stratified random sampling design was adopted, strata being the blocks and type of institutions. The block-wise details by category of VTPs are given in the table below:

Table 1.1 Block-wise VTPs List in Gurdaspur

Name of Blocks	Category of VTPs								
	Schools	**ITI**	**ITCs**	**Polytechnic**	**Colleges**	**Others**	**Total Formal**	**Informal***	**Total**
Batala	143	1	-	3	7	10	164	20	184
Gurdaspur	84	4	2	3	18	21	133	21	155
Dera Baba Nanak	10	1	-	0	3	-	14	5	19
Fatehgarh Churian	10	1	-	0	2	-	13	3	16
Dhariwal	19	1	1	0	1	-	22	1	23
Quadian	10	1	-	0	4	-	15	2	17
Dinanagar	17	0	1	1	5	10	34	3	37
Kalanpur	5	1	-	0	0	5	11	1	7
Shri Harigobindpur	8	0	-	0	0	3	11	0	13
Khanuwan	6	0	2	0	0	1	9	0	9
Dorangal	4	0	-	1	0	1	6	0	6
Miscellaneous	34	0	-	0	1	-	35	4	40
Total	**350**	**10**	**6**	**8**	**41**	**51**	**466**	**60**	**526**

*As listed in the frame.

** 'Other Institutions' include institutions providing various skill development courses other than ITI and polytechnics.

For a population size of 526 and with specification of a) 5% margin of error, and b) 95% confidence level, the sample size with random sampling would be about 225. The total sample size has been distributed, first among various types of institutions, allowing 25% sampling of schools, 50% in colleges and polytechnics and 100% in the case of all other types of institutions. This leads to a total sample size of 244 which is slightly higher than a calculated size of 225. The samples for each type of institutions have then been distributed among various blocks in proportion to the total number of institutions of that type in the block. Within each block the requisite number of schools and colleges and polytechnics as indicated in the above table were selected through simple random sampling. Institutions of other types were covered on Census basis.

In addition to the institutions appearing in the sampling frame originally constructed from various sources, it was found during the field work that there were some other training establishments which were being operated from residential or other areas and were not listed in the frame. Such institutions were listed at the time of survey in different blocks, added to the sample and were covered through this survey. These institutions were mainly in the informal sphere of activity. In the universe compiled from various sources there were a total of 60 informal institutions. However, a total of 85* were listed after locating them while in the field, which have all been covered. It was also found that a few institutions which were originally

listed as schools and colleges were in fact imparting vocational education or training and as such they were transferred to the relevant category 'Other institutions'. The final sample with all these inclusions came to 282 as shown below:

Table 1.2 Sampling of VTPs

Name of Blocks	Category of VTPs								
	School	ITI	ITC	Polytechnic	College	Other Institution	Total Formal	Informal Institution	Total
Gurdaspur	27	4	2	2	3	8	46	38	84
Batala	43	1	-	2	3	12	61	19	80
Dorangal	3	-	-	-	-	-	3	1	4
Khanuwan	3	-	2	-	-	4	9	-	9
Kalanaur	1	1		-	1	2	5	4	9
Shri Hargobindpur	5	-		-	-	4	9	3	12
Dhariwal	11	1	1	-	-	2	15	5	20
Quadian	4	1		-	2	2	9	3	12
Dinanagar	5	-	1	1	2	5	14	9	23
Dera Baba Nanak	4	1	-	-	1	8	14	2	16
Fatehgarh Churian	3	1	-	-	2	6	12	1	13
Total	**109**	**10**	**6**	**5**	14	**53**	**197**	**85***	**282**

While the total sample of institutions surveyed, including general schools and colleges, was thus 282, the primary focus of the study was on vocational education and training providers. It may be noted here that sample of schools has been taken only in order to assess the infrastructure available in the district which could be optimally utilized for purposes of vocational training. Detailed analysis of all other aspects has therefore been confined to VTPs only. Excluding the 123 general schools and colleges selected into the sample, the number of VTPs actually surveyed came to 155 as shown in the following table.

Table 1.3 Actual Coverage after deleting the sample of schools and general colleges covered

Name of Blocks	Category of VTPs								
	School	ITI	ITC	Polytechnic	Colleges	Others Institutions	Total Formal	Informal Institutions	Total
Gurdaspur	0	4	2	2	4	4	16	36	52
Batala	1	1	0	2	2	9	15	18	33
Dorangal	0	0	0	0	0	0	0	0	0
Khanuwan	0	0	2	0	1	3	6	0	6
Kalanaur	0	1	0	0	0	2	3	4	7
Shri Hargobindpur	0	0	0	0	0	4	4	4	8
Dhariwal	0	1	1	0	0	2	4	3	7
Quadian	0	1	0	0	1	1	3	2	5
Dinanagar	1	0	0	1	1	3	6	9	15

Dera Baba Nanak	0	1	0	0	2	6	9	4	13
Fatehgarh Churian	3	1	1	0	2	1	8	1	9
Total	**5**	**10**	**6**	**5**	**13**	**35**	**74**	**81**	**155**

The above classification of VTPs is on the basis of the various types of educational and training facilities available in the district. Schools and Colleges are imparting general education, while ITIs and ITCs are providing certificate courses. Polytechnics provide Diploma level courses. The category of other institutions include various types of institutions providing different trade related certificate/ diploma and degree courses. All these are covered under formal institutions as these courses are recognized by some or the other agency. The category of informal institutions includes those trade related courses that are imparted by generally home based institutions which offer paper or no certificate.

- ***Sampling for Industrial Establishments***

The objective of administering a questionnaire to industry establishments was to assess their demand for skills for future as well as existing skill shortages.

To prepare the universe for conducting the establishment survey, a list of industries/ establishments were obtained from District Industry Centre (DIC), Employment Exchange, Economic Census 2004-05, Government ITI, industrial associations etc. and was also collected a list of informal establishments from other sources.

As per the sampling frame there are a total of about 3,877 establishments in the district. A large concentration of about 1,994 establishments (51.4 per cent) is in Batala Block followed by 336 in Gurdaspur.

All the industrial units of the district were classified according to the major economic activities of the district in consultation with district officials which are as follows:

- Agriculture Implements
- Electrical & Electronics
- Other Manufacturing
- Repair Services
- Wooden Furnishing
- Others

The establishment survey was conducted in all the 11 blocks of the district to cover the above Economic/Industrial activities. Some of the informal activities that did not find a place in the listed sample frame were located and surveyed at the time of field work itself. Thus, the block-wise and industrial category-wise coverage is given in the following table:

Table 1.4 Block-wise and industrial category-wise coverage – Establishments

Name of the Blocks	Industrial Activity						
	Agriculture Implements (Manufacturing / Repair/ Servicing)	Electricity/ Electronics Units	Repair and Servicing Units	Wood/ Wooden Furniture Units	Manufacturing Units (Steel, Iron, Lathe, etc.	Others	Total
Batala	4	3	14	3	122	7	153
DeraBaba Nanak	0	1	4	0	2	0	7
Gurdaspur	4	0	13	2	16	5	40
Dhariwal	2	1	8	2	3	0	16
Dinanagar	4	0	13	5	4	2	28
Dorangal	2	0	1	0	2	0	5
Fatehgarh Churian	2	0	8	6	2	0	18
Qudian	1	0	1	0	2	2	6
Khanwan	1	3	10	1	1	5	21
Kalanaur	1	0	9	1	6	2	19
Shri Hargobindpur	2	1	9	1	5	1	19
Total	**23**	**9**	**90**	**21**	**165**	**24**	**332**

Source: IAMR Survey, 2011

The above sampling has been done for 90 per cent confidence level with 5 per cent margin of error.

- **Focus Group Discussions (FGDs)**

  The details of Focus Group discussions organized in both the districts may be seen in the following table.

Table 1.5 Details of FGDs

Sl. No.	FGD With	Number of FGDs	No of Persons Attended	Participants
A.	District Level	7	135	Principal from ITIs, Principals of schools, Representative of NGO's , district officials, Block officials, representatives from various industries etc.
B.	Block	11	About 200	Block officials, Sarpanch, ITI Principals, Block education officer, C DPO's NGOs, VDOs, Panchayat Secretaries etc.
C.	Village Level	2	25	Local Youth
D.	Stakeholders (Unemployed Youth, industry Association, industrialists,	7		Govt. officials, Head of skill Training imparting Institutions, Industrialists, Informal training providers and local youth etc.
E.	Self Help Group	2	40	President of SHG, block officials

- **Data Collection and Analysis**

Data collection was conducted within a period of one month by hiring investigators at local level who were duly supervised by the teams of the institute. Each questionnaire was scrutinized and wherever gaps were identified the concerned persons were sent to the field again. Investigators were fully trained by the IAMR officials. Institute's officials also visited some of the VTPs and establishments to get the questionnaires filled and sample checking. Software has been developed in-house to generate data tables.
Focus Group Discussions have been analyzed and discussed in relevant sections.

To summarise, this section indicates that although in one district, census study and in another, sample study has been conducted; in both the districts all the blocks have been covered. While doing a sample study a proper sampling design has been prepared. Study tools were designed in-house and pretested in the field before finalization. Mixed methodology approach is a modern approach generally used in all types of researches to get appropriate results wherein quantification is possible and qualitative aspects are also taken into account.

Chapter 2

PART A (Gurdaspur District)

Demographic and Social Status of the District

In this section, demographic and social profile of the district has been discussed which indicated its rich culture and historical background. Both natural and human resources, which could be exploited for their optimum utilization, have been detailed in this section.

The Profile

The district of Gurdaspur was ruled by several dynasties including Mughals. From the latter half of the 10th century up to 1919 A.D., this district was ruled by the Shahi dynasty under Jayapal and Anandpal. Kalanaur in this district was the most important town during the period from 14^{th} to 16^{th} century. After the decline and fall of the Mughal supremacy and the rise of the Sikh power, this district saw various changes. Some of the Sikh Gurus have been closely associated with the district. Guru Nanak, born in 1469 in the Lahore district, married in 1485 in the Batala Tehsil. There is still a wall known as Jhoolana Mahal in Gurdaspur which "swings". The Sikh Guru Hargobind refounded Shri Hargobindpur which had been formerly known by the name of Rahila. Banda Bahadur, the disciple of Guru Gobind Singh used this district as a base to rule the country up to Lahore. The emperor Bahadur Shah conducted an expedition against him in 1711. Banda Bahadar fought his last battle with the Mughal at Gurdas Nangal in the district and was captured. In 1811, Maharaja Ranjit Singh known as the Lion of Punjab captured the whole district. Dinanagar, with its pleasant mango gardens and running canal was his favourite summer residence. Muslim population of the district migrated to Pakistan and Hindus and the Sikhs of Sialkot and Tehsil Shakargarh migrated to Gurdaspur after crossing the Ravi Bridge. They settled and spread in Gurdaspur district. It may be observed that the district has witnessed many ups and downs. This background shows that the district is rich in culture and retains historical importance which attracts a number of tourists from across the globe.

Area and Location

Total area of the district is 2552 Sq. Km. which is 5 per cent of total area of the State. The Gurdaspur district is the northernmost district of Punjab State. It falls in the Jalandhar division and is located between river the Ravi and Beas. The district lies between north-latitude 31^0-36' and 32^0-34' and east longitude 74^0-56' and 75^0-24' and shares common boundaries with Kathua district of Jammu & Kashmir State in the north, Chamba and Kangra districts of Himachal Pradesh in the north-east, Hoshiarpur district in the south-east, Kapurthala district in the south, Amritsar district in the south-west and Pakistan in the north-west.

Topography

There are three Tehsils (namely Gurdaspur, Batala and Dera Baba Nanak), Seven Sub-tehsils and 11 Community Development Blocks. All three tehsils are similar to the rest of the Punjab plains in structure, genesis, lithology and surface configuration. Pathankot which was the part of Gurdaspur district till June, 2011 has been declared as a separate district. With this partition, five community Development Blocks, namely, Bamial, Dharkalan, N.J. Singh, Pathankot and Sujanpur have been transferred to this newly formed district. Pathankot area was hilly region with plenty of horticulture resources and was an advantage for Gurdaspur district. Now with 11 blocks, the district is generally a plain area with its border with Pakistan posing a number of threats and repressions.

Table 2.1 Tehsils, Sub-tehsils and Blocks in the District

Tehsils	Sub-tehsils	Community Development Blocks
1. Batala	1. Dhariwal	1. Batala
2. Dera Baba Nanak	2. Dinanagar	2. Dera Baba Nanak
3. Gurdaspur	3. Fategarh Churian	3. Dhariwal
	4. Kahnuwan	4. Dinanagar
	5.Kalanur	5. Dorangla
	6.Qadian	6. Fatehgarh Churian
	7. Shri Hargobindpur	7. Gurdaspur
		8. Kahnuwan
		9. Kalanaur
		10. Qadian
		11. Sri Hargobindpur

To its south lies an area of about 128 sq. kms which is highly dissected and is an undulating plain. Its elevation ranges from about 305 to 381 meters above sea level. The flood plains of the river Ravi and the Beas are separated from the up-land plain by sharp river-cut bluffs. They are low lying, with slightly uneven topography. Sand dominates in the soil structure of the flood plains.

The up-land plain covers a large part of the district particularly of Dera Baba Nanak, Batala and Gurdaspur tehsils. Its elevation ranges from about 305 meters above sea level in the north-east to about 213 metres above sea level in the south-west, with a gentle gradient of about 1 meter in 1.6 km. This is the most important physiographic unit in the district.

River System and Power Resources

The Beas and Ravi are the two main rivers which flow through the district, both of which originate near the Rohtang Pass in Himachal Pradesh. The Chaki Khad is the chief tributary of the Beas River in Gurdaspur district. Like other rivers of Punjab, the water of Beas and Ravi rivers fluctuate from season to season and from year to year. This fluctuating discharge of the rivers does not permit their navigational use.

There are a number of local swampy depressions popularly known as Chhambs. The largest of these is the Kahnuwan Chhamb which stretches along the Beas River in Gurdaspur tehsil. Another swampy depression is the Keshopur Chhamb but this Chhamba alongwith other erstwhile chhambs of Dhan Rai, Narod Budiulzama, Paniar, Bucha Nangal and Naranwali, have practically been reclaimed now.

Gurdaspur district possesses a fairly dense network of canals of the Upper Bari Doab Canal system which irrigates most of the area of the district. Its main branches are Lahore branch, Kasur branch and the Sabhraon branch. The Ravi Beas link which was completed around 1954 diverts part of the Ravi water into Chakki khad which is a tributary of Beas. Ranjit Sagar Dam 600 MW generation of power, Punjab's share is 452 MW. Ranjit Sagar Dam is one of the latest multipurpose river valley projects under construction on river Ravi about 24 km upstream of Madhopur Head works.

The power resources in the district are not sufficient to meet the need of agriculture as well as industries. This is one of the major bottlenecks in the development of industries.

Climate

The summer season falls between the months of April to July and the winter November to March. In summer season, the temperature touches 44^0C or even sometimes crosses it. June is the hottest month and January is the coldest one. Mostly, rain falls in the month of July. The winter rains are experienced during January and February. Dust storms occur in the month of May and June.

Rainfall

The south-west monsoon generally arrives in the first week of July and continues up to the end of August. Seventy per cent of the rainfall occurs during this period. The average rainfall of the district is 875.4 millimetres (average of 5 years), state average is 457.5 millimetres (average of five years).

Ecology

The changes in ecology system are inevitable consequences of development process. The denudation of forests due to increasing population, urbanization industrialization has accelerated the process of environmental degradation in the district. Therefore, preservation of the ecology is one of the most important goals of the district planning. The vegetation varies in the district depending on the soil, topography and elevation. In the Shahpur Kandi range which lies in the hilly tract, the forests are mainly of the miscellaneous hardwood species and the Chil pine. In the Plain, large scale of aforestation has been undertaken by the forest department, where water facilities are available, Shisham, mulberry, eucalyptus and poplar is being planted. In the Kallar area, kikar prosopis and eucalyptus has been planted.

Hydrology

Depth of water in the district varies between 10 and 40 metres below land. The groundwater in this region is suitable for irrigational and domestic uses. The sub-soil water depth ranges from 1.5 to 3 metres in most part of the district.

Soils

The soils are loamy with clay content below 10 percent. They contain small quantities of lime but the magnesium content is high. They are rich in potash and phosphoric acid but the quantities available are low. The agriculture is dependent to a large extent on the nature of its soils which in turn is influenced materially by climatic factors. The soil of the district is quite alluvial and fertile.

The area of Dhariwal Ghuman, Quadian, Harchowal and Sri Hargobindpur is called Riarki. The western side of Kahnuwan Lake up to Aliwal canal is called Bangar and the area between the rivers of Beas and Ravi is known as Bet. The cultivable waste land is fallow or covered with bushes or jungle which may not be put to any use. Lands under ching grass bamboo, bushes, tree crops etc. which are not included under forests have been considered as cultivable waste. As for example, all growing lands are permanent pastures, meadows, grazing lands within the forests etc.

Minerals Resources

The district is rich in mineral resources. The minerals found in the district are building stones, foundry sand, gold calctuff, ochre, salt petre etc. The building materials like boulders shingle, sand, brick earth etc, usually occur at the same place and are found in the ephemeral streams as well as in the perennial streams. The foundry sand is found from Dharamkot near Batala. The deposits are located 6.5 kms west of Batala. Exposed on both sides of Batala-Dera Baba Nanak road, the Dharmkot sand is a natural moulding sand, containing about 20% of clay. Another deposit which is about 4 meters thick occurs at about 6 km from Batala on the Batala Qadian road. The sand gives a yellowish tinge on the surface but is reddish brown at about 1 metre depth.

The sand deposits are also found at Bhagwanpur about 15 km west of Batala on Dera Baba Nanak road and about 10 km from Gurdaspur on the Gurdaspur Naushera road (20 percent clay). The Calc-tufa found at scattered places in Dhar-Dunera block of district Gurdaspur is suitable for lime burning and cement manufacture. The salt petre occurs in the district at the villages of Thikriwala, Lamin and Pandori in thesil Gurdaspur and Dhawan, Chataurgarh and Badowal in tehsil Batala. It is a source of Potassium nitrate which can be used for making crackers and Gunpowder, in matches and sugar industry, and as fertilizer.

Demographic Features

There are 11 Community Development Block in the District. The number of inhabited villages in eleven blocks is 1,160. The number of village panchayats is 1,217.

Table 2.2 Community Development Block wise Village and Panchayat Details, 2001

Sr. No.	Community Development Block s	No. of inhabited Villages	No. of Village Panchayats
1	Batala	106	130
2	Dera Baba Nanak	123	139
3	Dhariwal	113	117
4	Dinanagar	113	113
5	Dorangla	86	75
6	Fatehgarh Churian	83	108
7	Gurdaspur	130	139
8	Kahnuwan	148	137
9	Kalanaur	93	93
10	Qadian	63	68
11	Sri Hargobindpur	102	98
Total		**1160**	**1217**

Source: Block at a Glance, District Gurdaspur, 2004

The total area of the district is 2,552 square km. The total population is 1, 1573. The total population density is 502. The literacy rate of the district is 81.1% – male literacy 85.9%, female literacy is 75.7% which is above the state average. In case of male it is 81.5% and in case of female it is 71.3%; and the total literacy is 76.7%. The literacy in Gurdaspur is above the all India average – in case of male it is 82.1%, in case of female it is 65.5% and for total it is 74.0%. The details for 11 community development blocks are given in the following table:

Table 2.3 Community Developments Block-wise Population, 2001

Community Development Blocks	Total Area (sqkm)	Population ('000)			Density
		Male	Female	Total	
Batala	221	680	612	1292	585
Dera Baba Nanak	286	579	510	1089	381
Dhariwal	233	679	619	1298	557
Dinanagar	203	534	502	1036	510
Dorangla	123	257	241	498	405
Fatehgarh Churian	236	485	431	916	388
Gurdaspur	251	828	733	1561	622
Kahnuwan	334	629	584	1213	363
Kalanaur	195	390	358	748	384
Qadian	199	448	411	859	432
Sri Hargobindpur	271	554	509	1063	392
Total	**2552**	**6063**	**5510**	**11573**	**502**

Source: Block at a Glance, District Gurdaspur, 2004

- **High Unemployment**

Unemployment scenario indicates that out of the total unemployed in the State, 8.2% are in Gurdaspur. The percentage of unemployed is higher in Gurdaspur as compared to other districts of Punjab such as Kapurthala, Jalandhar, Hoshiarpur etc. Only in a few districts unemployment is higher than Gurdaspur, these districts are Amritsar, Patiala and Fatehgarh Saheb. Educated unemployment is high (77.5%) (Directorate of Employment, 2009).
It may be observed in this section that Gurdaspur district is historically and culturally rich. Its natural resources in terms of rivers and canals make irrigation possible as the district is predominantly agriculture based. Ground water is suitable for agriculture as well as for domestic use. The district is also rich in mineral resources such as building stones, foundry sand, calc-tufa, ochre, salt petre, limestone etc. which can be used for development of economic activities. The literacy rate is high in the district as compared to the state average and national average.

Block-wise information may be seen in Annexure 1.

Chapter 3

Major Economic Activities

The section mentions about major economic activities and potential for their expansion for generating employment. These results are based on the survey conducted by the institution as well as the secondary data available from the district which provide information about composition of industries by ownership, status of industrial growth major activities by their size of employment.

Main Activities in Gurdaspur – Farm and Non-farm Activities

- ***Predominantly Agricultural District: Farm Activities***

Gurdaspur is predominantly an agricultural district. More than 70 per cent population lives in rural areas. Out of the total main workers of the district, 56 per cent are engaged as agriculture worker, 2 per cent in household industry and 42 per cent other workers. The contribution of other sector such as forestry, fishing, mining and quarrying is almost negligible. Livestock, especially dairy, is another main source of livelihood. Since the state led the country's green revolution, which brought change in life style, aspirations of youth increased, so there was a demand for better education for children, better housing and better consumer goods. Mechanization of agriculture has taken place and tractors, motors pumps, threshers, etc., have almost replaced the bullocks and traditional technology.

The total number of workers in the district is 370000. Out of this, 146700 are agricultural workers. The number of non-agricultural workers is 223300. The density of population is the highest in Gurdaspur and the least in Kahnuwan. The block-wise details are given in the following table.

The block-wise details of net area sown, area sown more than once and net irrigated area is given in the following table:

Table 3.1 Community Development Block-wise Agriculture, 2003-04

Development Blocks	Details of Area Sown, Irrigated		
	Net Area Sown ('00 ha)	Area Sown more than once ('00 ha)	Net Irrigated ('00 ha)
Batala	183	166	182
Dera Baba Nanak	243	228	237
Dhariwal	200	182	191
Dinanagar	156	128	148
Dorangla	99	82	90
Fatehgarh Churian	199	185	194
Gurdaspur	203	157	196
Kahnuwan	225	196	181
Kalanaur	166	148	158
Qadian	157	52	25
Sri Hargobindpur	220	200	196
Total	**2051**	**1724**	**1798**

Source: Block at a Glance, District Gurdaspur, 2004

3.2 Community Development Block-wise Workers' Classification, 2001

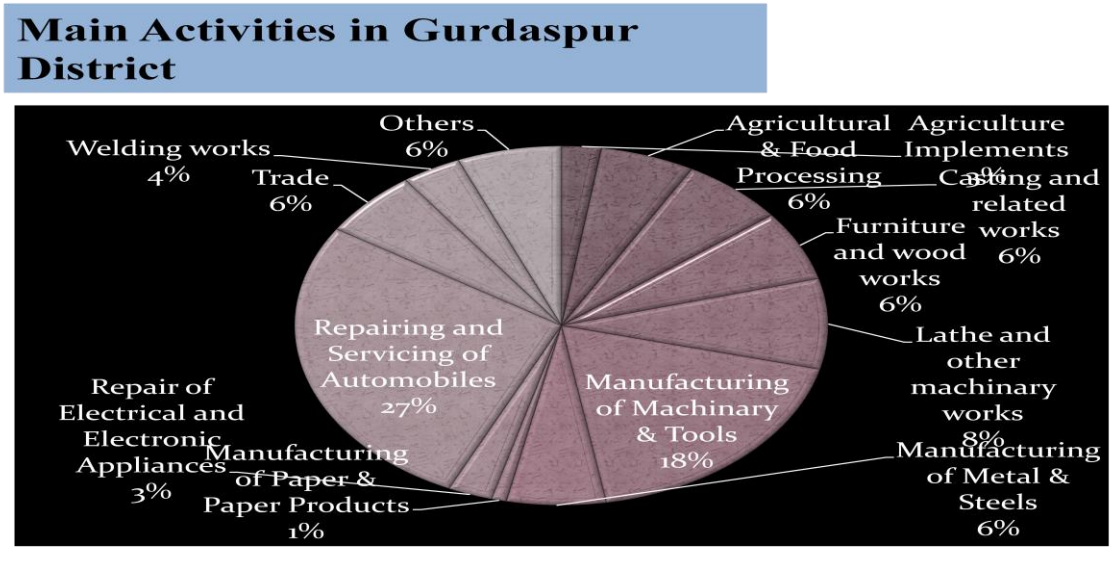
Community Development Blocks	Workers ('00)		
	Agricultural workers	Non-agricultural workers	Total workers
Batala	157	252	409
Dera Baba Nanak	157	220	377
Dhariwal	164	266	430
Dinanagar	93	230	323
Dorangla	66	87	153
Fatehgarh Churian	86	44	130
Gurdaspur	140	375	515
Kahnuwan	189	233	422
Kalanaur	102	156	258
Qadian	127	161	288
Sri Hargobindpur	186	209	395
Total	**1467**	**2233**	**3700**

Source: Blocks at a Glance, District Gurdaspur, 2004

- ***Non-Farm Activities***

Other non-farm economic activities relate to manufacturing and services which have their concentration in Batala and Gurdaspur blocks. Non-farm activities include manufacturing of agricultural implements and other industries relating to machines and tools. Wooden furnishing is also one of the major non-farm activities. Besides there are activities relating to electricals and electronics and constructions activities. Traditional activities in the district relate to embroidery and stitching, paper making and, to certain extent, tourism. The following chart indicates the main industrial activity (other than agriculture) which is based on the survey conducted.

Chart 1



Source: IAMR Survey, 2011

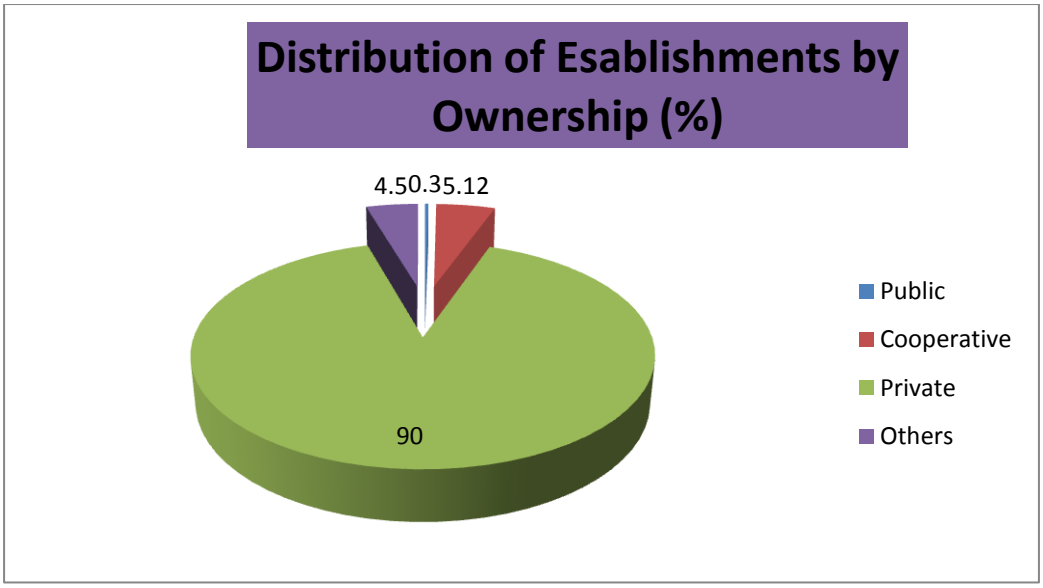
Maximum economic activities are concentrated in Batala block followed by Gurdaspur, Dinagarh, Kahnuwan. Some blocks like Dorangal, Quadian, Dera Baba Nanak appear to be backward as there are negligible number of establishments so far as manufacturing or services related activities are concerned. These blocks are depending upon agriculture and to some extent religious tourism (Dera Baba Nanak**).** Block-wise main activities may be seen in annexure-II.

- ***Predominated by Private Sector***

The block-wise and ownership-wise composition of establishments can be seen in Tables-1A to 1D (Annexure-III). It may be observed that 90 per cent of the establishments are in private sector followed by cooperative sector (only 5.12 per cent). The presence of public sector establishments is negligible while others (such as NGOs) account for 4.58 per cent which include NGOs, etc.

Overall results show that public sector industrial establishments are negligible in the district while private sector is taking initiatives in the industrial development of the district, especially in Batala Block. The profile also indicates that industrial development is not uniform across the district.

Chart 2

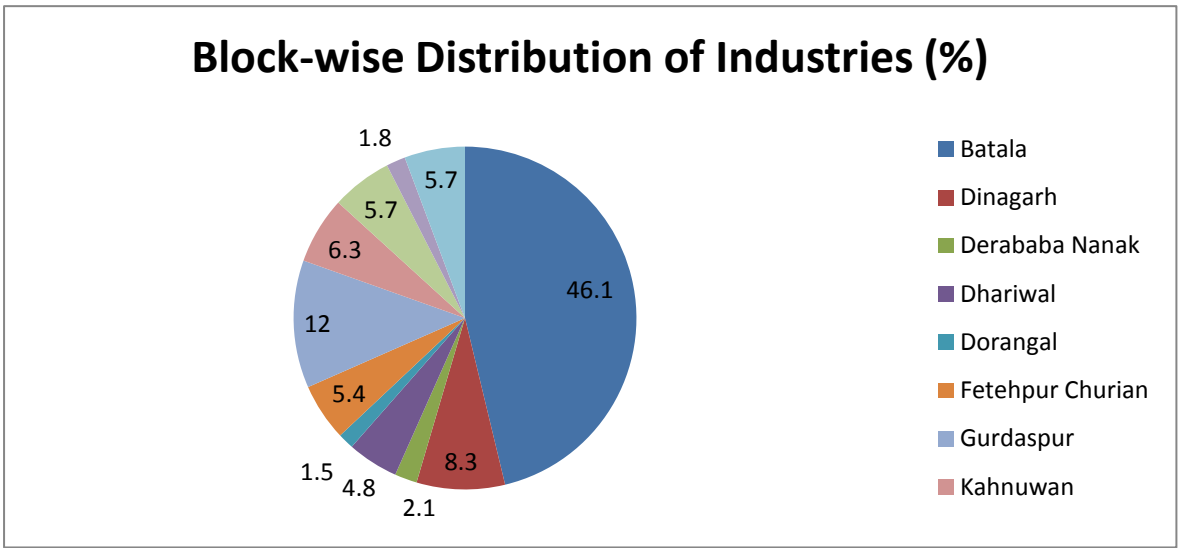


Source: IAMR Survey, 2011

- ***Industrial Development not uniform across the district***

The block-wise information indicates that about half of the establishments are in Batala (46.1 per cent) followed by Gurdaspur (12.0 per cent). The proportion of establishments in other blocks varied from about 2 to 8 per cent. Very few establishments are in Dera Baba Nanak, Kalanaur, Qudian blocks showing a lack of industrial development in these blocks.

Chart 3



Source: IAMR Survey, 2011

- ***Status of Industrial Growth over the years***

Table-3 (Annexure-IV) indicates the block-wise composition of establishments in the district by their year of establishments indicating the growth/decline of industries. It may be seen that the boom period of industrial establishments had been up to 1990. About 71% of all industrial units were set up during that period. This has however to be considered against the fact that prior to 1990 data are cumulated data for several decades. The share of new units set up since 1990 was 29% of all the units. But, if we compare the last two decades, it may be seen that about 78% (75 out of 96) of the new establishments (those set up after 1990) were set up during 1991-2000 and only 22% after 2000.

Block-wise analysis indicates that the share of Batala has gradually declined and that of Dinagarh, Gurdaspur and Kahnuwan has improved in comparison to earlier period so far as establishment of new units is concerned.

Industry Establishments and size of Employment

- ***Small Establishments***

Table-4 (Annexure-V) shows composition of establishments according to major economic activities and employment size. Taken all activities together, it may be observed that the establishments in the district are very small so far as employment size is concerned and about 60 per cent of the units are employing less than 5 workers, and about 85 per cent employing 1 to 10 workers. Large establishments employing more than 100 persons are negligible (1.5 per cent) and so are those employing 26-100 size class (3.3 per cent). About 11 per cent establishments are of medium size which is employing 11 to 25 workers. Thus, the district in

general has very small sized units so far as employment per unit is concerned. If we compare the size of employment in establishments in Gurdaspur with the state as a whole and country as a whole, it is observed that the proportion of small units (with less than 10 workers) is 98.35 per cent in Punjab state and about 98.49 per cent in the country (Economic Census 2005). The Gurdaspur District scenario is in line with the Punjab state and national scenario. (Data presented above relates to only those establishments where survey has been conducted. It may be noted here that all establishments employing more than 50 workers have been covered under survey).

- ***Manufacturing Industries are employing more workers***

Major economic activity-wise composition shows that organizations employing more than 25 workers are involved in agriculture and other processing related activities, lathe and other machinery work, manufacturing of metal and steel, paper and paper products and other manufacturing activities. The medium sized industries employing 11 to 25 workers are those involved in lathe and other machinery work followed by other economic activities such as casting and related work, furniture and wood work and repairing and servicing. The rest of the units are of small sized and are involved in various activities such as repairing, trade, welding, manufacturing, etc. Most of these small sized units are engaged in repairing services. It may also be mentioned that the economic activities like lathe and machinery work, manufacturing of metals and steel and other activities mentioned above are carried out in both small size as well as medium sized units.

Use of Technology and Modernisation Plan

- ***Lesser Number of Industries are opting new Technology and Machines***

Although new technologies are replacing the traditional technologies in the country, certain areas are slow in adopting new technology and machines. Gurdaspur is a backward region and technological innovation is almost negligible. Only 8 per cent establishments out of the total surveyed have purchased new equipments for their industrial units. This is also because most of the establishments are small and are unable to invest on costly machines. Out of these 8% establishments that are replacing old technology, more than half are in Batala, followed by Gurdaspur and Dinagarh. This phenomenon is understandable as there is a concentration of establishments in these blocks. In particular, most of the innovations and improvements are taking place at Batala as there is a concentration of establishments there. (Table-5) (Annexure-VI)

- ***About one- forth establishments are aspiring for future expansion***

While Table-5 showed that very few establishments replaced their old technology with the new one barring Batala block, Table-6 (Annexure-VII) indicates that about one-fourth of the establishments (27%) are planning to expand or modernize their units or would like to diversify their activities. This modernization is planned by establishments involved in

manufacturing of machines and tools (33%) followed by lathe and other machinery work, (12.2) and repair & servicing (12.2) which generally involves electronic and electrical activities. It may be noted that there is a concentration of these activities in the district.

It may be mentioned here that as it is in the whole of Punjab, in Gurdaspur also agriculture is modernized and farmers are using tractors, sowing machines and other machines for agriculture.

Summing up

In Gurdaspur district, concentration of industries is more in Batala Block. Majority of industries are small, most of them are engaged in manufacturing of lathe and other machine sheet metal, agricultural appliances etc. Private sector is predominant. New industries are not coming up. About 27 percent industries are aspiring for future expansion.

Chapter 4

Status of Vocational Training Providers

In this section, the status of educational and vocational training facilities available in the district has been discussed. This information has been compiled using secondary sources. This section also provides a detailed analysis of vocational training providers in the district which is based on primary survey conducted by the Institute. The analysis interalia includes the details of formal and informal institutions, their status of recognition, types of courses offered, infrastructure available and so on. The section also details the quality of training and the issue of employability on the basis of the survey results as well as focus group discussions organized across the district. There is a mention of educational facilities, but detailed analysis is confined to Vocational Training Providers only as desired by the sponsors.

Educational Facilities in the District

With the opening of a number of primary, middle, high secondary schools and colleges, the literacy rate in the district has been going up since 1947. The district has got 6th rank among all the districts of the state in terms of literacy rate. The literacy rate in 1947 was 43.49 per cent of the total population of the district, as against 40.86 per cent of the Punjab State as a whole. In order to increase the literacy ratio, the State Government has established Adult Education Centers in the State under the Adult Education Porgramme. As many as 300 adult education centers (6 for males and 294 for females) have been established.

The number of arts and science colleges in the district is 41 at present. The number of higher secondary schools is 373. In spite of a number of institutions in the district providing education, their concentration is only in a few big towns and students have to travel quite a distance for their education. All the areas of the district are not developed uniformly.

The following table provides details about the educational facilities in the district:

Table 4.1: Educational Institutions in the District

Type of Institution	No.
Arts & Science Colleges	41
High/Hr./Sr. Secondary Schools	373
Middle School	255
Primary Schools	1552

Source: Official website of the district

Training Facilities

- ***Training facilities in only few blocks***

Training facilities are limited only to a few blocks of the district. Formal training institutions comprise of ITIs/ITCs, Polytechnics, and other institutions imparting training in various

courses like computers which are formal institutes. There are a number of informal institutions that are imparting training in beauty courses, driving, auto mechanic etc. These institutions are informal and are providing training without conferring any formal certificate.
There is one engineering college, 8 polytechnics, one hotel management institution, 10 ITIs, 1 B.Ed. College and 1 NTT (Table 4.2). Some of the blocks do not even have any ITI.

Table 4.2 Training Facilities

Profession College Type	No.
Engineering College	1
Polytechnic	8
Hotel Management	1
I.T.Is	10
ITCs	6
B.Ed. college	1
N.T.T.	1

Source: Department of Education, Gurdaspur

If the number of ITIs/ITCs in the district is compared with that of all India number of these institutions and within the Punjab as a whole, the ratio in Gurdaspur is one ITI/ITC per 16,000 persons in the age group of 15 to 24 years of age, while this ratio in Punjab is one ITI per 15,000 persons of the same age group. At all India level the ratio is one ITI per 23,000 persons. This shows that the ratio in Gurdaspur is better than all India ratio while it is not so when compared with Punjab state as a whole (2011, Census).

- ***Vocational training is dominated by private organizations***

A. Affiliations

Table 4.3 shows the type of affiliations the vocational training providers have. The table shows that more than half institutions are private (about 66%). The institutions affiliated with public or government institutions are only about 6%. The rest of institutions are public trust (about 3%), NGO (about 8%), Government aided organizations (about 5%) and others (12%).

Block-wise composition of institutions shows that maximum number of training providers are in Gurdaspur Municipality/block (38%) followed by Batala (about 22%). In other blocks, the number of vocational training providers is very limited implying that youth are coming to Gurdaspur and Batala for training. Concentration of institutions in private sector also indicates that students have to pay high price for getting trained.

Table-4.3: Composition of Institutions by Type of Affiliation

Blocks	Type of Affiliation						All Sectors combined
	Public or Govt. Organisations	Private Agency	Public Trust	NGO	Govt. Aided Organisation	Others	
Batala	5	14	1	8	0	6	34
							-21.94
Dinagarh	1	8	2	1	0	2	14
							-9.03
Derababa Nanak	0	8	1	1	2	1	13
							-8.39
Dhariwal	0	5	0	2	0	0	7
							-4.52
Fatehpur Churian	1	3	0	0	2	0	6
							-3.87
Gurdaspur	2	49	0	0	2	7	60
							-38.71
Kahnuwan	0	3	0	0	0	0	3
							-1.94
Kalanur	0	4	0	0	1	1	6
							-3.87
Qudian	1	2	1	0	1	0	5
							-3.23
Sri Harigovindpur	0	6	0	0	0	1	7
							-4.52
Total	**10**	**102**	**5**	**12**	**8**	**18**	**155**
	-6.45	**-65.81**	**-3.23**	**-7.74**	**-5.16**	**-11.61**	**-100**

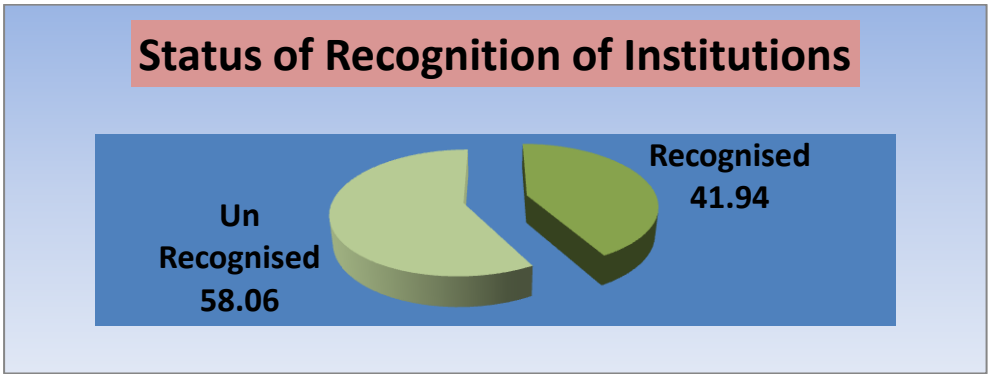
Source: IAMR Survey, 2011

B. Recognition

- ***Only About 42 percent of the VTPs are recognized***

The chart given below shows the status of recognition of various institutes providing training. Out of a total 155 institutions surveyed, 65 (42%) reported that these were recognized by some or the other recognized body, while 90 (58%) stated that these were not recognized. These unrecognized institutions were offering training informally.

Chart 4



Source: IAMR Survey, 2011

C. Block-wise Composition of Institutions by their Recognition

- ***Higher percentage of recognized VTPs are concentrated in Batala Block***

Out of the total institutions, about one-fourth of the institutions are recognized by State Government Agency (23.45%). About 50% recognized institutions are recognized by the Central Government. The institutions recognized under Society Act are 16% followed by recognition from other agencies (about 13%). Out of the total recognized institutions one-fourth are in Gurdaspur (23.46%) followed by Batala (18.5%) and Dera Baba Nanak (16.05%). In other blocks, the percentage of recognized institutions is very low. This is understandable as in these blocks training institutions are very few and most of them are private and informal.

Table-4.4: Block-wise Status of Recognition of VTPs

Blocks	Recognizing Body																		
	AICTE	Dept. of Electronics	Dental Council of India	Distance Education Council	Hotel Management	Industry/ Trading Association	KVIC	Medical Council of India	Ministry of Labour & Employment	M/HRD	NIOS/ SOS	Nursing Council	Society Act	State Govt. Agency	University	NCTE	NCVT/SCVT	Any Other	Total
Batala	1	0		1	0	0	0	0	1	0	0	1	3	6	0	0	0	2	15
																			-18.52
Dinagarh	2	1	0	1	1	0	0	0	0	1	0	0	0	0	2	1	0	0	9
																			-11.11
Derababa Nanak	1	0	0	2	0	0	0	0	0	0	0	1	2	1	2	0	1	3	13
																			-16.05
Dhariwal	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1	5
																			-6.17
Fetehpur Churian	0	0	0	0	0	1	1	0	0	0	0	0	1	1	1	0	2	0	6
																			-7.41
Gurdaspur	1	0	0	1	0	0	0	1	0	0	0	0	3	2	1	0	6	4	19
																			-23.46
Kahnuwan	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	4
																			-4.94
Kalanur	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	3
																			-3.7

Qudian	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3 -3.7
Sri Harigovindpur	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	4 -4.94
Total	6 -7.41	1 -1.23	0	5 -6.17	1 -1.23	2 -2.47	1 -1.23	1 -1.23	2 -2.47	1 -1.23	0	3 -3.7	13 -16.05	10 -12.35	9 -11.11	1 -1.23	14 -17.28	11 -13.58	81 -100

Source: IAMR Survey, 2011

D. Type of Institutions – Formal vs. Informal

As stated earlier formal institutions are those which provide a recognized certificate while informal institutions are imparting training without giving a recognized certificate.

- ***Courses Offered by formal institutions***

  The courses offered by formal institutions may be seen in the following chart. It may be observed that maximum number of institutions (34%) is offering courses in computer related areas which include certificate, diploma, degree and post-degree level courses. About 20% institutions are offering courses in cutting/tailoring, fashion designing, embroidery, etc. The institutions offering courses in engineering trades are 21.3%. These courses relate to engineering trades, such as technicians, machinists, etc. which are generally offered by ITIs and polytechnics. A few institutions are providing training in construction related trades (10.6%), health care (6.4%) and others (8.5%). These other courses are variety of courses relating to electrical, electronics, and repairs and so on.

- ***Intake capacity in ITIs***

  Trade-wise intake capacity in ITIs and ITCs can be seen in the following table. It may be seen that total intake capacity is 3240 out of which about 1700 seats are in ITIs and 1540 are in ITCs

Chart-5

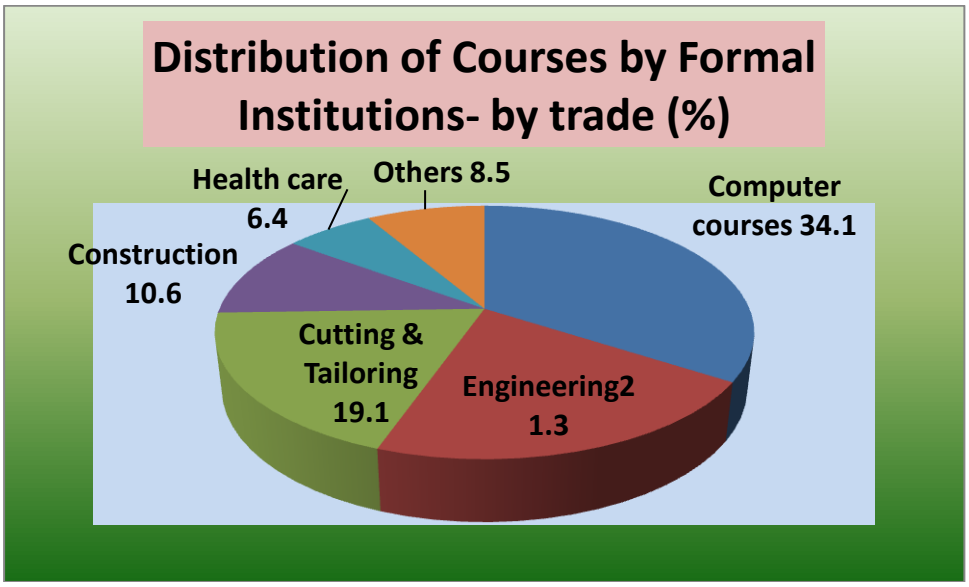


Table No. 4.5 Intake Capacity of ITI/ITCs in Gurdaspur District

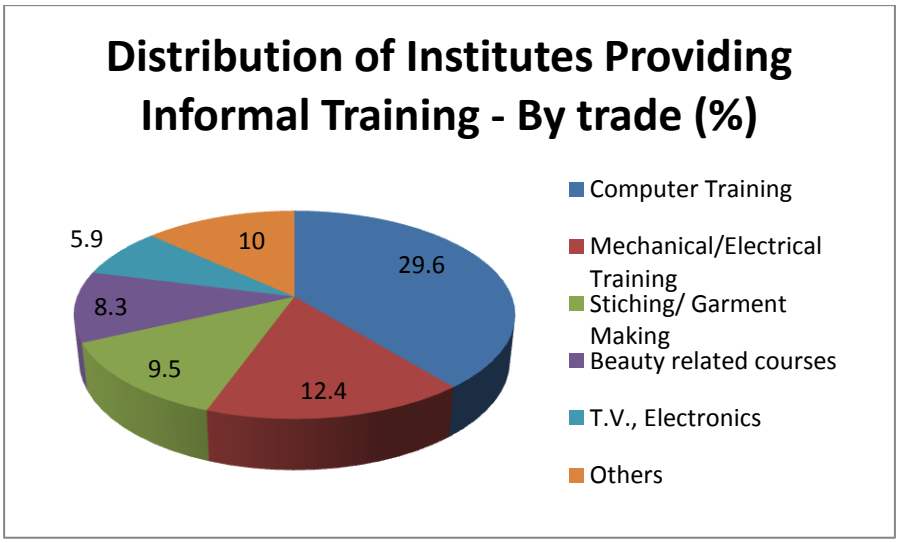
Source: IAMR Survey, 2011

Sl. No	Name of Trades	Intake Capacity		
		ITI	ITC	Total
1	Bleaching and Dyeing	60	0	60
2	Carpenter	40	120	160
3	Computer Operator cum Programming Assistant	0	160	160
4	Cutting & Tailoring	140	100	240
5	Draftsman Civil	40	0	40
6	Draftsman Mechanic	20	0	20
7	Electrician	160	220	380
8	Electronic Mechanic	20	0	20
9	Embroidering & Needle Works	120	120	240
10	Fitter	80	60	140
11	Foundryman	20	0	20
12	Health/Sanitation Inspector	0	80	80
13	Machinist	140	0	140
14	Mechanic Diesel	40	120	160
15	Mechanic Motor Vehicle	120	80	200
16	Mechanic Radio and TV	40	0	40
17	Mechanic Ref. & AC	40	180	220
18	Mechanic Tractor	120	40	160
19	Plastic Processing Operator	20	0	20
20	Plumber	0	100	100
21	Preservation of Food and Vegetables	40	0	40
22	Sheet Metal Worker	20	0	20
23	Stenography - Hindi	20	0	20
24	Stenographer - English	80	0	80
25	Surveyor	40	0	40
26	Turner	120	0	120
27	Welder	80	160	240
28	Wireless Mechanic cum Operator	20	0	20
29	Wireman	60	0	60
Total		**1700**	**1540**	**3240**

- ***Courses offered by informal Institutions***

The data show that majority of the institutions are informal and are providing informal certificates for the courses which are not recognized in the formal job market. However, these people so trained are making a living after doing these courses from the informal institutions, or they set up their own ventures. Following Chart shows that informal institutions are providing training primarily in computers, mechanical /electrical, stitching, electronics, and beauty related areas. This accounts for about 76% of institutions. Some other informal institutes are offering training in carpentry, plumbing, cloth printing and dyeing, marble cutting, driving etc. Number of such institutions is very few.

Chart 6



Source: IAMR Survey, 2011

Institutional Capacity

A. Infrastructure – Premises

- ***Majority of VTPs have their own premises***

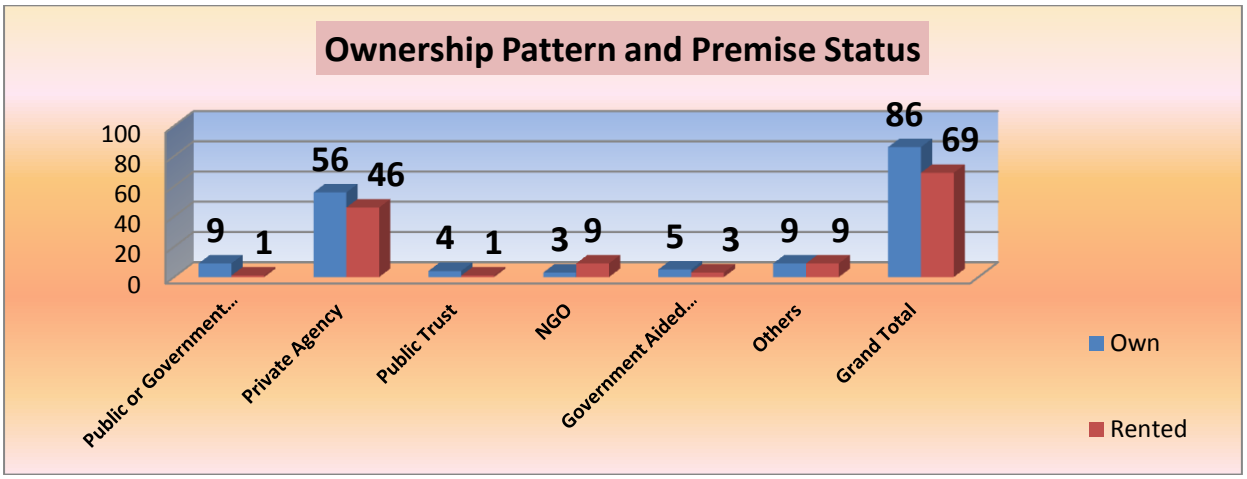
Table-4.6 shows the distribution of VTPs according to ownership of their premises in which they are running the training programmes. Taking all types of institutions together, it may be seen that more than half of these (55.5%) have their own building to run the courses while rest are situated in rented premises. Type of institution-wise analysis indicates that most of the Government/Govt. Aided Institutions/Public Trusts have their own premises. So far as private training institutions are concerned, about half have their own building. NGOs are generally functioning from rented buildings.

Table 4.6 Distribution of VTPs by Status of Premises

Sl. No	Type of Institutions	Status of Premise		
		Own	Rented	Total
1	Public or Government Organisation	9 (90.0)	1 (10.0)	10 (100.0)
2	Private Agency	56 (54.9)	46 (45.1)	102 (100.0)
3	Public Trust	4 (80.0)	1 (20.0)	5 (100.0)
4	NGO	3 (25.0)	9 (75.0)	12 (100.0)
5	Government Aided Organisation	5 (62.5)	3 (37.5)	8 (100.0)
6	Others	9 (50.0)	9 (50.0)	18 (100.0)
Total		**86 (55.5)**	**69 (44.5)**	**155 (100.0)**

Source: IAMR Survey, 2011

Chart 7



Source: IAMR Survey, 2011

B. Staff Strength

- ***Informal institutions have fewer instructors***

Table-4.7 relates to the staff strength of Vocational Training Providers. It may be observed that the formal institutions have on an average 12 people per institution on their teaching faculty. In case of informal institutions, the average persons as instructors are only 3 per institution. This indicates that either these informal institutions are very small or have a few courses in which they do not require more faculty. There is also a possibility that the informal institutions do not have enough teaching faculty.

Table 4.7 Staff Strength of VTPs

Sl.No.	Type of VTPs	No. of Teaching Staff	No. of Non-Teaching Staff	Total Staff Strength	No. of Institutions
1.	Formal	594	326	920	47
2.	Informal	279	160	439	108
	Grand Total	873	486	1359	155

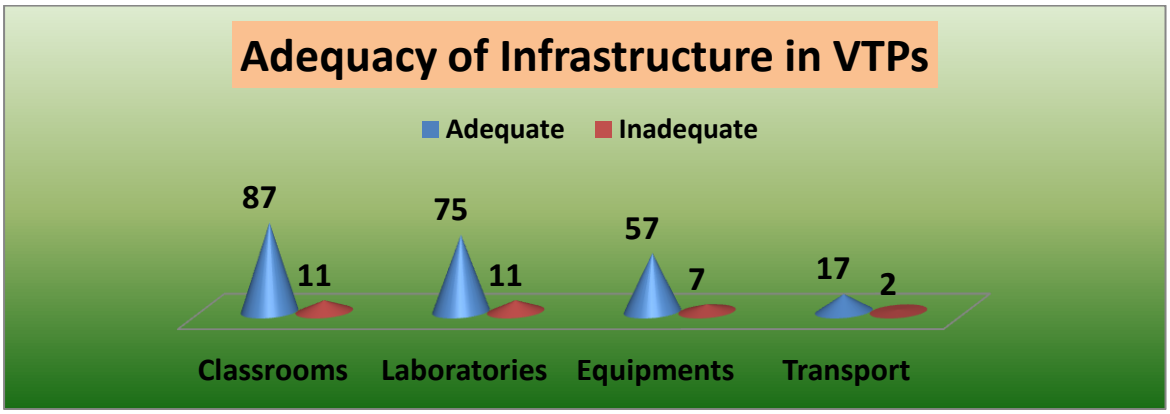
Source: IAMR Survey, 2011

C. Infrastructure Adequacy

- ***Most of the VTPs reported adequate infrastructure for training***

The following graph indicates the adequacy of infrastructure of vocational training providers in terms of classrooms, laboratories, equipments and transport facilities to their respective institutions. It can be seen that all the institutions have not reported about these aspects. It appears that those reported have adequate infrastructure in all the aspects in general. It can be presumed that institutions which have not reported perhaps do not have adequate facilities. It may be mentioned here that while about three-fourths of the formal institutions have provided information, less than half informal institutions have given the information on this question.

Chart 8



Source: IAMR Survey, 2011

D. Demand for New Courses

- ***Demand for Computer related courses highest, followed by paramedical and beauty care courses.***

Training providers were asked if they received any demand from students to start some new courses. Table below provides the details of the information in this regard.

Table-4.8: VTPs Demanding New Courses

Sl.No.	Course Name	No. of Institute Reporting Demand
1.	Beauty Care	6 (9.52)
2.	Computer Course	32 (50.79)
3.	Finance/ Accounting	6 (9.52)
4.	Cutting/ Tailoring & Fashion Design	3 (4.76)
5.	Para-medical/Nursing	7 (11.11)
6.	B.Ed.	2 (3.17)
7.	Repair Services	4 (6.35)
8.	Personality Development	3 (4.76)
	Total	**63 (100.0)**

Source: IAMR Survey, 2011

Out of the 281 surveyed, 63 VTPs (22.40%) responded. It may be presumed that these were the institutions which were asked to introduce new courses. Half of the institutions stated demand for computer related courses which included web designing, hardware courses, various types of software courses, animations etc. About 11% institutions stated demand for paramedical and nursing courses followed by demand for courses like beauty care, finance related courses which *inter alia* included marketing, insurance, taxation etc.

E. Financial Implications

- ***Formal Institutions are not making profits***

  Institutions were asked about their expenditure and revenue to work out per student expenditure and if the institutes are making profits. It may be seen from the following table that not all sampled institutions have provided this information due to various reasons. Information provided by some of the institutions may also not be fully correct as no records have been shown or provided. On the basis of the provided information, it is seen that:

  - Out of the 155 surveyed institutions, 57 (36.8%) responded.
  - Only 22% formal institutions gave information.
  - Formal institutes have reported to be running in losses. Further probing indicated that fee per student is meagre and they get grants which is not sufficient to meet the costs on courses.

- ***Informal Institutions are spending less amount of money on training***

  It may be noted that formal institutions' per student cost is very high as compared to informal institutions. It is one of the reasons that these institutions are running at losses. It may be reiterated that formal institutions have big buildings and infrastructure which has come to light during focus group discussions. Most of the institutions were of the view that the infrastructure was not optimally utilized. Table below presents the data.

Table 4.9 Details of Revenue for the Year 2010-11

Sl.No.	Type of VTP's	No. of Students	Total Expenditure	Total Receipt	No. of Institutes
1.	Formal	4339	54936232	55939455	19
2.	Informal	1453	2734000	3638525	38
	Total	**5792**	**57670232**	**59577980**	**57**

Source: IAMR Survey, 2011

- Informal institutions are making profit per student as Rs. 622/-.
- The expenditure of informal institutions per student is - Rs.1,882/- while in case of formal institutions it is about Rs.12,660/- per student.

Status of Training and Education

- ***Higher education facilities in the district are not up to the mark***

Generally, in all the blocks, sufficient schools are available up to middle level and almost all the children attend the school at least up to primary level. However, higher education is not up to the mark as there is a dearth of Senior Secondary Schools as well as Colleges. Generally, these schools and colleges are concentrated only in few blocks which are relatively developed. Children have to travel to main towns of the district like Batala or Gurdaspur for higher education. It has been observed that private schools have come up in major towns to impart education at higher level. Education in these private schools and colleges is very costly. Poor families are unable to afford them.

- ***Vocational training providers are concentrated in larger towns like Gurdaspur and Batala***

For imparting training, there are ITIs, Polytechnics, Training colleges, both in public and private sector. Again, these training facilities are concentrated in some of the blocks only, such as Batala, Gurdaspur, Kalanaur etc. Some other blocks such as Darakalan, Srihargovindpur, Kanuwan, Durangal etc. do not have any ITI, therefore, question of availability of higher level technical Institutions does not arise. Some senior secondary schools offer vocational streams also, but in most of the schools, education is limited to Arts, Commerce and Science streams. Some schools offer only humanity related disciplines.

Quality of Education and Training

- ***Quality of teaching is poor***

The poor quality of education and training in the district is of great concern. It has been pointed out that even though Primary and Middle Level Schools are available in villages/group of villages, the quality of education is very poor. Some are single-teacher schools while in some schools, no teacher comes as he/she has to come down from and go back far-off places. Schools have very poor infrastructure as well. For instance, schools with vocational streams do not have equipments needed to teach the course. Similarly, for teaching science disciplines,

proper labs are not available. It was reported that families which are interested in providing good education to their children send even very small kids to Gurdaspur or Batala for education. There had been a demand to improve quality of education from all stakeholders.

- ***VTPs are mushrooming but quality remains an issue***

Private ITIs, Polytechnics and training colleges are mushrooming in the district. In spite of the high fees (for example, Rs. 30,000/- for one year course in welding), the training in these institutions is not of good quality. Most of these private ITIs were hardly providing any practical training to the students. Students were also interested in getting the certificate as it makes them eligible for government jobs. In a sense, certificates are purchased. However, this is not true in the case of all private institutions.

It was reported that in government ITIs, the machines and equipments were obsolete and therefore even though some practical training was offered, that was not in tune with market demands. The courses offered by technical institutions also lack interactions with industries and other labour markets indicators. Some courses were obsolete and new courses had not been started. The major concern was expressed about syllabus of various courses. It was pointed out that syllabus was as old as from the 1960s and was never revised according to labour market demand.

Industries were of the view that students coming out of ITIs and Polytechnics totally lack practical experience and it was not possible for them to hire these students and give them modern machines to handle. Contrarily, students stated that after spending substantial money on various skill related training, industries were offering only Rs.3,000 p.m. which was not worth taking.

Some of the ITIs had been designated Centre for Excellence. New machines and equipments have been purchased under the scheme for specified trades but trainers were not able to provide training on these modern machines. Some of the modern industrial establishments had CNC machines and wanted that such machines are installed in the workshops for the students so that students could get acquainted with them to work in industries.

Summing up

The concentration of VTPs is more in larger towns (60 percent) namely Gurdaspur and Batala. Majority of these institutions are recognized by one or other agency. The Govt. and Govt. aided Institutions are having good infrastructure and sufficient staff but optimum utilization remains an issue. Informal institutions are providing training for such trades which requires less space and machines. Informal training is also predominantly provided by private institutions. Computer related courses have more demand followed by paramedical and beauty care courses. Formal institutions are receiving regular grants from Government, hence incurring more expenditure per courses and are charging fewer fees from students. Private/informal institutions are charging more fee from students and incurring less expenditure and making profit out of it.

Chapter 5

Skill Gaps and Skill Demands

This section provides information about the existing skill gaps as well future requirements of skill development as reported by industries. The demands have been estimated for the whole district. The section also provides information about skill needs in relation to the resources available in the district which are either under-utilized or unutilized. The section covers skills that need up-gradation in the district as well as potential for starting new activities.

Preference for Skilled Personnel

- ***Skilled persons are preferred by most of establishments***

There has been a view that employers prefer fresher's for employment and provide them in-house training to engaging skilled personnel. This is because they have to pay less to freshers than trained people. Moreover, there is supposedly a high turnover among trained workers. To verify this contention, employers were asked about their preference for skilled workers vis-a-vis freshers while hiring for performing various activities. The results show that about three-fourths of the employers are looking for trained people in almost all the activities in general and in activities like manufacturing of machine and tools including lathe and other machinery work, repairing activities, trade, casting and related work and to some extent for agriculture and other food processing activities. Only in furniture and wood work and in repair services, the relative preference between freshers and trained persons is more or less even.

Estimated Existing Skill Gaps

The following table indicates the present estimated skill requirements on the basis of the reporting from the industries. Trade-wise gaps may be seen from the table.

Table 5.1 Trade-wise Existing Skill Gaps Estimated

Trade-wise Shortage of Manpower	
Trades	**Shortage**
Turner	756
Fitter	925
Saperman	143
Moulder	512
Lathe Operator	391
Grinder	78
Helper(C.I. Casting)	261
Machinist	721
Helper (General and Unskilled)	981
Pattern Maker	65
Electrician	180

Helper (Electrician)	112
Fabricator	98
A/C (Ref.) Mechanic	65
Planner	78
Boiler	73
Draftsman	52
Welder	274
X-ray Technician	115
X-ray Attendant	104
Boring man	26
Tractor Mechanic	25
CNC Operator	52
Painter	76
Total	**6165**

Source: IAMR Survey, 2011

Estimated Future Skill Needs

As stated earlier, organizations are planning expansion, modernization and diversification which in turn require skilled people. More than half of the organizations reported skill needs for their future activities. Trade-wise needs reported have been detailed in the following table. It may be observed that maximum requirements are in trades such asMachinist, Turner, fitter and CNC operator. About 9,000 trained personnel are needed in various trades in the district in the next five years.

Table 5.2: Future Requirement by Trades

Main Activity (Trades)	Estimated Requirement
Boiler Attendant	298
Boring Operator	26
Carpenter	64
Caterer	65
CNC Operator	622
Computer Operator	185
Dairy Technician	10
Electrician	287
Fitter	1479
Helper (Unskilled)	1106
Lab Technician	195
Machinist	1742
Mechanic (Auto/Diesel)	38
Moulder	117
Nurse	104
Packer	25
Pharmacist	47
Photocopier Operator	65
Planner Man	235
Production Engineer	13

Radiologist	52
Shapper Man	130
Turner	209
Technician	143
Turner	1421
Welder	179
Others	504
Total	**9379**

Source: IAMR Survey, 2011

The estimations in tables 8 and 9 are based on certain assumptions which are as follows:

- There will be pro-active policies to encourage establishment of industries.
- Industry establishments will employ trained manpower.
- Overseas demand will increase.
- Youth would like to join the trades in which there is shortage or demand by establishments.
- Youth will be trained in functional skills.

Traditional Skills and Need for their Up-gradation

The district has traditional skills in carpet weaving, embroidery, shawl making and in preparing other handicrafts. Embroidery, stitching etc., is generally done by women. It was pointed out that because of consumerism, there is a need for skill up-gradation so that they could learn new designs and make new items according to the latest fashion and market demand. The major problem in sustainability of traditional skills had been the lack of linkages with markets. Some of the NGOs were working with Self Help Groups SHGs and stated that they were helping these groups to get associated with markets through 'melas' that are organized at various places from time to time. But, generally women had to depend upon middlemen and therefore they were getting very meagre amount for their products. Traditional skills are also available in some of the occupations such as Mason, Electrician, Blacksmith etc., but their skills are obsolete in the light of technological innovations and demand for modern construction.

Rationale of Emerging Skill Needs

The discussions with various stakeholders and the survey in general indicate the following skill shortages in the district:

- There is a need to start short-term courses of motor mechanic, diesel mechanic, electrical items repair, plumber, carpenter, mason, electrician, black smith, etc. The training should be on modern machines and equipments. They should also be trained according to latest demands in the market. It was reported that by 2022 there would be a need for 17 crores of construction workers as roads, bridges, houses are under construction which require skilled people.

- There is a demand for fabrication course especially in Kadiyan block as people start their own work after training in this field.
- Youths are very keen to join Defense Services but no facilities are available for their training. There was a need to start training in this field.
- Moulders, Turners, Mechanical Engineer, Welders, Fitters are in great demand specially in Batala Block as iron related activities are being performed in this area.
- Since food crops are available in abundance, there is a need to provide training in processing of produce. The economy of Gurdaspur district is agro-based and there is a demand for agriculture related training. The courses may include food processing, specially wheat, rice, sugarcane, and potato processing, dairy product processing and so on.
- The youths in Gurdaspur is physically fit as well as have interest in sports. There is no ground or any stadium in the district to provide any professional training in various sports. It was pointed out that some area should be allocated for providing training in sports to the youths. They were also quite interested in such type of training to pursue sports as a career. It was mentioned that some land was allocated for this purpose from panchayat but stadium is yet to be built.
- It was reported that people are not aware of various opportunities available to them. Awareness camps at village level can be organized to provide career guidance. It was felt that guidance counsellors should be appointed in schools/colleges for career guidance and also to change the mindsets of the local people.
- Entrepreneurship has vast scope in the district but people lack confidence, marketing skills, leadership qualities and team work to be entrepreneurs.
- Entrepreneurship programmes can be organized with forward linkages. The training package should include financial management, project development, communication skills and personality development. Development of soft skills such as communication skills and personality development was stressed upon as a universal need.
- Substantial number of youths is going abroad. They join jobs outside Gurdaspur district where they face problems in speaking English. There was a demand to start training in English language speaking.
- Animal rearing and poultry are major economic activities in the district. There was a demand for training in Auxiliary Nursing Midwife (ANM) and General Nursing & Mid-wife (GNM and other related courses such as poultry farming, animal health etc.
- Packaging courses are also in demand especially for Pharmaceutical sector. Moreover, if food processing courses are started, demand for packaging course in this sector will also increase.
- Youths are also interested in Hotel and Tourism related occupations. It was pointed out that there was only one decent hotel in the entire district. Students graduating in Hotel Management have to go outside the district. There are some private colleges which offer several courses on bakery, food production, housekeeping, and cookery. Some of these courses have been sponsored by Ministry of Tourism under the scheme 'Hunar-se-rozgar'. Lack of employment opportunity locally did not make these courses attractive.

- Gurdaspur could be developed as a tourist place as it has a number of temples, gurudwaras, bordering areas and water bodies which are very attractive. Birds also migrate to these water bodies. There are Forest Reserves also. Water sports could be developed to generate local tourism. This would also give impetus to local handicrafts and other ancillary activities. There is a need to develop these areas for tourist purposes and consequently start customized courses in travel & tourism.
- There is a need to establish training centres for girl students, especially in fashion designing, beauty courses, painting, interior decoration, embroidery, art & craft, pickle making, soft toys making and other courses in food processing which suitable for girls. Software course which teaches accounting is very popular among students as they can start their own work after getting training in this course. As stated earlier parents are reluctant to send girls to far-off places. Gender sensitive courses at the door steps of girls are extremely necessary.
- A few industries have been started glass blowing activity. Training in glass blowing techniques is extremely essential. After getting training in this course people may start their own business which is in great demand. Machine cost for this is only Rs. 80,000. Industries also need trained people.
- Some of the participants were of the view that people of the Gurdaspur are culturally starved. There is no centre for teaching fine arts like music, dance etc. Youths are interested in learning these disciplines. There is a strong need for establishing a centre so as to start such courses. A branch of National School of Drama should also be established in the district to start courses on choreography, script writing, acting etc.

Scope for Establishing Industries

- Raw materials for producing 500 ton paper per day are available in the district. Therefore, paper mill can be established in the district. In case such a mill comes up, about 1000 people can get jobs with various skills such as electrical, mechanical, expertise in finances, management and so on. Cost of establishing such an industry is about 50 crores and this can be done only on the initiative of the government.
- Small entrepreneur ventures can be started by youth on food processing, fish farming, poultry farming etc. as raw material is available. There is a need to link training with government schemes for loans and other guidance. It was reported that deserving candidates do not get loans as they are poor and cannot afford any guarantee.
- There is a demand for glass blowing industry which can be set up by individuals at a low cost.
- There is scope for Agro-based industries especially in rural areas

Summary of Skills needed and Rationale for it (District as a Whole)

S. No.	Emerging Skill Needs	Rationale For It
A.	**Engineering Trades:** Motor mechanic, Diesel Mechanic, Electrician, Plumber, carpenter, Black Smith, Modern Mechanic operator, (CNC), Moulder, Turner, Mechanic, Engineering, Welder, Fitter, Fabricator.	Demand for such trades was indicated by the industry. Demand is for functional skills on modern machines.
B.	**Non- Farm Activities:** Basket weaving, Rope making, light furniture (Muddha, Chair, Sofa etc) Bakery, Housekeeping, Cookery, paper making, card board making, wood work etc..	Raw material as mulberry trees and sarkandas are available in abundant. There is great demand in the local market to prepare various items using raw material from these trees.
C.	**Agro Based**: Food processing, processing of dairy products, processing of horticulture products, Gur and khandsari, Packaging	Raw material is available, great demand in the market; Needs short term training courses.
D.	**Medical Related courses**: Pharmacists, Auxiliary Nurse Midwives (ANM), General Nurse Midwives, Certificate in Veterinary Science (CVS), Sanitation etc..	There is only one institution imparting courses for ANM, GNM and Pharma. Such courses are very much demanded by Pvt. Hospitals, Nursing homes. Veterinarians are also demanded by farmers for the health care of their livestock.
E.	**For Women**: Fashion designing, Beauty courses, Painting, interior decoration, Embroidery, Arts & crafts, Ladies Purse making, soft toys making, Dying and Bleaching, Packaging, Pickle making, computers.	These courses have a good demand for self employment, particularly among Self Help Groups SHGs. Already such activities are going on in the District; short duration courses for skill up-gradation are needed. Forward linkages for marketing are extremely required.
F.	**Tourism:** Customized courses in travel & Tourism, water sports instructors, tourist guides, and religious tourism.	District is having large number of temples, gurudwaras, forest reserves, and canals etc. Area can be developed for tourist purposes.
G.	**Traditional Trades**: Mason, Blacksmith, Shoemakers, Weavers, Washer man, Carpenter.	All traditional trades need up-gradation of skills for using latest machines and tools. Short duration courses are needed.
H.	**Skill Demanded for National and International level:** Heavy motor vehicle drivers, Crane Operators, J.C.B Operator, courses relating to modern building construction	Youths are going abroad for operating heavy vehicles, for activities relating to building construction etc. Courses for such activities are in demand along with personality development and language courses
I.	**Entrepreneurship Development**: Financial Management, Project Developments, Communication Skills, Marketing Personality Development, English Speaking Courses.	Youths in the district are enterprising. They find it difficult to get loans for their ventures for various reasons such as lack of skills in communication, project preparation etc.

J.	**Others:** Fine art, Music, Dance, and Drama, Military Training, Glass blowing, Sports.	Youths in the District have calibre for music, dance and other fine arts. Also due to media influence they are interested in these activities. Most of the young adults want to join defense services, sports etc. Glass blowing work is in demand in nearby states. Therefore, there is a demand for skills in this work.

The Block-wise demand for skills may be seen in Annexure IX.

In this section it can be observed that in the existing economic activities there is a shortage of skilled people. Same is the case for future requirements in the light of the fact that industries are planning to expand and modernize, which will require new sets of skills with their functionalities. It can be observed from the above discussions that there is potential for starting new economic activities which will again require various types of skills. The people in Punjab including females have traditional skills which need up-gradation due to changing labour market demands.

Chapter 6

Other Issues

Aspirations of Youth

- ***Youth are attracted towards salaried jobs or handsome pay packet***

  Youths in the district have preferences for government job, defense services or jobs outside the country where they could get a good pay package. Students stated that after doing technical training, they do not get good salary to sustain themselves in the local area. Industries and other private institutions offer very meagre amount. Therefore, they prefer to stay with the family and keep on trying for government jobs or aspire for going out especially in the Middle East countries.

- **Interested in starting their own ventures**

  Some of the participants indicated that their interest in establishing their own ventures, for example one participant in the Shikha village stated that in case he does not get an Army job, he would like to establish a computer training centre as he has done MCA. Further probing indicated that his brother worked in the Middle East as Lift Operator and earned enough money to start this venture. He was motivating his other friends and relatives to go for computer course and be partners in his computer centre. A fact has come to light that remittances from abroad are used for building big houses and other household purchases; only a few spend on starting business activities.

- **Problems of Youth**

  The agricultural prosperity in the region which was the result of green revolution raised the earnings of the farmers and had contributed towards an overall prosperity in this region. However, majority of the local youth were no longer interested in pursuing agriculture as the principal occupation. On the other hand, non-agricultural sector has not developed as per potential in this region. Local youths, who had already experienced agricultural prosperity and a fairly comfortable lifestyle (bikes, mobiles, and other electronic gadgets), were unwilling to accept the terms and conditions of work offered to them. They were therefore inclined towards government jobs which provided them a fairly secure and good lifestyle. But government jobs were rare and their numbers fast dwindling. Unemployment problem in this region, therefore, needs to be addressed immediately to combat problems of youth in the region, who are engaging in anti-social activities.

Resources and Their Optimum Utilisation

Most of the infrastructure available in the district in terms of schools, colleges etc. have activities only in one shift. The infrastructure can be utilized for starting courses in the evening

or in the second shift, for example, Aryanagar college has its classes up to 3 p.m. and they were willing to offer their premises for exploring possibilities of starting any other programme utilizing the existing infrastructure. The buildings of other schools, ITIs may also be utilized for skill development programmes. It was stated that there is a need to establish production centres in the ITIs and other technical colleges to better utilize the infrastructure available on the one hand and to provide practical training to the students on the other. It was suggested that supply of manufactured goods can be through District Industry Centre DIC. A variety of raw material is available which at present is not being processed. There is plenty of waste material out of wheat and rice crops. The straw and *sarkanda* can be utilized for making paper as well as cardboards. Besides, there is crop produce as well as horticulture produce which is sold as a raw material for processing to Himachal Pradesh. Processed goods come back to the district at higher prices. Possibilities can be explored to process the produce in the district itself by providing skills to the local youth.

Problems of Industries

It was reported that increase in freight charges, multiple taxation, non-availability of electricity and lack of incentives provided by the government are some of the major reasons for closing down the industry establishments in the district and industrialists are not coming forward to set up new industries even when ample scope is there. Himachal Pradesh and Jammu & Kashmir are adjoining states where several incentives are provided to industrialists in terms of tax exemption, lower transportation charges etc. A number of industrialists have closed down their industries in Gurdaspur district and have set up the same in these neighbouring states. Some others are expanding and diversifying their industrial activities outside Gurdaspur district especially in these neighbouring states. Kamal Paper Mill, for instance, started its production from Gurdaspur district. Now, it has other two units one each in Himachal Pradesh and Jammu & Kashmir. This scenario is resulting in unemployment and low demand for skilled labour. As mentioned earlier, erratic power supply is also of great concern for industry establishments. Because of poor supply of electricity, workers remain idle which increases the cost of production.

The local industrialists had a common notion that people in this district lacked skills, and therefore, they preferred hiring skilled personnel from other states. When asked if they ever tried with the locals who were ITI pass-outs, they could not give any conclusive answer. The industrialists were of the view that before giving certificates to the ITI pass- outs, it should have been made compulsory for the students to get 6 months, training from an industrial establishment. The industries expressed their willingness to cooperate with the ITIs in providing practical training to the students. The industrialists were highly apprehensive about the general attitude of the local people. They stated that people here were not hard working, that is why reason they take people from other states. The team observes that one of the reasons of hiring people from outside was that they could be offered lower wages.

Issues relating to Employment for women

Opportunities for women employment and training are few. There are hardly any training centres for women available in the local areas and parents are reluctant to send their children to distant places. Some private institutions have started women- oriented short- term courses but they are only minuscule. Moreover, there are no employment opportunities even when girls are trained in various occupations. The women had been involved in SHGs and started a number of economic activities, but marketing of their products was the main problem. There should be short- term training programmes as per the needs of women with forward linkages for their employment.

Some initiatives taken to improve the employability of students

In order to bridge the gap between industrial requirements and training facilities, some institutes send their students to various industrial establishments for 15-20 days' training in trades such as electrician, diesel mechanic, and motor mechanic. However, such short duration training was in no way helpful for the students and such industrial exposure was a merely formality.

In order to give students exposure in industrial training, Beant College of Engineering and Technology opened an Innovation Centre and an Incubation Centre. Both the centres had societies which comprised of industrialists, academicians, and alumni. In the Incubation Centre, students worked in the ongoing projects of the institute (projects obtained from the industries). Students in 3rd and 4th years of their degree course were allowed to work in such projects. The objective of the Incubation Centre was to improve the self- employment potential of the students. In the Innovation Centre, students in their 2nd year of Degree course selected projects on their own which were partly funded by the college.

A number of local NGOs were providing training in various skills in order to promote self-employment. Local NGOs reported that they conducted training in villages on courses such as beautician, sewing, art and craft, manufacture of soft toys, pickle making etc. The fees charged were nominal (Rs. 100/- per month) for some courses and the duration of such courses spanned from six months to one year. These courses were offered in batches of 30-35 trainees and raw materials were also provided by the NGO initially in some cases. Selection of villages was generally done on the basis of their contacts with the sarpanch of the respective villages. In certain cases, the sarpanch himself contacted the NGOs for conducting training programmes. Each year some NGOs reportedly adopt 5-6 villages each for such training programmes. It was stated that poor persons cannot buy raw material which is a hindrance in training. NGOs also cannot afford raw material for a long time. Government support in such cases is needed.

Although such initiatives at the local level were welcome, but the scope and coverage of such programmes were extremely limited, and without any follow up action particularly in respect of marketing, such efforts failed to make any significant inroads in generating productive and gainful employment.

Attention Needed

Stakeholders mentioned some of the issues that require immediate attention in the district for employment generation. These were:

- Placements are shown by ITIs but industry establishments do not provide them jobs as per their trades in which students are trained. Some establishments ask the pass-outs to work as labourers which they decline and leave the job. Thus, placements shown by the institutes are doubtful.
- In some institutions Modular Employable Scheme (MES) courses are in operation but it was reported that institutions are not getting their due payments.
- It was mentioned that government should provide a minimum support price (MSP) for each commodity.
- It was reported that students lack analytical and comprehensive abilities. Syllabus and teaching strategies should be designed in such a manner that these abilities are developed among the students at school level itself.
- There is a need to have a check on mushrooming of ITIs and colleges in case they are unable to provide good quality education and training.
- It was stated that no transport facilities are available from Gurdaspur after 6 p.m. This is a bottleneck in the development of the district.
- It was suggested that a department of industrial training and vocational education should be established and should be linked with apprenticeship department. In other words, these should be under one umbrella.
- It was stated that under apprenticeship scheme training is not provided in the trade a student is pursuing his training. The student pursuing a course in civil engineering goes for training in mechanical engineering. This is because students do not want to go too far of places for training. Thus, apprenticeship training becomes an eye-wash only.

Chapter 7

Suggestions and Action Points

On the basis of field survey results it is evident that the district has potential for development. There are skill gaps and also new skill needs are emerging which should be taken into consideration for preparing skill development plan. Some specific suggestions are as below:

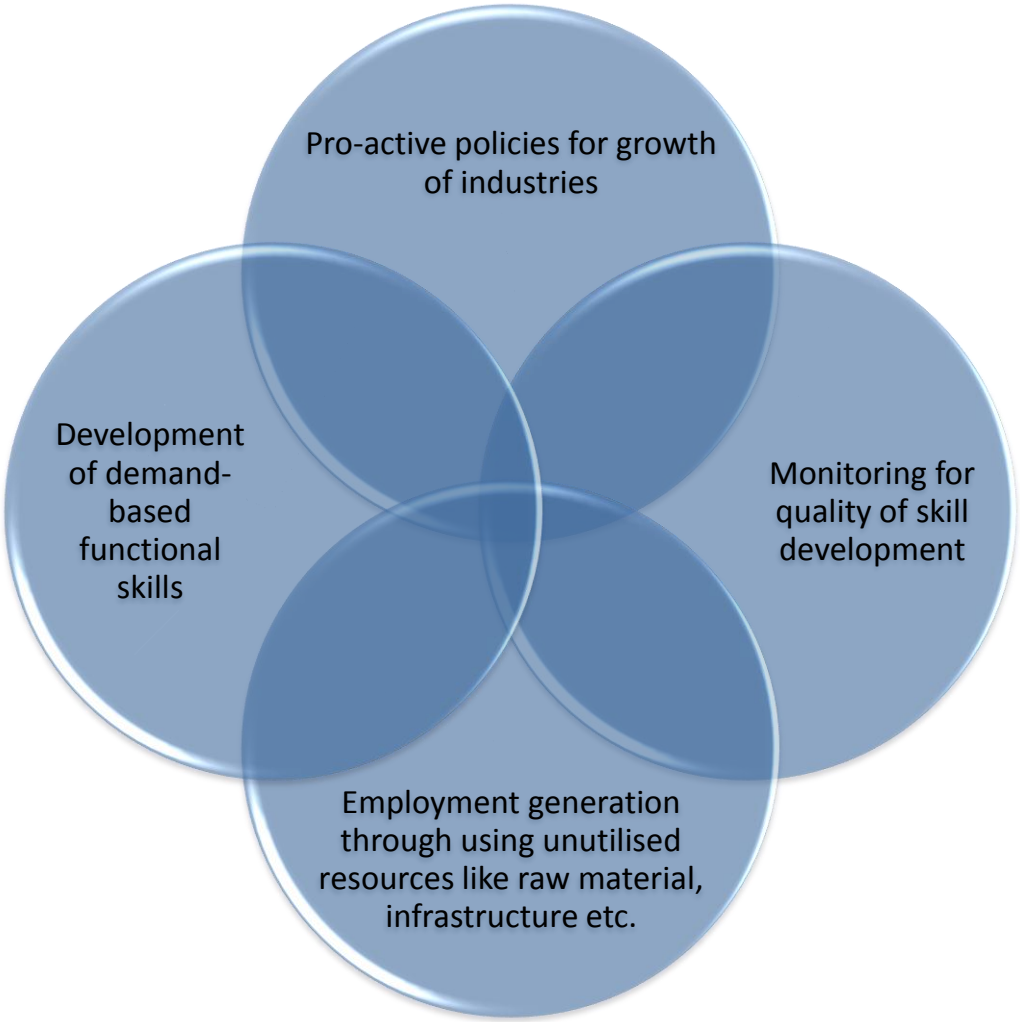
Suggestions and Policy Interventions

Finding	-	Heath facilities in rural areas are very poor.
Suggestion	-	Every village should have a post of Health Inspector.
Finding	-	The youth is not aware about various educational training and employment facilities.
Suggestion	-	Schools/colleges should have guidance counsellors.
Finding	-	Industries are closing down as the neighbouring states like Himachal Pradesh and Jammu & Kashmir have special incentives for establishment of industries.
Suggestion	-	Special incentives to industries are needed as is being done in other states.
Finding	-	The power supply to industries is erratic which creates problems for the industries.
Suggestion	-	Regular power supply should be ensured or government can allot some area as special zone where there can be regular power supply.
Finding	-	It has been seen that students coming out of training institutions lack practical orientation and are unable to meet the demands of the industries.
Suggestion	-	Training should be linked to increasing the employability of persons and courses should be as per market demand.
Finding	-	It has been found that teachers' skills have not been upgraded and therefore they cannot provide practical training on new machines.
Suggestion	-	There is a need to upgrade the skills of teachers who are providing technical training.
Finding	-	No branch of National Dairy Development is there in Gurdaspur.
Suggestion	-	A Centre of National Dairy Development should be established in Gurdaspur as the organization offers a number of training courses in agri-related areas.

Finding	-	Krishi Melas are organized in the district, which are popular in rural areas. Awareness programmes and information about various training courses in agriculture related sectors is not disseminated through these Melas.
Suggestion	-	In Krishi Melas information about various short-term courses by agriculture department should be disseminated.
Finding	-	It was mentioned that that only large amounts of loans are given under PMRY scheme which are not catering to the needs of youth who want to take small loans and start their own ventures.
Suggestion	-	Under P.M.R.Y scheme small loans should be given so that youths can start their own ventures.
Finding	-	A large number of people informally trained which do not posses any recognized certificate get employment.
Suggestion	-	There is a need for certification of informally trained persons.
Finding	-	It has been found that people have to travel far off places for technical training. There was a demand that Technical institutions should be established in the areas where there is lack of such institutions.
Suggestion	-	Need for training institutions in blocks besides Gurdaspur and Batala
Finding	-	The quality of training has been found poor. Training is also not as per youth aspiration as per aspiration of the youth.
Suggestion	-	Improvement in quality of training keeping youth aspiration in focus. Youth aspire for coaching for defence services, training in language skills, personality development, sports, fine arts, etc.
Finding	-	It has been found that raw material in terms of wheat, sugarcane, sarkanda, remains of wheat, etc. are available which at present are not being processed.
Suggestion	-	Plenty of raw material is available which can be utilized for processing purposes.
Finding	-	Infrastructure is available in the district in terms of buildings, equipments etc. which is underutilized.
Suggestion	-	Infrastructure may be utilized optimally by having double shift in organising training.

Chart 9

Action Points



Annexure – I

Block Profiles

Batala

Batala is a Municipal Council in Gurdaspur which is located about 30 km from Gurdaspur, the headquarters of the district. Batala is an important place for Sikh devotees. Guru Nanak Dev, the founder of the Sikh religion was married here to Sulakhni, the daughter of Mul Chand Chauna in 1485. Many temples and Gurdwaras related to the Guru's marriage attract devotees from near and far. Every year there are celebrations on the anniversary of Guru Nanak's marriage.

Batala once called as Iron bird of Asia as it produced highest amount of C.I. Casting, agricultural and mechanical machinery. Batala is still one of the leading cities in northern India in manufacturing of C.I Casting and agricultural and mechanical machinery. It is both an agricultural market place and industrial centre. Cotton ginning, weaving, sugar refining, rice milling, and manufacturing of woollen products are some of the other businesses. New rail links are proposed which would generate direct employment for the people.

One of the older towns in the province of Lahore in earlier times, Batala is home to many monuments of religious and historic importance. These monuments are connected with Sikh history and Mughal period. The city consists of several churches constructed during the British Raj. It is well connected with the other cities and towns of Punjab by road and railways. The block has the population of 1.29 lakhs of which 47.36 percent were females. The population density of the block is 585 persons per sq.km which is higher than the district average of 502 persons per sq. km. The block has population of 58 per cent literacy rate.

Dera Baba Nanak

Dera Baba Nanak is a block and a Municipal Council in Gurdaspur district. As of 2001 Census, Dera Baba Nanak block had a population of 1.09 Lahks. Males constitute 53.17 percent of the population and females 46.83 percent. Dera Baba Nanak has an average literacy rate of 58 percent.

Two famous Gurudwaras at Dera Baba Nanak are Shri Darbar Sahib and Sri Chola Sahib. Dera Baba Nanak, one of the most sacred places of the Sikhs, is situated on the banks of river Ravi. Guru Nanak Dev, the first Sikh Guru, settled and died near the village Pakhoke, opposite to the present town named which was as Kartarpur. The Bedis, descendants of Guru Nanak Dev built a new town and named it Dera Baba Nanak after their great ancestor. The town has a number of Sikh temples. Pilgrims come to this holy town in large numbers. Dera Baba Nanak was made the head quarter of newly created Tehsil of Dera Baba Nanak. It is a historical town and has many lanes and houses that have been preserved since the time of Guru Nanak. Also from this town pilgrims can see across the border with Pakistan and see the Gurudwara at Kartarpur.

The place is famous religious tourism which has potential generating non-agricultural employment.

Dhariwal

Dhariwal is a developmental block and a Municipal Council in the district. It is famous for its woolen mill. This town is situated on the banks of river Upper Bari Duab and is 13 km away from Gurdaspur on Gurdaspur-Batala highway. As of 2001 Census, Dhariwal block had a population of 1.30 lakh. The block has an average literacy rate of 58 percent. In Dhariwal, 10% of the population is under 6 years of age.

Dinanagar

Dinanagar is a sub-tehsil in the district and has a rich history of its own. It was the summer capital of Maharaja Ranjit Singh of Punjab State (which includes present day Punjab, Harayana, Himachal Pradesh, parts of Rajasthan, Jammu & Kashmir states of India and Punjab State of Pakistan). Dinanagar is famous for its ancient Dayanand Math where spiritual education, ayurveda, physical activities are practised and encouraged. With changing times Dinanagar is also progressing in Industrial Development and education sector. Besides having agriculture as its mainstay, various Pipe manufacturing units are operating in Dinanagar since 1950s. Recently, wood industry has also shown its strong presence in this ancient town. In education sector, keeping in pace with country's development, various IT institute have come up (besides college education), giving ample opportunity to youths to choose their carrier. Total population of the block is 1.04 Lakhs of which 48.45 per cent constitutes the female population. The block has the literacy rate of 63 percent which is higher than the district average of 58 percent.

Dorangla

Dorangla is the smallest development block in the district. The block consists of 66 villages covering the geographical area of 123 sq. km. The total population of the block is about 0.50 lakhs of which 24 percent belong to scheduled castes (SC). Fifty-seven percent of the block population is literate. Non-agricultural workers are higher as compared with to agricultural workers in the block.

Fategarh Churian

This is also a small development block consisting of 83 villages spread over 236 sq.kms. The total population of the block is about one lakh. The density of the population is about 388 persons per sq. km. The literacy rate of the block is about 57 percent. The number of non-agricultural workers (4,400) is less than the agricultural workers (8,600). About 23 percent population belongs to scheduled castes. Majority of the SC population is working as agricultural workers.

Gurdaspur

Gurdaspur is a city situated in the northwest part of the country. The Gurdaspur city situated on Amritsar–Jammu National Highway Road, 36 km from Pathankot and 32 km from Batala,

is the district headquarters. All head offices of various departments are situated in this city. The Indo-Pak Border is at a distance of 10 km from here. Raavi and Beas rivers are flowing through the city.

The city was named after the name of Mahant Guridas. The Emperor Akbar was crowned at Kalanaur which is 26 km from Gurdaspur city. Also, Behrampur town is situated at a distance of 10 km where Mukbara of Bairam Khan is situated. Earlier, Dinanagar town was the capital of Maharaja Ranjit Singh which is only 12 km away from Gurdaspur city. The famous woolen mill is situated at Dhariwal which is only 12 km away from Gurdaspur city. According to the 2001 Census, Gurdaspur has a population of 1.56 lakhs. Gurdaspur has an average literacy rate of 62 per cent.

Kahnuwan

Kahnuwan is located 19 km. from Gurdaspur. The tahsil and district headquarters, kahnuwan is also linked by road with Sri-gobindpur and Batala. Its population is 1.21 lakhs with the average density of 363 persons per sq.km. The literacy rate of the block is 59 percent. Geographically, it is the largest block in the district with the area of 334 sq. km. The block covers 148 villages and 137 Gram Panchayats. Kahnuwan, which gives its name to the well-known marsh, possesses several ancient buildings, the chief among which are the shrine of Shah Burhan, a Muhammadan saint, who flourished in the reign of Jahangir; the *gupha* or sub-terranean shrine of the Bairagi Bhagwanji; a *math* of sanyasis; and a jogi Mandir. A curious tradition attaches to a large *baoli* or well just below the high bank which though in a good condition is not used.

Kalanaur

Kalanaur is also a small block covering 93 villages and same numbers of Gram Panchayats. The block has the population of 0.75 lakhs with the average population density of 384 persons per sq.km. The block is located around twenty-six kilometers away from Gurdaspur, the district headquarters. Kalanaur is connected by road with Dera Baba Nanak and Batala.

Now reduced to the status of a village, Kalanaur was a small important town in older times. There was an old proverb which said ‘that he who has not seen Lahore, at least let him see Kalanaur’. This historical place is supposed to be one of the abodes of Lord Shiva, whose gigantic lingam is established here in a temple. According to another legend, the village takes its name from two Muslim brothers, Kalla and Nura, who defended and four walls of this village. During the reign of Akbar, Kalanaur attained its greatest splendour. At a distance of about 2 km from the locality, there is a masonry platform known as *Takhat* (throne) upon which Akbar was first crowned in 1556 A. D. Close to the same spot is a tomb of Jamil Beg which is in ruins.

Qadian

Qadian is a small town and a Municipal Council in the district, located from north-east of Amritsar, situated at 18 km (11 mi) north-east of Batala. Qadian is known as the birthplace of Mirza Ghulam Ahmad, the founder of the Ahmadiyya Movement. Qadian was established in 1530 by Mirza Hadi Baig, a religious scholar dedicated to Islam and the first Qazi in the area. Because of his religious beliefs, he named the new town 'Islampur Qazi'. Over time, the name of the town changed to 'Qazi Maji' (the word "Maji" means Bull referring to the animal still found in abundance in Qadian). Later, it was named just 'Qadi' and eventually it became to be known as Qadian.

According to 2001 Census, Qadian Block had a population of 0.86 lakhs. Males constitute 52.15 per cent of the population and females 47.85 percent. Qadian has an average literacy rate of 56 percent. The block area consists of 63 villages and 68 gram panchayats. Population density of the block is 432 persons per sq.km. Before the partition of India, the town of Qadian had a majority Muslims population because of the presence of many religious monuments belonging to the Islamic faith. Since 1947, Qadian's population is mostly Sikh with some members of the Ahmadiyya Muslim Community staying who take care for the Community's buildings and mosques. The vast majority of the Community migrated to Pakistan during the partition of India.

Shriharigobindpur

The block is one of the smaller blocks by geographical area in the district. The block boundary consists of 102 villages and 98 gram panchayats with a geographical area of 271 sq. km. Total population of the block is 1.06 lakhs with a population density of 392 persons per square kilometer. The literacy rate of the block is 56 percent which is lower than the district average of 61 percent. The number of workers from non-agriculture (20,900) is higher than that of agricultural (18,600) workers. About 28.9 percent of the block population belongs to SCs.

The detailed description of the district and its municipalities and development blocks provides its strengths and weaknesses. The SWOT analysis on the basis of the above can be seen in the chart given below:

Annexure-II

Block-wise and Main Activity-wise Composition of Establishments

Main Activity	Blocks											
	Batala	Dinagarh	Dera Baba Nanak	Dhariwal	Dorangal	Fetehpur Churian	Gurdaspur	Kahnuwan	Kalanur	Qudian	Sri Harigovindpur	Total
Agriculture Implements	3	2	0	0	0	0	1	0	1	1	0	8 -2.5
Agricultural & Food Processing Industry	4	2	0	2	2	2	3	1	0	0	3	19 -5.7
Casting and related works	21	0	0	0	0	0	0	0	0	0	0	21 -6.3
Furniture and Woodworks	3	5	0	2	0	6	2	1	1	0	1	21 -6.3
Lathe and Other Machinery Works	26	1	0	0	0	0	0	0	0	0	0	27 -8.1
Manufacturing of Leather Products	1	0	0	0	0	0	3	0	0	0	0	4 -1.2
Manufacturing of Machinery & Tool	57	1	0	0	0	0	3	0	0	0	0	61 -18.3

Manufacturing of Medicines & Drugs	2	0	0	0	0	0	1	0	0	0	0	3 -0.9
Manufacturing of Metals & Steels	9	0	0	2	0	1	3	1	1	1	2	20 -6
Manufacturing of Paper & Paper Products	1	0	0	0	0	0	2	0	0	0	0	3 -0.9
Manufacturing of Plastic Products	1	2	0	0	0	0	3	0	0	0	0	6 -1.8
Repair of Electricals & Electronics Appliances	2	0	1	1	0	0	1	3	0	0	1	9 -2.5
Repairing & Servicing	15	13	4	8	1	8	12	10	9	1	9	90 -27.2
Trade	6	1	0	0	2	0	4	5	2	0	0	20 -6
Welding Works	1	0	1	0	0	1	1	0	5	1	2	12 -3.6
Others	1	1	1	1	0	0	1	0	0	2	1	8 -2.5
Total	**153** **-46.1**	**28** **-8.4**	**7** **-2.1**	**16** **-4.8**	**5** **-1.5**	**18** **-5.4**	**40** **-12**	**21** **-6.3**	**19** **-5.8**	**6** **-1.8**	**19** **-5.8**	**332** **-100**

Annexure-III

a) Percentage of Composition of Establishments by Ownership (Total organizations surveyed: 332)

Sl. No.	Ownership	Percentages
1.	Public	0.4
2.	Cooperative	5.1
3.	Private	90.0
4.	Others	4.5
	All Sectors	**100.0**

b) Block-wise Composition of Establishments (in percent)

Sl.No.	Block	All Sectors combined
1.	Batala	46.1
2.	Dinagarh	8.3
3.	Derababa Nanak	2.1
4.	Dhariwal	4.8
5.	Dorangal	1.5
6.	Fetehpur Churian	5.4
7.	Gurdaspur	12.0
8.	Kahnuwan	6.3
9.	Kalanur	5.7
10.	Qudian	1.8
11.	Sri Harigovindpur	5.7
	All Blocks Total	100.0

c) Composition of Establishments (in Percent) by Ownership in Each Block

Sl. No.	Block	Sectors				
		Public	Cooperatives	Private	Others	All sectors
1.	Batala	0	0.07	98.7	0.7	100.0
2.	Dinagarh	0	10.7	82.1	7.1	100.0
3.	Derababa Nanak	0	0	100.0	0	100.0
4.	Dhariwal	0	6.3	93.7	0	100.0
5.	Dorangal	0	0	100.0	0	100.0
6.	Fetehpur Churian	5.6	5.6	83.2	5.6	100.0
7.	Gurdaspur	0	10.0	80.0	10.0	100.0
8.	Kahnuwan	0	9.5	81.0	9.5	100.0
9.	Kalanaur	0	21.1	52.6	26.3	100.0
10.	Qudian	0	0	100.0	0	100.0
11.	Sri Harigovindpur	0	5.3	94.7	0	100.0
	Owner-wise all blocks (Total)	**0.4**	**5.1**	**90.0**	**4.5**	**100.0**

d) Block-wise Share of Establishments by Ownership

(in percentages)

Sl.No.	Block	Sectors				
		Public	**Cooperatives**	**Private**	**Others**	**All Sector Total**
1.	Batala	0.0	5.9	50.5	6.7	46.1
2.	Dinagarh	0.0	17.6	7.7	13.3	8.3
3.	Derababa Nanak	0.0	0.0	2.3	0.0	2.1
4.	Dhariwal	0.0	5.9	5.0	0.0	4.8
5.	Dorangal	0.0	0.0	1.7	0.0	1.5
6.	Fetehpur Churian	100.0	5.9	5.0	6.7	5.4
7.	Gurdaspur	0.0	23.5	10.7	26.7	12.0
8.	Kahnuwan	0.0	11.8	5.7	13.3	6.3
9.	Kalanur	0.0	23.5	3.3	33.3	5.7
10.	Qudian	0.0	0.0	2.0	0.0	1.8
11.	Sri Harigovindpur	0.0	5.9	6.0	0.0	5.7
	Total	**0.30**	**5.12**	**90**	**4.5**	**100.0**

Annexure-IV

Block-wise Composition of Establishments by Year of Establishments

Sl.No.	Blocks	Year of Establishment			
		Upto 1990	**1991-2000**	**Beyond 2000**	**Total**
1.	Batala	118 (50.0)	28 (37.3)	7 (33.3)	153 (46.1)
2.	Dinagarh	14 (5.9)	10 (13.3)	4 (19.0)	28 (8.4)
3.	Derababa Nanak	6 (2.5)	1 (1.3)	0	7 (2.1)
4.	Dhariwal	9 (3.8)	7 (9.3)	0	16 (4.8)
5.	Dorangal	2 (0.8)	3 (4.0)	0	5 (1.5)
6.	Fetehpur Churian	14 (5.9)	4 (5.3)	0	18 (5.4)
7.	Gurdaspur	26 (11.0)	9 (12.0)	5 (23.8)	40 (12.0)
8.	Kahnuwan	13 (5.5)	5 (6.7)	3 (14.3)	21 (6.3)
9.	Kalanur	17 (7.2)	2 (2.7)	0	19 (5.7)
10.	Qudian	4 (1.7)	2 (2.7)	0	6 (1.8)
11.	Sri Harigovindpur	13 (5.5)	4 (5.3)	2 (9.5)	19 (5.7)
	Total	**236 (100.0)**	**75 (100.0)**	**21 (100.0)**	**332 (100.0)**

Source: District Industry Centre, Batala

Annexure-V

Main Activity-wise Composition of Establishments by Size of Employment in Gurdaspur

Sl.No.	Gurdaspur	Upto 5	6 to 10	11 to 25	26 to 100	100 and above	Total	Activity wise %
1.	Agriculture Implements	5	1	2	0	0	8	2.5
2.	Agricultural & Food Processing Industry	11	3	1	2	2	19	5.7
3.	Casting and related works	6	11	3	1	0	21	6.3
4.	Furniture and Wood Works	14	4	3	0	0	21	6.3
5.	Lathe and other machinery works	26	38	19	4	1	88	26.6
6.	Manufacturing of Leather Products	4	0	0	0	0	4	1.2
7.	Manufacturing of Medicines and & Drugs	0	2	0	0	0	2	0.6
8.	Manufacturing of Metals & Steels	14	2	2	1	0	19	5.7
9.	Manufacturing of Paper & Paper Products	1	1	0	1	0	3	0.9
10.	Manufacturing of Plastic Products	2	2	2	1	0	7	2.1
11.	Publishing and Printing	1	0	0	0	0	1	0.3
12.	Repairing & Servicing	90	4	3	1	0	98	29.5
13.	Trade	14	5	1	0	0	20	6.0
14.	Welding Works	10	2	0	0	0		3.6
15.	Others	5	2	0	0	2	9	2.7
	Total	**203 (61.14)**	**77 (23.19)**	**36 (10.84)**	**11 (3.31)**	**5 (1.51)**	**332 (100.0)**	**100**

Annexure-VI

Block-wise Composition of Establishments that Acquired New Equipments during Last Five Years

Sl.No.	No. of Establishments reported	Total
1.	Batala	55.5
2.	Dinagarh	18.5
3.	Derababa Nanak	0
4.	Dhariwal	0
5.	Dorangal	0
6.	Fetehpur Churian	0
7.	Gurdaspur	18.5
8.	Kahnuwan	0
9.	Kalanur	0
10.	Qudian	7.40
11.	Sri Harigovindpur	0
Total		**100.0**

Annexure-VII

Main Activity-wise Composition of Establishments Planning Modernisation

Sl.No.	Gurdaspur	%age of establishments in the activity reporting modernization plans
1.	Agriculture Implements	3.3
2.	Agricultural & Food Processing Industry	4.4
3.	Casting and related works	6.6
4.	Furniture and Wood Works	4.4
5.	Lathe and other Machinery Works	12.2
6.	Manufacturing of Leather Products	1.1
7.	Manufacturing of Medicines and & Chemicals	1.1
8.	Manufacturing of Metals & Steel	3.3
9.	Manufacturing of Paper & Paper Products	3.3
10.	Manufacturing of Plastic Products	3.3
11.	Repairing of Electricals & Electronics	1.1
12.	Trade	3.3
13.	Welding Works	3.3
14.	Manufacturing of Machinery & Tools	33.3
15.	Repair Services	12.2
16.	Others	2.2
Total		**90 establishments reported change (27%)**

Annexure-VIII

Main Activity-wise Distribution of Establishments by Preference of Workers for Employment

Sl.No.	Main Activity	Preference of Workers for Employment		
		Skilled Persons	Freshers	Total
1.	Agricultural Implements	8	0	8
2.	Agricultural & Food Processing Industry	13	1	14
3.	Art & Painting	0	1	1
4.	Casting and Related works	21	0	21
5.	Electrical Motor Repairing and Winding	1	0	1
6.	Furniture and Wood Works	11	10	21
7.	Lathe and Other Machinery Works	27	0	27
8.	Manufacturing of Bricks	0	1	1
9.	Manufacturing of Cattle Feed	1	0	1
10.	Manufacturing of Chemical Products	1	0	1
11.	Manufacturing of Food Products	4	0	4
12.	Manufacturing of Leather Products	4	0	4
13.	Manufacturing of Machinery & Tools	60	1	61
14.	Manufacturing of Medicines & Drugs	2	0	2
15.	Manufacturing of Metals & Steels	15	5	20
16.	Manufacturing of Paper & Paper Products	2	1	3
17.	Manufacturing of Plastic Products	4	2	6
18.	Publishing and Printing	1	0	1
19.	Repair of Electrical & Electronics Appliances	6	3	9
20.	Repairing & Servicing	40	49	89
21.	Trade	20	0	20
22.	Welding Works	1	11	12
23.	Woollen Manufacturing	1	0	1
24.	Others	2	2	4
Grand Total		**245**	**87**	**332**

Annexure-IX

Summary of Block-wise Skill Needs

S. No.	Block Name	Skills Required	Rational for it
1.	Gurdaspur	Aquaculture, Dairy, Food Processing, Packaging, Agro-based industries Gur and khand-sari, Soap making, Fruit processing. For Females – Tailoring and Embroidery, Ladies Purse making, Bleaching and Dying, Toy making, Beautician, Fashion Designing.	Raw material is available. There is a local demand for the products but there is lack of such courses in block. Traditional skills of women like Embroidery, Cutting & Tailoring needs to be upgraded. Already few women's groups are engaged in such activities.
2.	Deena Nagar	Dairy and Milk processing, Aquaculture, Poultry farming, Packaging and processing of eatable items, saw-mill operators. For women - Glass painting, Paper cutting, Dying and Bleaching, Papar and Badi making.	Raw material is available. No courses for such activities are available. There is great demand of such items in nearby town, Amritsar.
3.	Kanuwan	Pulp board making, saw mill operator, Aquaculture, packaging and processing of eatable items. For female - cutting and tailoring, Dyeing and bleaching, Papar and Badi making, Agarbatti making.	Abundant raw material is available for paper based cottage industries. Woods are available for saw mill. Short term courses are needed as such skills are needed in the local area.
4.	Kolanaur	Rope making, Electronic equipment repairers, Tractor mechanic. For females – embroidery, machine knitting, manufacturing of school bags, manufacturing of ladies purse, Manufacturing of cosmetics by using local herbs.	These skills are needed in the local market, Already some self-help group are engaged in such activities. Products are in great demand in larger cities. Needs Short term courses are needed for skill up-gradation.
5.	Daurangla	Pulp board making, Food processing, saw mill operator, Horticulture, Dairy Processing. Up-gradation of tradition skills like carpenter, barber, weaver, mason, shoe-maker, block Smyth, hosiery work.	Raw material is available, But there is a lack of training institutions. Industrial units are non-existent. Lack of vocational guidance.
6.	Hargobindpur	Animal Husbandry, Dairy processing, Tractor mechanic, Motor mechanic. For women- cutting & tailoring, handicraft item making.	No ITI/ITC in the block. Industrial units are non-existent. Far - off from main city. Such trades are needed for local demand. Needs for vocational counselling.

7.	Batala	Foundry man, Machinists, Diesel mechanic, Electrician, Draft man (Mech.) Sapper man	Such trades are needed by the industry. Most of industries are foundry based but such trades are not available in the ITI/ITCs. However, quality of trained persons remains an issue.
8.	Dhariwal	Horticulture, Floriculture, Milk processing. Up-gradation of tradition skills like, mason, shoe-maker, weaver, washer man. Block Smyth carpenter, etc. For females - cutting and tailoring, embroidery, Dyeing and Bleaching, paper making Agarbatti making etc.	Horticulture and Floriculture are emerging area. There is a great demand for the product in the local area. Short duration courses are needed. Traditional skills of artisans need up-gradation by using new machine and tools. Literacy rate among women is high. They can take up small business if proper training is provided to them.
9.	Qadien	Horticulture, food processing, milk processing, electronics repair, welder fabricators tractor-mechanic up-gradation of traditional skills like carpenter, shoemakers, weaver etc.,	There is a lack of training institutions in the block. Horticulture is emerging. Traditional skills needs up-gradation.
10.	Derababa-Nanak	Horticulture, Bee keeping Milk processing Mashroom growing, gur and khandsari, poultry farming, Tractor mechanics, motor mechanic, Welder. For females – Purse making, Dying and Bleaching, Cutting and Tailoring, Embroidery, Machine Knitting, Pickle making, Jam & Jelly Making.	It's a bordering block Agriculture is the principal occupation. Scope for of-farm activities. Females are interested in home-based activities which has a local demand. There is lack of training institution in the Block.
11.	Fathegarh Churian	Tractor mechanic, Diesel mechanic, Motor mechanic, Fitter, Welder, motor binding, Automobile mechanic. For females – Cutting & tailoring, Beautician, Hair-Dresser, Machine knitting. For youth going abroad –Heavy Duty Driver, Crane Operator, JCB Driver.	There is a local demand for such trades but no institution is proving training, SHG women are interested in such trades. Already some SHGs are engaged but they need up gradation of skills. Youth are interested in going abroad. They need special training in operating heavy machines. No such training institute exists in the block as well as in the District.

PART B (Singrauli District)

Chapter 1

About the District

Introduction

Singrauli District (comprising three Blocks - Waidhan, Deosar, and Chitrangi) was carved out as a separate district of Madhya Pradesh on May 24, 2008, with its headquarters situated at Waidhan. Singrauli District is surrounded by Sidhi District of Madhya Pradesh in the West, and Sonbhadra District of Uttar Pradesh state in the North. Singrauli is fast emerging as the energy hub of India because of the thermal power plants that already exist and the new ones which are under construction, and will be commissioned shortly. Abundance of water and presence of coal mines have provided ideal setting for thermal power generation in this region.

Brief Historical Background

The Place earlier known as Shringavali, named after the sage Shring, was well known for its dense forests inhabited by wild animals. The place was considered so treacherous that it was used by the kings of Rewa State, who ruled the district till 1947, as an open prison for detaining errant civilians and officers.

The recent history of Singrauli (post-1947) is primarily centred around power plants, starting of open coal mines, and considerable in-migration of both white-collar as well as blue-collar workers in this region. Such positive developments in this region are not without any cost. There has been large scale displacement of people from the project sites, and in many instances, it has been a story of multiple displacement. Quite often in various large scale development projects, the costs are borne by a separate set of people, while benefits accrue to others. Singrauli is a prime example of such a development trajectory.

During the First Five Year Plan period, G. B. Pant Dam and Hydro Power Project on river Rihand was sanctioned for industrial development in the region. The construction was completed in 1962 and was inaugurated by Pt. Jawaharlal Nehru in 1962. Later, rich coal deposit spread over an area of 2200 sq. km in the state of M.P. (Singrauli district) and U.P. (Sonbhadra district) were discovered close to artificial lake that could be used to generate electricity. As a result of the construction of the dam, 350 villages were submerged, out of which 70 villages were from Sidhi District (now Singrauli). This was the first large scale displacement experienced by the people in this region. As compensation, the villagers received 60 times the revenue paid prior to the construction of dam (which turned out to be Rs 3-4 per acre).

Renu Sagar thermal power plant (Birla group) was constructed in mid 1960s, and this was the first thermal power plant in the region. Coal for this power plant was mined from Jhingurada coal field which started its operation during 1965-66, and as a result of which inhabitants of 7

adivasi villages had to be displaced. The first super thermal power project (Singrauli Super Thermal Power Project) in the country was established here in 1975 by National Thermal Power Corporation (NTPC). Due to establishment of this super thermal power project, inhabitants of three villages had to be displaced.

Northern Coalfields Limited (NCL) started mining in this region (Jeyant area) from 1975 onwards. Coal was primarily supplied to NTPC for its Super Thermal Project. Following this, NCL started mining in different locations in the District (Nigahi, Amroli, Dudhichuya, Kharia, Kakri).

Clearly, even prior to its formation as a separate District, Singrauli was the destination of thermal power projects. However, the thermal power projects were not spread across the entire District, and were concentrated in the northern part of the District (Waidhan Block). At the moment all the operational coal mines and power plants are located in the northern parts of the district.

Abundance of water resources and rich mineral deposits (primarily coal) resulted in Singrauli becoming the hub of thermal power generation in the country. As mentioned earlier, this is not without cost. Keeping in mind the welfare of local people in the project affected areas the Government of Madhya Pradesh signed a Memorandum of Understanding (MoU) with NTPC and NCL. However, an enquiry as to what extent different clauses of MoU have been followed by the companies in letter and spirit is beyond the scope of this report. The important clauses regarding rehabilitation and resettlement as per MoU are mentioned in Box 1.

Box 1: Memorandum of Understanding

Memorandum of Understanding titled "Development of Singrauli" signed between Govt. of MP, NTPC, and NCL on 21-11-1988 at Surya Bhawan, Waidhan, Madhya Pradesh.

According to this MoU, "courses for land ousters with active participation and cooperation of NTPC and NCL in the local ITI must be started for which there is maximum demand in these organizations. The courses on mining survey which is not available here may be taken up at ITI, Shahdol. Similarly, some diploma courses for non-technical trades such as office correspondence, stenography, typing etc. exclusively for land oustees may also be organized."

The above suggestion was approved.

NCL: The quantum of employment in NCL from MP is low as compared to other States, and to eradicate this unjust treatment to residents of MP, NCL should reserve some fixed quota for MP. Also NCL should impart training to the pass-out of local ITI right at the ITI itself so that NCL may consider them candidature for recruitment to various posts without asking them to produce any "experience certificate".

NTPC: NTPC should also make sincere efforts in giving employment to the students of MP which at present is almost negligible.

Failure to comply with any of the conditions mentioned above may result in withdrawal of this and attract action under the provisions of Environment (protection) Act, 1986.

According to an agreement between the District officials (including the collector, SDM, Employment Officer etc.) and NCL on 13/7/1996, it was decided to allocate the total number of posts in the ratio of 60:40, i.e., 60% of the total posts so proposed to be filled in will be for MP and 40% from UP. The above decision will be made applicable for all future vacancies to be filled up by direct recruitment.

Blocks in the District

The District has three Blocks viz. Chitrangi, Deosar, and Waidhan (Table 1.1). The District headquarters is situated at Waidhan. Industrial clusters in the District are largely located at Waidhan.

Table 1.1: Geographical Area and Administrative Set-up

Block	Geographical Area (Ha.)	No. of Villages	No. of Village Panchayats
Chitrangi	192290	311	115
	34%		
Deosar	184559	223	97
	32%		
Waidhan	190424	272	104
	34%		
All	567213	806	316
	100%		

Source: District Statistical Handbook, 2009, Singrauli

As per the official statistics, 95 per cent of villages have electricity connection, and about 96 per cent of villages have drinking water facilities. However, in reality, despite being the hub of power generation in the country, non-availability and very irregular supply of electricity in the villages is a major hindrance towards economic development of the District.

Blocks in Brief

Chitarangi

Among the three blocks in Singrauli District, Chittrangi is the most backward one. The backwardness of the District can be gauzed by the fact that there is not a single doctor (with an M.B.B.S degree) in the entire Block, although there is a primary health centre, albeit in a dilapidated state.[1] There is not a single Degree college in the entire Block, and students willing to pursue studies beyond standard XII have to go to either Waidhan, or in far-away places like Indore or Bhopal (depending on their ability to pay). Power supply is in a dismal state with week-long power cuts being a common phenomenon in the block. Rural connectivity has only improved in the last 5-6 years, thanks to Pradhan Mantri Gram Sadak Yojana (PMGSY). River Sonbhadra divides the Block into two parts (Northern and Southern). The Northern part is inaccessible during the monsoons and there are 21 village panchayats in this part. Motorised boats are the only means of transportation between the Northern and Southern parts. Needlessly to mention, the Northern part is even more backward.

Agriculture was the mainstay of economy of this Block. For majority of the households agriculture was the principal occupation. There were 34,773 farmers in the Block (12,249 belonging to STs, 3,178 SCs, and 19, 346 belonging to Others). Majority of the big land-

[1] On paper there is one M.B.B.S doctor, who hardly makes a visit.

owners belonged to Vaishya Caste, while there were some big land-owners among STs as well. Apart from crop cultivation, animal husbandry (poultry, goat rearing) was also an important source of livelihood for the population. Lack of irrigation facilities was a major hindrance in the use of high yielding varieties of seeds and chemical fertilizers. Extension services are almost non-existent in this Block, with inter-generational transfer of knowledge about various agricultural practices being the only mode of teaching and learning. Absence of any marketing facility is also an important hindrance against agricultural development. Poor rural connectivity and absence of marketing facility has resulted in non-remunerative prices for the farmers. Small farmers sell their produce in local areas while larger producers take their crops in Gorawal Mandi located in Sonbhadra District of Uttar Pradesh.

Deosar

Although slightly more developed as compared to Chitrangi, shabby buildings hosting different government offices on both sides of a barely one-kilometre long stretch of narrow muddy road, is what Deosar town looks like. The condition of roads and power supply were both better than in Chitrangi. There was one Degree college in the entire Block, which was run by two permanent teachers, one of them being the Principal himself. Only 6 subjects (all Humanities) were offered in this college. There were four temporary teachers, and together with the permanent teachers formed a fleet of 6 teachers, one in each subject. Needless to mention, students took admission only for the sake of a degree, and have no expectation of employment opportunities after completion of their courses. Students willing to pursue higher studies in Science subjects have to go to either Waidhan, or in far-away places like Indore or Bhopal (depending on their ability to pay). Among the local students there was demand for Science courses, which can improve their employability in professions like medical representatives, and also in private companies which generally preferred Science graduates. In this college, three permanent teaching positions have remained vacant for the last 10 years. Unfilled vacancy is a general trend in almost all colleges in Madhya Pradesh. The last regular appointment of government college teachers in Madhya Pradesh was held as far back in 1991 through Public Service Commission.[2] As a result, colleges had to depend on guest faculties who were recruited at the local level. Colleges notified vacancies to the area office which then brought out an advertisement containing the integrated list of vacancies for the area as a whole. Applicants then started applying in the colleges directly, and end up applying in as many colleges as possible. Finally, it was often the case that meritorious candidates ended up being selected in more than one college. The colleges also brought out a waiting list. Deosar being a backward area is not generally preferred by the shortlisted candidates, and therefore, this college permanently faces teacher's scarcity. By the time guest faculties finally join, usually half the session gets over. There was huge disparity in terms of salary between permanent teachers (who were paid as per UGC scale, which was not less than Rs. 40,000 per month) and guest teachers (who were paid Rs. 120 per class, subject to a maximum of four classes per day). Further, there was a ceiling of Rs. 8000 per month for the guest faculty. Just to add on to

[2] The only exception was a special recruitment for teachers belonging to SC and ST communities in 2003-04 and 2006.

their humiliation, the guest faculty was not paid for the days when there was some examination in the college.

Agriculture was the principal economic activity in this region. There were 24,710 farmers in the Block. Lack of irrigation facilities was a major constraint which the farmers confronted. Kharif crops were almost entirely dependent on monsoon rains, while 52 per cent of cropped area was irrigated during rabi season. Lift irrigation from Gopad River was by far the most important source of irrigation.[3]

Waidhan

Among all the three Blocks of the District, Waidhan was the most developed in terms of infrastructure and civic amenities. All the important offices (including that of the Collector) were located in Waidhan. The condition of roads and power supply were both better than the other two blocks. Even though agriculture was the principal activity in this Block also, there was no training or demonstration of agricultural practices provided to the farmers. The young generation in this block was not willing to pursue their traditional activities, as it was not remunerative enough and involved lot of hardship. Also, there was no training facility to make new products which were in demand. The young generation was mostly interested in getting training from ITIs in trades which had high demand in the region. Unfortunately, there was only one ITI in the District, and therefore, there was huge demand for admission into ITIs, though many of the courses were outdated and there was acute scarcity of modern implements and equipment.

Land Utilization

Area under cultivation constituted 30 per cent of geographical area in the District. The proportion of area under cultivation was the lowest in Waidhan which is the centre of major economic activity and administrative set-up. Lack of irrigation is a major hindrance towards agricultural development in the District, and this problem was the most severe in Chitrangi Block (Table 1.2). Net irrigated area as proportion of net sown area was extremely low when compared with both State average (43%) and national average (44%). Among different sources of irrigation, wells accounted for two-thirds of area irrigated.

Table 1.2: Land Utilization Pattern in Singrauli District of Madhya Pradesh

Block	Geographical Area (Ha)	% of Cultivable Area	% of Net sown Area	% of Net Irrigated area to Net Sown Area
Chitrangi	192290	34	34	6.4
Deosar	184559	29	29	13.9
Waidhan	190424	24	24	32.5
Total	567213	30	30	16.9

Source: District Statistical Hand Book, 2009, Singrauli, Madhya Pradesh

[3] River water was first collected in a well, and then it was pumped out using diesel pumps.

As in other parts of the country, Singrauli too was characterised by preponderance of small landholdings. As much as 44 per cent of landholdings were of less than 1 ha (Table 1.3). But in terms of area, such small landholdings accounted for only 10 per cent. On the other extreme, only 3 per cent of landholdings were more than 10 ha in size, but those accounted for 21 per cent of the total land area.

Table 1.3: Size Class of Land Holding, Singrauli, 2009

Size	No. of Land Holding	Area (Hectare)
Less than 1 hectare	92540 (44%)	41210 (10%)
1-2 hectare	45320 (21%)	66976 (16%)
2-4 hectare	41425 (20%)	114232 (26%)
4-10 hectare	21965 (10%)	127988 (30%)
More than 10 hectare	5515 (3%)	90892 (21%)
Total	211503 (100%)	432037 (100%)

Source: District Statistical Hand Book, 2009, Singrauli

Smallness of size of holding together with low irrigation intensity resulted in lower agricultural productivity, which has a major role in socio-economic under development of the District.

Cropping Pattern

Paddy, wheat, and arhar are the principal crops in the District. In all the blocks, paddy and arhar are the principal kharif crops, while wheat is the principal rabi crop.

In Chitarangi, like in other parts of the District, pulses accounted for a considerable portion of land under cultivation in both kharif and rabi seasons. Arhar accounted for more than one-fourth of the land area under cultivation during the kharif season, while Chana was cultivated on one-third of the land under cultivation during the rabi season.[4] Irrigation was a major constraint for agricultural development in this Block. The kharif crops were almost entirely dependent on monsoon rains, while only one-fourth of the area under cultivation was irrigated during the rabi season. Lack of irrigation facilities was a major hindrance towards use of high yielding varieties of seeds and chemical fertilizers. Extension services were almost non-existent in this Block, with inter-generational transfer of knowledge about various agricultural practices being the only mode of teaching and learning.

In Deosar, agriculture was the principal economic activity of this region. There were 24,710 farmers in the Block (Caste-wise distribution of farmers was not available). Cropped area during kharif season was two and half times more of rabi season. Paddy along with arhar, minor millets and maize were principal crops cultivated during the kharif season, while wheat

[4] For details on cropping pattern refer to Table A1 in the appendix.

along with jowar and chana accounted for more than three-fourths of cropped area during rabi season.[5]

Waidhan is by far the most important centre of economic activity in the region. Area under cultivation in Waidhan was relatively lower than the other two Blocks in the District. Paddy and Arhar were the most important kahrif crops, while wheat was by far the most important rabi crop.[6]

For all the three principal crops (paddy, arhar, wheat), productivity in all the three Blocks are comparable to the State average, though much lower than average productivity for the country (Table 1.4). Low irrigation is one of the reasons for lower crop yield.

Table 1.4: Average Productivity of Principal Crops, 2010-11 (kg/ha)

Crop	Chitarangi	Deosar	Waidhan	Madhya Pradesh	All India
Paddy	1051	1178	1422	1000	2000
Arhar	469	963	730	739	765
Wheat	1533	1758	1527	1613	2619

Source: Office of Senior Agricultural Development Officer, for different blocks
Note: Data for All India are for the year 2008-9, Ministry of Agriculture, Government of India

Demographic Characteristics

With 1.6% of State population share, the density of population is quite low in Singrauli (Table 1.5). The population density in Singrauli is 208 persons per sq. km, which is much lower than that of Madhya Pradesh (236) and of the national average (382).

Table 1.5: Population and Population Density by Block

Block	2001	2011	Density	
			2001	2011
Chitrangi	258489	NA	133	NA
Deosar	243959	NA	134	NA
Waidhan	417721	NA	220	NA
Total	9,20,169	11,78,132	162	208

Source: Census of India, 2001 and 2011

During 2001-11 decadal growth rate of population has declined to 28 percent. Exponential growth rate of population during 2001-11 is 2.5 percent. Although the population growth rate has shown a decreasing trend but density of population has increased from 162 persons to 208 persons per sq. km from 2001 to 2011 census. The increase in population density is due to large scale in-migration of skilled workers which is the result of establishment of large number of thermal power plants and coal mines.

[5] Please refer to Table A2.
[6] Please refer to Table A3 in the Appendix.

Sex ratio has declined in the District from 922 in 2001 to 916 in 2011 (sex ratio for Madhya Pradesh is 930). The decline in sex ratio is contrary to the all India trend which showed an improvement in sex ratio from 933 in 2001 to 940 in 2011.

Scheduled Tribes (STs) constituted one-third of the population in the District, which is much higher than the proportion of ST population in the State as well as at the all India level. Among the three Blocks, proportion of ST population in Chtarangi and Deosar was more than twice that in Waidhan (Table 1.6). Several studies (India Human Development Report, 2011) have pointed out that STs in India are mostly located in the most backward regions of the country. Chitarangi and Deosar are undoubtedly among the most backward blocks in the country with hardly any educational opportunities available beyond higher secondary schools, with poor rural connectivity and electricity, with non-existent health care system, with hardly any irrigation facility thereby resulting in lower agricultural productivity, and with hardly in non-agricultural employment opportunities.

Table 1.6: Percentage of ST Population to Total Population

Block	2001	2007-8
Chitrangi	43.96	NA
Deosar	42.53	NA
Waidhan	19	NA
District (Singrauli)	32.25	NA
Madhya Pradesh	20.3	22
All India	8.2	8.6

Source: Census of India, 2001, & India Human Development Report, 2011

The non-availability of non-agricultural employment opportunities in Chitarangi and Deosar can be highlighted by the fact that despite low agricultural productivity, a vast majority of the population was dependent on agriculture for livelihood (Table 1.6). This was not the case in Waidhan (which is much more developed than the other two Blocks) where a significant proportion of population was employed in non-agricultural sector (Table 1.7).

Table 1.7: Distribution of Workers, by Block

Block	Agricultural	Non-agricultural	Total Workers
Chitarangi	75207 (90%)	8640 (10%)	83847
Deosar	65090 (88%)	9158 (12%)	74248
Waidhan	80525 (63%)	47101 (37%)	127626
Total	220822 (77%)	64899 (23%)	285721

Source: Census of India, 2001

Literacy rate in the District was of worse than the all India average as well as the State average. As against the all India average literacy rate of 74 per cent, and State literacy rate of 71 per cent, literacy rate in the District was only 62 per cent (Table 1.8)

Table 1.8: Literacy Rate, by Block

Block	2001	2011
Chitrangi	43.38	N.A
Deosar	43.12	N.A
Waidhan	56.99	N.A
Total	49.2	62.4

Source: Census of India, 2001 and 2011

Health

Among the civic amenities, health infrastructure and rural roads are of prime importance that influences the socio-economic development in the District to a considerable extent. On both of these parameters, the condition in the District was much worse as compared to both State average as well as national average. While the average population served per Government hospital for the country as a whole was 98000, for Madhya Pradesh it was 179,228, and in the case of Singrauli it was 294533. Further, there were only 101 hospital beds for the entire population, implying that there was less than one hospital bed per 10,000 population (Table 1.9). For the country as a whole, the number of hospital per 10,000 population is nine. In other words, average population served per Government hospital bed in Singrauli was 11,665; for Madhya Pradesh it was 3,392; and for the country as a whole it was 2,105. In addition to acute shortage in physical infrastructure, there was shortage of healthcare personnel also. Out of the sanctioned strength of 213 health cadres, only 72 posts are filled at present in the district hospital, while 564 posts were sanctioned in PHC/CHC & sub-centres and 313 posts were filled at the time of survey.

Table 1.9: Number of Health Centers, Number of Beds and Doctors available in Singrauli District, Madhya Pradesh

Block	**PHC**	**Govt. Dispensary/Hospital**	**Beds in Hospital**	**No. of Doctors**
Chitrangi	5	1	30	6
Deosar	5	1	21	6
Waidhan	5	2	50	12
Total	15	4	101	24

Source: District Statistical Hand book, 2009, Singrauli

Road Connectivity

Poor connectivity was one of the most crucial reasons for backwardness of the District. The nearest major city to Singrauli was Varanasi, 208 km by road. About half of the road in the District was non-metalled (Table 1.10).

Table 1.10: Road Length (in kms) under Public Works Department, Singrauli

Block	Metalled Road	Non-metalled road	Total
Chitrangi	N.A	N.A	N.A
Deosar	259.7	N.A	259.7
Waidhan	209.85	404.4	614.25
Total	469.55	404.4	873.95

Source: District Statistical Hand Book, 2009, Singrauli

For the country as a whole, length of metalled road per 100 sq km of area is 81 km, while in case of Madhya Pradesh it was 57 km. Singrauli was way behind with only 9 km of metalled road per 100 sq km of geographical area. This brings out the pathetic state of affairs of rural connectivity in the District. In recent years, due to PMGSY, there has been some improvement in rural connectivity. All roads constructed under PMGSY are all metalled roads which this had improved rural connectivity to some extent (Table 1.11).

Table 1.11: Roads Constructed under PMGSY, by Block

Blocks	Waidhan	Chitrangi	Deosar	Total
Length	344.27 km	352 km	380.13 km	1076.31 km
No. of Roads	52	46	57	155

Source: Office of PMGSY, Singrauli District

In February, 2011, the Central Government allocated a special fund of Rs 10 crores for construction of roads (22 km). This fund was provided to Singrauli because it is a potential naxalite affected District. However, even after calling for tenders 4 times, no suitable candidate was found.

There are various reasons for the backwardness of the District – poor connectivity, poor health facilities, lower literacy rate, lack of irrigation, and dearth of non-agricultural sources of employment. With the setting up of some of the biggest thermal power plants in the country, the pressure on existing infrastructure is likely to increase manifold. Development of basic infrastructure should therefore be given top priority by the District administration.

APPENDIX

Table A1: Cropping Pattern, Chitrangi, 2010-11

Season	Crop	Area (ha)	Proportion of Area
Kharif			
	Paddy	14115	25.7
	Jowar	2500	4.5
	Maize	9745	17.7
	Minor Millet (Kodo)	7255	13.2
	Cereals	*33615*	*61.1*
	Arhar	14476	26.3
	Moong	40	0.1
	Urad	2700	4.9
	Pulses	*17216*	*31.3*
	Til	3612	6.6
	Soyabeen	33	0.1
	Ram Til (Black)	500	0.9
	Oilseeds	*4145*	*7.5*
	Total	**54976**	**100.0**
Rabi			
	Wheat	9670	26.5
	Jowar	8140	22.3
	Cereals	*17810*	48.7
	Chana	11300	30.9
	Masoor	1650	4.5
	Matar	260	0.7
	Others	25	0.1
	Pulses	*13235*	36.2
	Til (Alsi)	3212	8.8
	Mustard (Rai)	2302	6.3
	Oilseeds	*5514*	15.1
	Total	**36559**	**100.0**

Source: Office of Senior Agricultural Development Officer, Chitrangi

Table A2: Cropping Pattern, Deosar, 2010-11

Season	Crop	Area (ha)	Proportion of Area
Kharif			
	Paddy	13000	22.5
	Jowar	500	0.9
	Maize	8800	15.2
	Minor Millet (Kodo)	12500	21.6
	Cereals	*34800*	60.1
	Arhar	12100	20.9
	Moong	350	0.6
	Urad	2700	4.7
	Pulses	*15150*	26.2
	Til	7432	12.8
	Ram Til (Black)	500	0.9
	Oilseeds	*7932*	13.7
	Total	**57882**	**100.0**
Rabi			
	Wheat	8510	36.5
	Jowar	5850	25.1
	Cereals	*14360*	61.6
	Chana	3580	15.4
	Masoor	200	0.9
	Matar	390	1.7
	Others	1200	5.1
	Pulses	*5370*	23.0
	Mustard (Rai)	3590	15.4
	Oilseeds	*3590*	15.4
	Total	**23320**	**100.0**

Source: Office of Senior Agricultural Development Officer, Deosar

Table A3: Cropping Pattern, Waidhan, 2010-11

Season	Crop	Area (ha)	Proportion of Area
Kharif			
	Paddy	7455	21.1
	Jowar	201	0.6
	Maize	7493	21.2
	Minor Millet (Kodo)	7785	22.0
	Cereals	*22934*	*64.9*
	Arhar	10125	28.6
	Moong	255	0.7
	Urad	2050	5.8
	Pulses	*12430*	*35.1*
	Total	**35364**	**100.0**
Rabi			
	Wheat	13175	41.8
	Jowar	3590	11.4
	Cereals	*16765*	53.2
	Chana	3015	9.6
	Masoor	2000	6.4
	Matar	690	2.2
	Others	3500	11.1
	Pulses	*9205*	29.2
	Til (Alsi)	3212	10.2
	Mustard (Rai)	2302	7.3
	Oilseeds	*5514*	17.5
	Total	**31484**	**100.0**

Source: Office of Senior Agricultural Development Officer, Waidhan

Chapter 2

Assessment of Skill Demand in Singrauli District

Introduction

This chapter deals with the crucial issue of skill demand in Singrauli district of Madhya Pradesh. The present and future Skill demand in various industries/establishments is assessed on the basis of *census* survey conducted in the industries/establishments of the district.

In the Economic Census, establishments employing 10 or more workers, both in organised and unorganised sectors (excluding crop production and plantation) are considered. This survey however has also considered establishments employing less than 10 workers as well. Therefore, even though economic census reported only 49 establishments, the number of establishments covered in this survey is 372.

Location and Ownership of Establishments

There were 372 establishments in the District, with heavy concentration in Waidhan Block (which accounted for more than 80 per cent of all establishments (Table 2.1).

Table 2.1: Distribution of Establishments, by Block, 2011

Block	No. of Establishment	% of Establishment
Chittarangi	38	10.2
Deosar	35	9.4
Waidhan	299	80.4
Total	372	100

Source: IAMR Survey, 2011

Waidhan is the most important centre of economic activity in the District, and therefore most of the establishments are located here. The new white-collar migrants, who are employed with the thermal power plants and coal mines, usually get settled down in the main District town of Waidhan. This has opened up new opportunities of expansion of the market, and therefore, many new establishments are coming up in this Block. Half of the establishments (148) in Waidhan have been established since 2005 onwards.

Vast majority of establishment (92%) were owned by private proprietors (Table 2.2).[7]

Table 2.2: Block and Sector-wise Distribution of Establishments in Singrauli

Block	Sectors				
	Public	Cooperative	Private	Others	Total
Chittrangi	1 (2.63)	0 (0.00)	37 (97.37)	0 (0.00)	38 (100.00)
Deosar	0 (0.00)	0 (0.00)	34 (97.14)	1 (2.86)	35 (100.00)
Waidhan	4 (1.34)	7 (2.34)	272 (90.97)	16 (5.35)	299 (100.00)
Total	5 (1.34)	7 (1.88)	343 (92.20)	17 (4.58)	372 (100.00)

Source: IAMR Survey, 2011

When establishments were classified by major activity, it was observed that sale and repair of vehicles & parts constituted the largest chunk of establishments in the District.[8] On an average, such establishments employed 6 workers. In fact, majority of establishments on an average employed less than 10 workers (Table 2.3). The major employers are coal mines of Northern Coalfields Limited (public enterprise), National Thermal Power Corporation (public enterprise), and an aluminium plant in the private sector (Birla Group). It may be pointed out that large enterprises accounted for less than 2 per cent of all establishments but employed the bulk of the workforce (more than two-thirds) in the District. Therefore, in terms of employment generation, these large enterprises (both public and private) play a crucial role in the region.

Table 2.3: Percentage Distribution of Establishments by Major Activity, Singrauli, 2011

Major Activity	% of Establishments	% of Employees	Average Number of Employee per Establishment
Sale and Repair of Vehicles & Parts	28	1.6	6
Tailor	12	0.7	5
Manufacture and repair of small machine parts	12	1.5	13
Sale and Repair of Electrical Motor & Equipment	10	0.4	4
Traditional activities	8	0.2	3
Manufacture of furniture	6	0.3	5
Power Plant	0.8	23.9	3027
Coal Mine	0.5	39	7412
Aluminium Plant	0.2	3.5	11050
Hospital & Clinic	1	1.1	84
Others	21.5	28.9	10

Source: IAMR Survey, 2011

[7] In the survey, the four different types of proprietorship were public, cooperative, private, and others.
[8] For block and main activity of distribution of establishments refer to annexure 2.1.

Analyses of establishments according to number of establishments (269,72.31 per cent) their size of employment revealed that out of 372 establishments surveyed, highest 269 (72.31 per cent) had employment size up to 5 workers, followed by 66 establishments (17.74 per cent) with employment size of 6 to 10 workers. 15 establishments (4.03 per cent) had employment size of 11-25 workers and 26-100 workers each. Four establishments (1.08 per cent) were having employment size of 501 and above workers, and three establishments (0.81 per cent) had employment size of 101 to 500 persons. The establishments which employed more than 100 workers are coal mines, thermal power plants, and aluminium plants. The industrial picture of Singrauli is that of a few large scale enterprises (some more coming up in the next 3-4 years) alongside large number of small enterprises which either act as ancillary industries to the bigger ones or provide support (primarily of the nature of repair and maintenance) to the activities carried out in the large enterprises. The very survival of these small enterprises is depended on the activities in large enterprises.

Block-wise analysis indicates that out of 38 establishments in Chittrangi block, 32 establishments (84.21percent) had employment size of up to 5 workers, followed by 5 establishments (13.16 percent) in the size class of 6 to 10 workers. One establishment (2.63 percent) was located in the size class of 101 to 500 workers. In Deosar block, out of 35 establishments, 30 establishments (85.70 percent) were in the employment size of up to 5 persons and remaining five establishments (14.30 percent) were in the employment size category starting from 6-10 persons to more than 501 persons. Highest percentage of Waidhan block establishments (69.23 per cent or 207 establishments) were located in the employment size category of up to 5 persons, followed by 20.07 percent (60 establishments) in employment size category of 6 to 10 persons. Only 14 establishments (6.7 per cent) were in employment size of 11-25 persons and 26-100 persons each (Table 2.4).[9]

Table 2.4: Block-wise Distribution of Establishments according to Size of Employment in Singaruli District of Madhya Pradesh

Sl. No.	Blocks	Size of Employment (Number of persons)						
		Up to 5	6-10	11-25	26-100	101-500	501-above	Total
1	Chittrangi	32 (84.21)	5 (13.16)	0 (0.00)	0 (0.00)	1 (2.63)	0 (0.00)	38 (100.00)
2	Deosar	30 (85.70)	1 (2.86)	1 (2.86)	1 (2.86)	1 (2.86)	1 (2.86)	35 (100.00)
3	Waidhan	207 (69.23)	60 (20.07)	14 (4.68)	14 (4.68)	1 (0.32)	3 (1.02)	299 (100.00)
4	Total	269 (72.31	66 (17.74)	15 (4.03)	15 (4.03)	3 (0.81)	4 (1.08)	372 (100.00)

Source: IAMR Survey, 2011
Note: Figures within parentheses show the percentage of row total.

Broad main activities of establishments were classified according to National Industrial Classification (NIC) -2008 sections. All main activities of establishments were classified according to NIC-2008 sections.

[9] For main activity-wise distribution of establishments by size of employment refer to annexure 2.2.

Out of 372 establishments surveyed in Singrauli district, maximum were performing manufacturing activities i.e. 166 establishments (44.62 percent), followed by Wholesale and Retail Trade; Repair of Motor Vehicles and Motor Cycles i.e. 160 establishments (43.01 percent), and Other Service Activities i.e. 13 establishments (3.4 percent) (Table 2.5).

Table 2.5: Block and Main Activity-wise Distribution of Establishments in Singrauli

Sl. No.	Main Activities Classified according to NIC -2008 (Sections)	Blocks			
		Chitrangi	Deosar	Waidhan	Total
1	B - Mining and Quarrying	0 (0.00)	0 (0.00)	2 (100.00)	2 (100.00)
2	C - Manufacturing	33 (19.88)	11 (6.63)	122 (73.49)	166 (100.00)
3	D - Electricity ,Gas Steam and Air Conditioning Supply	0 (0.00)	0 (0.00)	4 (100.00)	4 (100.00)
4	G - Wholesale and Retail Trade Repair of Motor vehicles and Motor Cycles	4 (2.50)	22 (13.75)	134 (83.75)	160 (100.00)
5	I - Accommodation and Food Service Activities	0 (0.00)	0 (0.00)	6 (100.00)	6 (100.00)
6	J - Information and Communication	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
7	K - Financial and Insurance Activities	0 (0.00)	0 (0.00)	3 (100.00)	3 (100.00)
8	N - Administrative and support Service Activities	0 (0.00)	0 (0.00)	5 (100.00)	5 (100.00)
9	P - Education	0 (0.00)	0 (0.00)	4 (100.00)	4 (100.00)
10	Q - Human Health and Social Work Activities	1 (12.50)	0 (0.00)	7 (87.50)	8 (100.00)
11	S - Other Service Activities	0 (0.00)	2 (15.3)	11 (84.7)	13 (100.00)
	Total	38 (10.21)	35 (9.41)	299 (80.38	372 (100.00)

Source: IAMR Survey, 2011
Note: Figures in parentheses show percentage to row total.

Technological Change and Modernization

Among all the 372 establishments in the District, only 36 establishments (10%) reported acquisition of new equipment in the last 5 years. Out of these 36 establishments, majority of them were selling or repairing various motor parts and electrical equipment (Table 2.6). It may be noted that sale and repair of vehicles & parts, and sale and repair of electrical motor & equipment are all small establishments employing on an average six workers and four workers respectively. However, none of the establishments which acquired new equipment needed any new personnel to operate such machines.

Table 2.6: Establishments which acquired New Equipments, Singrauli

Major Activity of Establishment	No. of Establishments which acquired New equipments in the last 5 Years
Manufacture and Repair of Small Machine Parts	9
Sale and Repair of Vehicles & Parts	8
Sale and Repair of Electrical Motor & Equipment	4
Tailor	4
Computer Sale and Repair	1
Hospital/Clinic	1
Manufacture of Furniture	1
Mine	1
Motor Repair	1
Power Generation	1
Trader	1
Traditional	1
Others	3

Source: IAMR Survey, 2011

As per NIC-2008 classification of activities, out of 36 establishments which acquired new equipment, 17 establishments (47.22 percent) were from wholesale and retail trade, and repair of motor vehicles and motor cycles, followed by 14 establishments (38.89 percent) from manufacturing sector. Remaining five establishments were from other five activities one each in each activity, such as Mining and Quarrying; Electricity, Gas, Steam and Air Conditioning Supply; Information and Communication; Administrative and Support Service Activities; and Human Health and Social work Activities (Table 2.7).

Table 2.7: Block and Main Activity-wise Distribution of Establishments of which Acquired new equipments during last five years in Singrauli

Sl. No.	Main Activities classed according to NIC - 2008 Sections	Block			
		Chittrangi	Deosar	Waidhan	Total
1	B- Mining and quarrying	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
2	C- Manufacturing	4 (28.57)	2 (14.29)	8 (57.14)	14 (100.00)
3	D - Electricity ,Gas Steam and Air Conditioning Supply	0 (0.00)	0 (0.00)	1 (0.00)	1 (100.00)
4	G - Wholesale and Retail trade Repair of Motor Vehicles and Motor Cycles	1 (5.88)	7 (41.18)	9 (52.94)	17 (100.00)
5	J - Information and Communication	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
6	N - Administrative and Supports Service	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
7	Q - Human Health and Social work Activities	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
	Total	5 (13.89)	9 (25.00)	22 (61.11)	36 (100.00)

Source: IAMR survey, 2011
Note: Figures parentheses show percentage to row total.

Sector-wise analyses revealed that vast majority of establishments (88.88 percent) in the district which acquired new equipment were from private sector followed by public sector (5.56 percent), and 0thers (5.56 percent). Block-wise analyses indicate that all five establishments of Chitrangi block which acquired new equipment were from private sector. Likewise, in Deosar block, all nine establishments were from private sector. But in Waidhan block 81.82 percent (18) were from private sector followed by public sector (9.09 percent) and Others (9.09 percent) (Table 2.8).[10]

Table 2.8: Sector-wise Distribution of Establishments which Acquired New equipment during Last Five Years in Singrauli

Sl. No.	Block	Sectors				
		Public	Cooperative	Private	Others	Total
1	Chittrangi	0 (0.00)	0 (0.00)	5 (100.00)	0 (0.00)	5 (100.00)
2	Deosar	0 (0.00)	0 (0.00)	9 (100.00)	0 (0.00)	9 (100.00)
3	Waidhan	2 (9.09)	0 (0.00)	18 (81.82)	2 (9.09)	22 (100.00)
	Total	2 (5.56)	0 (0.00)	32 (88.88)	2 (5.56)	36 (100.00)

Source: IAMR Survey, 2011
Note: Figure within parentheses shows the Percentage of row total.

Additional Requirement of Skilled Manpower

An assessment of additional requirement of skilled manpower in the District was made both at the level of current scale of operation, as well as keeping in mind the future expansion plans of the establishments.

It has already been pointed out that power generation and mining are the two most important non-agricultural activities in the District. At the present scale of operation, these two types of establishments face maximum shortage of skilled manpower in the region (Table 2.9). Low level of education coupled with severe shortage of technical and vocational institutions are the reasons for shortage of skilled manpower in the region. Further, the fact that this District is one of the most backward districts in the country is highlighted by the acute shortage of health personnel in the District.[11]

[10] For main activity wise distribution of establishments which acquired new equipment during the last 5 years refer to annexure 2.3
[11] For main activity wise establishment reporting shortage of skills refer to annexure 2.4

Table 2.9: Shortage of Skilled Manpower by Activity at Present Scale of Operation

Major Activity of Establishment	Required No. of Employees	No. of Employees	Shortage
Mine	18781	13718	5063
Power Generation	12722	12117	605
Hospital/Clinic	778	477	301
Manufacture and Repair of Small Machine Parts	598	536	62
Sale and Repair of Vehicles & Parts	604	545	59
Others	15133	15048	85
Total	**48616**	**42441**	**6175**

Source: IAMR Survey, 2011

In terms of trade, maximum shortage of skilled manpower was in machine operator, followed by administrative staff (Table 2.10). In addition, there is a large list of trade as depicted in Table 2.10, which points out to shortage of skilled manpower in the region. Large in-migration of white-collar and blue-collar workers in the region is testimony to lack of skill development initiatives. We repeat here that Singrauli is one of the most backward districts of the country with low literacy, and severe scarcity (as compared to its growing demand) of technical and professional training institutions in the country. The district is not really prepared in terms of human resources as well as infrastructural facilities to accommodate the growing demand of the newly established establishments.

Table 2.10: Shortage of Skilled Manpower by Trade at Present Scale of Operation

Trade	Required No. of Employees	No. of Employees	Shortage
Machine operator	6980	5804	1176
Human resource & administration	4206	3234	972
Foreman	2798	2069	729
Electrician	3258	2756	502
Fitter	3943	3542	401
Security	2593	2231	362
CNC programmer cum operator	862	534	328
Catering	350	105	245
Engineer	2870	2670	200
Attendant	574	382	192
Welder	2004	1818	186
Driver	1534	1365	169
Compounder	200	53	147
Nurse	172	67	105
Carpenter	533	430	103
Laboratory technician	148	104	44
Chemist	370	328	42
Turner	165	128	37
Motor vehicle mechanic	374	339	35
Doctor	104	71	33
Surveyor	58	26	32
Machinist	795	769	26
Medical technician	53	29	24
Draughtsman	159	140	19
Plumber	342	330	12
Auto electrical and electronics mechanic	864	854	10
Rigger	535	525	10
Traditional	66	56	10
Tailor	185	176	9
Painter	345	338	7
Traditional	15	12	3
Barber	214	213	1
Beautician	14	13	1
Food processing	4	3	1
Mason	6093	6092	1
Wireman	721	720	1
Lab technician	4	4	0
Mechanic	6	6	0
Mining explosion	15	15	0
Moulder	405	405	0
Others	3685	3685	0
Total	**48616**	**42441**	**6175**

Source: IAMR Survey, 2011

By broad discipline, shortage of skilled manpower in the District can be summarized in Table 2.11 below:

Table 2.11: Broad Discipline-wise Demand and Shortage of Skilled personnel in Establishments of Singrauli

Sl. No.	Broad Discipline	Number of Trades	Number of employees	Required employees	Shortage
1.	Mechanical	57	11,284	13,134	1850
2.	Electrical	15	3,673	4625	952
3.	Civil	11	3553	3684	128
4.	Geology and Mining	9	118	165	47
5.	Electronics and Communication	5	352	364	12
6.	Control & Instrumental	1	563	569	6
7.	Chemical	4	64	74	10
8.	Computer	3	571	858	14
9.	Management	25	3677	4964	1287
10.	Health	29	776	1186	410
11.	Accounts and Finance	5	1357	1448	91
12.	Education	8	112	113	1
13.	Hotel Management	7	1454	1646	192
14.	Driving / operator	3	2311	2846	535
15.	Other Services	19	531	582	51
16.	Unskilled workers (Attendant/ cleaner/contract labour/Helper/ Khalasi/Mazdoor/Other staff)	0	12045	12631	586
	Total	201	42,441	48,616	6175

Source: IAMR Survey, 2011

Out of the 372 establishments surveyed, 112 establishments have expansion plan in the next five years. All the power generation plants and coal mines have future plan of expansion, which will enhance future demand for skilled manpower in the region. More than one-third of establishments which are involved in sale and repair of motor, small machine parts and vehicles have expansion plans (Table 2.12). With expansion of economic activities in the District, there has been a significant increase in the number of vehicles which is likely to grow when construction of the proposed power plants and coal mines begin, and the plants under construction start operating. Therefore, it has been observed that proportion of establishments which are involved in sale and repair of motor, small machine parts and vehicles have expansion plans.[12]

[12] For main activity- wise distribution of establishments which have plans for expansion/modernization/diversification in the next five years refer to annexure 2.5

Table 2.12: No. of Establishments with Expansion Plan, by Activity, Singrauli

Activity	Total No. of Establishments	No. of Establishments with Expansion Plans
Sale and Repair of Vehicles & Parts	103	34
Manufacture and Repair of Small Machine Parts	45	17
Sale and Repair of Electrical Motor & Equipment	36	12
Others	26	12
Tailor	46	10
Traditional	30	7
Power Generation	3	3
Manufacture of Furniture	21	2
Beauty Parlour	6	2
Brick Kiln	4	2
Manufacture of Chemicals	3	2
Mine	2	2
Hospital/Clinic	7	1
Barber	4	1
Computer Sale and Repair	3	1
Catering	2	1
Typing	2	1
Aluminium Plant	1	1
Trader	1	1
Total	**345**	**112**

Source: IAMR Survey, 2011

Note: Only those types of establishments have been considered which have expansion plans, so the total number of establishments is less than 372.

The establishments which reported future plan of expansion/modernisation in the next five years reported that in such an event, maximum number of skilled manpower will be required in the trade, auto-electrical and electronics mechanic, followed by machinist (Table 2.13). There would also be a considerable demand for administrative staff provided the future expansion plans are carried out.[13]

[13] For trade wise future additional requirement of skilled personnel refer to annexure 2.6

Table 2.13: Additional Manpower required by Trade when Establishments Carry on with Expansion Plan in the Next 5 Years

Trade	Additional Skilled Manpower Required
Auto electrical and electronics mechanic	1256
Machinist	990
Human resource & administration	410
Security	360
Information technology	228
Engineering	295
Fitter	115
CNC programmer cum operator	152
Welder	58
Machine operator	102
Chemist	77
Driver	62
Plumber	60
Computer operator	53
Finance and insurance	45
Canteen worker / cook	26
Motor vehicle mechanic	23
Tailor	17
Carpenter	5
Nurse	12
Beautician	10
Others	8
Painter	7
Traditional	7
Baker & Confectioner	5
Mason	1
Pathologist	1
Unskilled	503
Total	**4885**

Source: IAMR Survey, 2011

Combining the present shortage of manpower (Table 2.10) and future requirement in the event of establishments carrying forward their expansion plans (Table 2.13), the total manpower required in the District in the next 5 years is 11,060. The maximum demand for skilled manpower will be in the trades auto-electrical and electronics mechanic, machine operator, human resource & administration, electrician, fitter, CNC programmer cum operator, and machinist.

The study revealed that out of 372 establishments surveyed in the district, only 47 establishments (15.72 per cent) reported that they are providing training to their workers. Eight establishments in Chitrangi Block (21.05 percent of total block), five establishments in Deosar Block (14.28 percent of total blocks) and 34 establishments of Waidhan Block (11.37 percent of total block) reported that they are providing training to their workers (Table 2.14).[14]

[14] For activity- wise distribution of establishments which provide training to their workers refer to annexure 2.7

Table 2.14: Block-wise Distribution of Establishments which provide Training to workers in Singrauli

Sl. No.	Block	Establishments Acquired New Equipments	Total Establishments	Percentage of Establishment Provide Training to Their workers
1	Chitrangi	8	38	21.05
2	Deosar	5	35	14.28
3	Waidhan	34	299	11.37
	Total	47	372	15.72

Source: IAMR Survey, 2011

With many more establishments coming up, demand for skilled manpower in various technical fields will only grow up. The estimates presented here are based on the survey of establishments which already exist. Some of them have expansion plan as well, and are therefore captured in this survey. The establishments which will be set up in the coming 3-4 years will further increase the demand for skilled workers in the region (Table 2.15). Therefore, it is imperative that more technical and vocational institutions are set up in the District, so that local people acquire adequate skills to get employment in these establishments, and reap the benefits of economic growth this region is experiencing.

Table 2.15: Future Power Plants/Coal Fields coming up in Singrauli District

Name of the Power Plant	Owner	Capacity	Area	Source of Coal	Owner	Life of the Coal Mines	Area of the Coal Field			
							Forest Land	Government land	Private Land	Total Land
Sasan Ultra Mega Power Project (S.P.L.)	Reliance (Anil Dhirubhai Ambani Group-ADAG)	3960 MW	368.97 acres	Moher & Moher Amlohri Extension Coal Block	Reliance (Anil Dhirubhai Ambani Group-ADAG)	29 Years	1198 Ha	213.204 ha	776.7 ha	2187.948 ha
				Chatrasal Coal Block	Reliance (Anil Dhirubhai Ambani Group-ADAG)	21 Years				
Chitrangi Power Project	Reliance (Anil Dhirubhai Ambani Group-ADAG)	3960 MW	1500.76 Acres	Moher & Moher Amlohri Extension Coal Block	Reliance (Anil Dhirubhai Ambani Group-ADAG)	29 Years	1198 ha	213.204 ha	776.7 ha	2187.948 ha

				Chatrasal Coal Block	Reliance (Anil Dhirubhai Ambani Group-ADAG)	21 Years				
Mahan Super Thermal Power Project	Essar Group	1200 MW	1742.40 Acres	Mahan Coal Limited	Joint venture of Essar & Hindalco	15 Years	17.65 ha		1182.35 Ha	1200 Ha
				Amelia (North) Coal Block	Jaypee Group	27 Years		36.77 ha	80.15 ha	482 ha
Jaypee Nigrie Super Thermal Power Project, Nigrie	Jaypee Group									
NTPC Vindhyanagar Stage - 4 Ash Dyke	National Thermal Power Corporation (NTPC)	21000 MW	500 Acres	Nigahi Coal Mines of NCL.						
				M.P Sanik Coal Mines limited (Amelia Coal Block)	Joint venture of sanik Aryan Group (49%) & Govt. of M.P. (51 %)		128.570 ha	314.000 ha	381.280 ha	1978.850 ha
DB Power (Madhya Pradesh) Limited	Dainik Bhaskar Group	1320 MW	335.75 Acres	Coal India Limited						

Preference of Establishments for employing of Workers for Employment

Out of 372 establishments surveyed in the district, 209 establishments (56-18 percent) reported they preferred skilled persons for employment. 152 establishments (40.86 percent) preferred freshers and 11 establishments (2.96 percent) preferred both skilled and freshers.

Block-wise analysis indicates that in Chitrangi block, out of 38 establishments surveyed, majority of them (81.58 percent) preferred fresher's followed by skilled persons (18.42 percent). In Deosar block, out of 35 establishments surveyed, majority of them (88.57 percent) preferred skilled persons followed by freshers (11.43 percent); likewise in Waidhan block, out of 299 establishments surveyed, highest (171 establishments) (57.19 percent) preferred skilled persons followed by 117 freshers; 117 establishments (39.13 percent)

preferred freshers; 11 establishments (3.68 percent) preferred both skilled and freshers (Table 2.16).

Table -2.16 Block Wise Distribution Establishments showing preference for Employing workers in Singrauli District of Madhya Pradesh

Sl. No.	Block	Preference for workers for employment			
		Skilled persons	Fresher's	Both	Total
1	Chittrangi	7 (18.42)	31 (81.58)	0 (0.00)	38 (100.00)
2	Deosar	31 (88.57)	4 (11.43)	0 (0.00)	35 (100.0)
3	Waidhan	171 (57.19)	117 (39.13)	11 (3.68)	299 (100.00)
	Total	20.9 (58.18)	152 (40.86)	11 (2.96)	372 (100.00)

Source: IAMR Survey, 2011.
Note: Figure within parentheses shows the Percentage of Row Total

Out of total 372 establishments surveyed in Singrauli district, 209 establishments (56.18 percent) expressed their views to employ skilled persons while 40.86 percent of establishments gave preference for freshers. Only eleven establishments (2.96 percent) preferred both skilled and fresher's.

Activity wise analyses revealed that 50.00 percent of Manufacturing establishments preferred freshers and 48.19 percent preferred skilled personnel and 1.81 percent preferred both, Majority of establishments (60.62 percent) engaged in Wholesaled Retail Trade; Repair of Motor Vehicles and Motor Cycles, preferred skilled persons and 35.63 percent preferred freshers. Only 3.75 percent preferred both skilled and fresher's. Majority of establishments engaged in other activities such as Human Health and Social Work Activities; Education; Other Service Activities; Information and Communication; Accommodation and Food Service Activities; Mining and Quarrying; and Electricity, Gas, Steam and Air Conditioning Supply also reported their preference for skilled persons (Table-2.17) .

Survey results affirmed that majority of establishments in most of the activities preferred skilled persons instead of freshers.[15]

[15] For activity wise distribution of establishments by Preference of Workers for Employment please refer to annexure 2.8.

Table-2.17 Block and Main Activity –wise Distribution of Establishments showing preference for employing Workers in Singrauli District of Madhya Pradesh

Sl. No.	Main Activities Classified According to NIC – 2008 Section	Preference for Workers For Employment			
		Skilled Persons	Fresher's	Both	Total
1	B- Mining and quarrying	1 (50.00)	0 (0.00)	1 (50.00)	2 (100.00)
2	C- Manufacturing	80 (48.19)	83 (50.00)	3 (1.81)	166 (100.00)
3	D- Electricity ,Gas Steam and Air conditioning supply	4 (100.00)	0 (0.00)	0 (0.00)	4 (100.00)
4	G- Wholesale and Retail Trade; Repair of Motor Vehicles and Motor Cycles	97 (60.62)	57 (35.63)	6 (3.75)	160 (100.00)
5	I-Accommodation and Food Service Activities	4 (66.67)	1 (16.67)	1 (16.66)	6 (100.00)
6	J- Information and Communication	1 (100.00)	0 (0.00)	0 (0.00)	1 (100.00)
7	K- Financial and Insurance Activities	1 (33.33)	2 (66.67)	0 (0.00)	3 (100.00)
8	N- Administrative and Supports Service	2 (40.00)	3 (60.00)	0 (0.00)	5 (100.00)
9	P - Education	4 (100.00)	0 (0.00)	0 (0.00)	4 (100.00)
10	Q-Human Health and Social work Activities	7 (87.50)	1 (12.50)	0 (0.00)	8 (100.00)
11	S - Other Service Activities	8 (61.54)	5 (38.46)	0 (0.00)	13 (100.00)
	Total	209 (56.18)	152 (40.86)	11 (2.96)	372 (100.00)

Source: IAMR Survey, 2011.
Note: Figure within parentheses shows the percentage of row total.

Conclusions

- ***Most of the establishments are concentrated in Waidhan block***

There are 372 establishments in Singrauli district, and they are mostly concentrated in Waidhan block. The largest proportion of establishments is in manufacturing activities (44.62 percent) followed by Wholesale and Retail Trade; Repair of Motor Vehicles and Motor Cycles. Out of 372 establishments surveyed in Singrauli district, 36 establishments (9.68 percent) reported that they acquired new equipments during last five years. Out of total 36 establishments, highest of them i.e. 17 establishments (47.22 percent) were from Whole Sale and Retail Trade; Repair of Motor Vehicles and Motor Cycles, followed by 14 establishments (38.89 percent) were from Manufacturing.

- ***Establishment of new private sector power plants and coal mines have resulted in expansion of market***

With the coming up of new power plants and coal mines in the private sector, and the consequent expansion of market, many small establishments have started recently (since 2005 onwards).

- ***Majority of establishments are small, employing less than 6 workers***

Analyses of establishments according to their size of employment revealed that out of 372 establishments surveyed highest 269 (72.31percent) were having employment size up to 5 persons followed by 66 establishments (17.74 percent) having employment size from 6 to 10 persons and 15 establishments (4.03 percent) were having employment size of 11-25 persons and 26-100persons each. Four establishments (1.08 percent) were having employment size of 501 and above persons and three establishments (0.81 percent) were having employment size of 101 to 500 persons.

- ***Majority of establishments are too small and have inadequate infrastructure to provide training to their workers***

Study revealed that out of 372 establishments surveyed in the district, only 47 establishments (15.72 percent) reported that they are providing training to their workers. Block wise and sector wise analyses indicated that out of total 47 establishments providing training to their workers, 87.23 percent of establishments were from private sector followed by others (6.38 percent). On the basis survey it can be concluded that a very small proportion of establishments were providing training to their workers or in other words, they had very limited role in skill development.

- ***Shortage of skilled manpower is one of the reason why large number of establishments do not have any plan of expansion***

Survey revealed that out of 372 establishments surveyed in Singrauli district, 112 establishments (30.11 percent) reported that they have plans for Expansion/ Modernization/Diversification during next five years. Sector wise and block wise analyses indicate that more than 90 percent of establishments those who plan for modernization/Expansion/Diversification were from private sector in Singrauli District. Broad activity wise analyses indicates that out of 112 establishments, highest 55 establishments (49.11 percent) were from Wholesale and Retail trade; Repair of Motor vehicles and Motor Cycles, followed by 38 establishments (33.93 percent) were from Manufacturing activities.

- ***The maximum additional skilled manpower will be required in electrical and electronics mechanic***

Combining the present shortage of manpower and future requirement in the event of establishments carrying forward their expansion plans, the total manpower required in the District in the next 5 years is 11, 060. The maximum demand for skilled manpower will be in the trades auto-electrical and electronics mechanic, machine operator, human resource & administration, electrician, fitter, CNC programmer cum operator, and machinist.

Chapter 3

Assessment of Supply of Skilled Personnel in Singrauli District

Introduction

In the previous chapter, the demand side of skilled personnel in the industries has been discussed. To fulfill the required demand of skilled persons in the industries, the vocational training provider institutions are to train the persons in required skills and supply to industries as per their requirements. Keeping in view of the potentials of Singrauli district there will be a high demand for skilled persons in different trades in the near future. To assess the supply of skilled persons, a survey of vocational/training provider institutions was conducted by IAMR. Survey results have been discussed as under:

Distribution of Vocational/Training Provider Institutions by type of affiliation

In Singrauli district, there were total 36 vocational/training provider institutions (VTPs) all of which were available and surveyed. Out of total 36 VTPs, 32 VTPs highest (88.89 percent) were in Waidhan block followed by 3 (8.33 percent) in Chittrangi block and only one (2.78 percent) in Deosar Block. List of VTPs in Singrauli District has been given at Annexure 3.1.

Analysis of VTPs according to affiliation indicates that out of 36 VTPs, 27 VTPs (highest) (75.00 percent) were affiliated with private agency, followed by 4 VTPs (11.11 percent) with Public/Government organisation and 4 VTPs (11.11 percent) with NGOs. One VTP (2.78 percent) was affiliated with other agencies established under public private partnership (PPP) mode.

Analyses of Block-wise affiliation of institutions indicate that in Chitrangi Block, the lone VTP was affiliated with private agency. In Deosar, block out of three VTPs, all were affiliated with private agencies. In Waidhan Block, out of 32 VTPs, highest twenty four VTPs (75.00 percent) were affiliated with private agency followed by 4 (12.50 percent) with public/Government organisations and 3 VTPs (9.87 percent) with NGOs. From the survey of VTPs, it may be concluded that highest percentage of VTPs were affiliated with private agencies in all the blocks (Table 3.1).

Table 3.1 Distribution of Vocational Training Provider Institutions by Type of Affiliation and Blocks in Singrauli District of Madhya Pradesh

Sl. No.	Blocks	Type of Affiliation				
		Public/ Govt. Organisation	Private Agency	NGO	Public Private Partnership	Total
1	Chittrangi	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (100.00)
2	Deosar	0 (0.00)	3 (100.00)	0 (0.00)	0 (0.00)	3 (100.00)
3	Waidhan	4 (12.50)	24 (75.00)	3 (9.37)	1 (3.13)	32 (100.00)
	Total	4 (11.11)	27 (75.00)	4 (11.11)	1 (2.78)	36 (100.00)

Source: IAMR Survey, 2011
Note: Figures with in Parentheses shows percentages to row total.

Distribution of Vocational Training Provider Institutions according to Their Status of Recognition

Out of 36 VTPs, Majority of them (27) (75.00 percent) were recognised and 9 (25.00 percent) were not found recognised in Singrauli District were recognised. Block-wise analysis indicates that in Chittrangi and Deosar blocks, all VTPs were recognised while in Waidhan block majority of VTPs i.e. 23 (71.87 percent) were not recognised and 9 VTPs (28.13 percent) were recognised (Table 3.2).

Table 3.2 Distribution of Vocational Provider Institutions by Status of Recognition in Singrauli District of Madhya Pradesh

SI. No.	**Blocks**	**No. of Institutions**		
		Recognized	**Not Recognized**	**Total**
1	**Chittrangi**	1 (100.00)	0 (0.00)	1 (100.00)
2	**Deosar**	3 (100.00)	0 (0.00)	3 (100.00)
3	**Waidhan**	23 (71.87)	9 (28.13)	32 (100.00)
-	**Total**	27 (75.00)	9 (25.00)	36 (100.00)

Source: IAMR Survey, 2011
Note: Figures with in Parentheses shows percentages to row total

Analysis of recognised VTPs according to the recognising body indicates that out of 27 recognised VTPs, 12 highest (44.44 percent) were recognised by Universities followed by four (14.81 percent) that were recognised by State Government Agencies and 3 VTPs (11.11 percent) were recognised by other agencies. Two VTPs (7.41 percent) were recognised by NCVT/ SCVT and one each was recognised by All India Council of Technical Education (AICTE), Distance Education Council, Medical Council of India, Nursing Council, Society Act and National Council of Teachers Education (Table 3.3).

Table 3.3: Distribution of Recognized Institutions by Recognizing Bodies in Singrauli District of Madhya Pradesh

Sl. No.	Recognizing Body	Block			
		Chittrangi	Deosar	Waidhan	Total
1	All India Council for Technical Education	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
2	Distance Education Council	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
3	Medical Council of India	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
4	Nursing Council	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
5	Society Act	1 (100.00)	0 (0.00)	0 (0.00)	1 (100.00)
6	State Govt. Agency	0 (0.00)	3 (75.00)	1 (25.00)	4 (100.00)
7	University	0 (0.00)	0 (0.00)	12 (100.00)	12 (100.00)
8	National Council of Teachers Education	0 (0.00)	0 (0.00)	1 (100.00)	1 (100.00)
9	NCVT/SCVT	0 (0.00)	0 (0.00)	2 (100.00)	2 (100.00)
10	Any Other	0 (0.00)	0 (0.00)	3 (100.00)	3 (100.00)
	Total	1 (3.70)	3 (11.11)	23 (85.19)	27 (100.00)

Source: IAMR Survey, 2011

Note: Figures with in Parentheses shows percentages to row total

Distribution of Vocational Training Institutions According to Their Level of Courses and Broad Disciplines

Total 36 VTPs in the district were running 80 courses. Out of 80 courses, 38 (highest) (47.50 percent) were certificate level courses followed by 36 diploma level courses (45.00 percent) and 6 (7.50 percent) informal type of courses.

Analyses of broad discipline-wise level of courses indicate that out of 36 diploma level courses, 26 highest (72.22 percent) were in computer discipline followed by three courses (8.33 per cent) in Mechanical, and two courses each (5.55 per cent) in Electrical and Civil/Engineering disciplines.

Out of 38 courses of certificate level, 13 highest (34.21 percent) were in Mechanical discipline followed by seven courses (18.42 percent) in Computer discipline and six courses (15.79 percent) in Health discipline. Out of six courses at informal level, 4 highest (6.67 percent) were conducting in Other services followed by one course (16.66 percent) in Mechanical discipline and one course (6.67 percent) in Driving. Total course-wise and broad discipline-wise analyses revealed that out of 80 courses, 33 highest (41.25 percent) were in Computer discipline

followed by 17 courses (21.25 percent) in Mechanical discipline and 9 courses (11.25 percent) in Other services (Table 3.4).[16]

Table 3.4 Distribution of Vocational Training Provider Institutions According to Broad Discipline and Level of Course in Singrauli District of Madhya Pradesh

Sl. No.	Broad Discipline	Level of Course			
		Diploma	Certificate	Informal/ Paper	Total
1	Mechanical	3 (17.65)	13 (76.47)	1 (5.88)	17 (100.00)
2	Electrical	2 (28.57)	5 (71.43)	0 (0.00)	7 (100.00)
3	Civil	2 (50.00)	2 (50.00)	0 (0.00)	4 (100.00)
4	Mining	1 (100.00)	0 (0.00)	0 (0.00)	1 (100.00)
5	Computer	26 (78.79)	7 (21.21)	0 (0.00)	33 (100.00)
6	Electronics & Telecommunication	1 (100)	0 (0.00)	0 (0.00)	1 (100)
7	Health	0 (0.00)	6 (100.00)	0 (0.00)	6 (100.00)
8	Driving/Operators	0 (0.00)	1 (50.00)	1 (50.00)	2 (100.00)
9	Other Services	1 (11.11)	4 (44.45)	4 (44.44)	9 (100.00)
	Total	36 (45.00)	38 (47.50)	6 (7.50)	80 (100.00)

Source: IAMR Survey, 2011
Note: Figures with in Parentheses shows percentages to row total.

Distribution of Vocational/Training Provider Institutions according to Status (Formal/Informal)

Survey revealed that out of 36 VTPs in the district, 16 (44.44 percent) were formal institutions and 20 (55.56 percent) were informal institutions. Block-wise analysis indicates that all VTPs in Chittrangi and Deosar blocks were in informal sector. In Waidhan block, out of 32 VTPs, 16 (50.00 percent) were formal VTPs and 16 (50.00 percent) were informal institutions (Table 3.5).

[16] For course/trade and level of course-wise distribution of VTPs refer to annexure 3.2.

Table 3.5 Distribution of Vocational Provider Institutions According to Their Status (Formal/ Informal) in Singrauli District of Madhya Pradesh

Sl. No.	Blocks	Type of Institutions		
		Formal	Informal	Total
1	Chittrangi	0 (0.45)	1 (100.00)	1 (100.00)
2	Deosar	(0.00)	3 (100.00)	2 (100.00)
3	Wadhan	16 (50.00)	16 (50.00)	32 (100.00)
	Total	16 (44.44)	20 (55.56)	36 (100.00)

Source: IAMR survey, 2011
Note: Figures within parentheses shows percentage to row total

Distribution of Vocational Training Provider Institutions by Type of Premises

Out of 36 VTPs surveyed in the district, 21 (58.33 percent) were running from their own premises and 15 (41.67 percent) were running from rented accommodation. Block-wise distribution indicates that in Chittrangi block, one lone VTP was running from rented premises. In Deosar block, out of three VTPs, two (66.69 percent) were working from own premises and one VTP (33.33 percent) was working in rented premises. In Waidhan block, out of 32 VTPs, 19 (59.37 percent) were working from own premises and 13 (40.63 percent) were running from rented accommodation. It may be concluded from the survey that highest percentage of VTPs in Deosar block (66.67 percent) were working from their own premises followed by Waidhan (66.11 percent) (Table 3.6).

Table 3.6: Block-wise Distribution of Vocational Training Provider Institutions according to Type of Premises

Sl.No.	**Blocks**	**Type of Premises**		
		Own	**Rented**	**Total**
1	**Chittrangi**	0 (0.00)	1 (100.00)	1 (100.00)
2	**Deosar**	2 (66.67)	1 (33.33)	3 (100.00)
3	**Waidhan**	19 (59.37)	13 (40.63)	32 (100.00)
Total		21 (58.33)	15 (41.67)	36 (100.00)

Source: IAMR survey, 2011
Note: Figures within parentheses shows percentage to row total.

Analyses of distribution of VTPs by type of ownership and type of premises indicate that out of 28 VTPs of private sector, 17 (60.71 percent) were working from their own premises, and 11 (39.29 percent) were working from rented accommodation. Out of Four VTPs of NGOs, one (33.33 percent) was working from own premises and two (60.71 percent) were working from rented accommodation. Out of three VTPs from Government organizations, two (66.67

percent) were working from own premises and one (33.33 percent) was working from rented accommodation (Table 3.7).

Table 3.7 Distribution of Vocational Training Provider Institutions by Type of Ownership and Type of Premises

Sl. No.	Type of Institutions	Type of Premises		
		Own	Rented	Total
1	Public or Govt. Organisation	2 (66.67)	1 (33.33)	3 (100.00)
2	Private Agency	17 (60.71)	11 (39.20)	28 (100.00)
4	NGO	1 (33.33)	3 (66.67)	4 (100.00)
6	Other	1 (100.00)	0 (00.00)	1 (100.00)
-	Total	21 (58.33)	15 (41.67)	36 (100.00)

Source: IAMR Survey, 2011

Staff Strength in Vocational/Training Provider Institutions

Survey results revealed that 36 VTPs in the district had a total staff strength of 437, of which 247 (56.52percent) were teaching staff and 190 (43.48 percent) were non-teaching staff. On an average there were seven teaching staff and five non-teaching staff (Table 3.8).

Table 3.8 Distribution of Staff Strength in Vocational Training Provider Institutes in Singrauli District of Madhya Pradesh

Sl. No.	Type of VTP's	No. of Teaching Staff	No. of Non-Teaching Staff	Total Staff Strength
1	Formal	214 (60.79)	138 (39.21)	352 (100.00)
2	Informal	33 (38.82)	52 (61.18)	85 (100.00)
Total		247 (56.52)	190 (43.48)	437 (100.00)

Source: IAMR Survey, 2011

Note: Figures with in Parentheses shows percentages to row total.

Study also indicates that in formal VTPs, teaching staff was much higher than in informal institutions. In formal institutions, out of total 352 staff, 214 (60.79 percent) were teaching staff and 138 (39.21 percent) were non -teaching staff while in informal type of VTPs, only 85 total staff were working of which 33 (38.82 percent) were teaching staff and 52 (61.18 percent) were non-teaching staff. The ratio of teaching and non-teaching staff in formal and informal institutions was just opposite. Average staff strength per VTP in formal institutions was 12 and in formal institutions it was 10. Average non-teaching staff per VTP in formal institutions was 6. As compared to formal institutions, average staff strength in teaching and non-teaching staff was very low in informal institutions. Average total staff strength was 6 per VTP in informal institutions. Average teaching staff per VTP was only two, while average non-teaching staff was four. Overall average of teaching staff per VTP per VTP (both formal and informal) was seven while non teaching staff average was five (Table 3.9).

Table 3.9: Average Staff per Vocational Provider Institutions in Singrauli District of Madhya Pradesh

Sl. No.	Type of VTP's	Average Staff Per VTP		
		Teaching Staff	Non-Teaching Staff	Total Staff Strength
1	Formal	10	6	16
2	Informal	2	4	6
	Total	7	5	12

Source: IAMR Survey, 2011

Note: Figures with in Parentheses shows percentages to row total.

Survey further revealed that out of 36 VTPs, majority of them (20) (55.55 percent) had less than five teaching staff followed by 9 VTPs (25.00 percent)which 5-10 had teaching staff and 5 VTPs (13.89 percent) had 15 and above teaching staff. In regard to non-teaching staff, majority of VTPs (23) (63.89 percent) had less than five non-teaching staff followed by 8 VTPs (22.22 percent) which had 5-10 non-teaching and 3 VTPs (8.33 percent) had 11.15 non-teaching staff.

Out of 36 VTPs, 14 highest (38.89 percent) had total staff strength of 5-10 followed by 9 VTPs (25.00) with staff strength of less than five and 7 VTPs (19.44 percent) with more than 15 (Table 3.10).

Table 3.10 Distribution of Vocational Training Provider Institutions by Type of Institutions, Staff Strength in Singrauli District of Madhya Pradesh

Type of Institutions	Total Staff Strength												
	Teaching				Non-Teaching				Total				
	<5	5-10	11-15	15+	<5	5-10	11-15	15+	<5	5-10	11-15	15+	Total
Public or Govt. Org.	2	0	0	2	2	0	0	2	1	1	0	2	4
	-50	0	0	-50	-50	0	0	-50	-25	-25	0	-50	-100
Private Agency	15	9	2	1	19	6	2	0	7	12	5	3	27
	-55.55	-33.33	-7.41	-3.7	-70.37	-22.22	-7.41	0	-26	-44.44	-18.51	-11.11	-100
NGO	2	0	0	2	2	1	1	0	1	1	0	2	4
	-50	0	0	-50	-50	-25	-25	0	-25	-25	0	-50	-100
PPP Mode	1	0	0	0	0	1	0	0	0	0	1	0	1
	-100	0	0	0	0	-100	0	0	0	0	-100	0	-100
Total	20	9	2	5	23	8	3	2	9	14	6	7	36
	-55.55	-25	-5.56	-13.89	-77.78	-22.22	-8.34	-5.56	-25	-38.89	-16.67	-19.44	-100

Source: IAMR Survey, 2011

Note: Figures with in Parentheses shows percentages to Row total

Enrolment, Pass-outs and Drop-outs in Vocational Training Provider Institutions

During 2010-11, there were 2,358 students enrolled, out of which 1,911student were passed outs (81.04 percent) and 104 students dropped out.

Study revealed that pass-outs percentage of students was very high (81.04 percent of total pass-outs). Drop-out students were only 4.41 percent which shows a good sign of progress of vocational education in the district.

Out of 2,358 students enrolled, highest enrolment was in Computer discipline (931) (39.48 percent) followed by Other services (478) (20.27 percent) and Mechanical (15.95 percent) (Table-14). Detailed list of trades/courses has been given at Annexure 3.3.

Table 3.11: Broad Discipline-wise Enrolment, Pass-outs and Drop-outs in Vocational Training Provider Institutions in Singrauli District of Madhya Pradesh

Sl. No.	Discipline	Number of Students		
		Enrolment	Pass-outs	Drop-Outs
1	Mechanical	376	368	1
2	Electrical	244	230	2
3	Civil	137	92	1
4	Mining	60	53	1
5	Computer	931	731	59
6	Health	114	5	-
7	Driving	18	18	-
8	Other	478	414	40
Total		2358	1911	104

Source: IAMR Survey, 2011

Students' Placement

Analysis of data indicates that placement of pass-outs decreased from 2008-09 to 2009-10, while it increased from 2009-10 to 2010-11. During 2008-09, 464 pass-outs were placed in their jobs, while in 2009-10 359 students placed into their jobs. In 2010-11, 641 students were placed. About 20.64 percent decrease was observed from 2008-09 to 2009-10, while there was an increase of 90.35 percent during 2009-10 to 2010-11.

Year-wise and course/trade-wise analysis revealed that during 2008-09, highest placement of (191) pass-outs was observed in Computer related trades followed by Mechanical trades (92 pass-outs) and Electrical trades (66 pass-outs). During 2009-10 also, highest placement of (116 students) was observed in computer related trades followed by Electrical trades (64 pass-outs) and Mechanical trades (58 pass-outs). During 2010-11, highest placement (216 pass-outs) of Computer related trades was observed followed by Mechanical trades (176 pass-outs) and Electrical trades (141 pass outs). It may be concluded that Computer related courses have good demand in the District followed by Mechanical and Electrical trades (Table 3.12).

Table 3.12 Number of Students Placed in Jobs according to Courses/Trades in Singrauli District of Madhya Pradesh

Sl. No.	Name of the Course/ Trades	No. of Students Placed		
		2008-09	2009-10	2010-11
1	Advance diploma in Computer Applications	117	57	57
2	Bar Bending	0	0	36
3	Beautician	0	4	4
4	Draftsman (Civil)	0	40	0
5	Computer Programmer	12	1	3
6	Computer Science	49	52	48
7	Diesel Mechanic	1	0	0
8	Electrician	66	64	99
9	Electronics	42	0	0
10	Fan repairing	0	0	42
11	Fitter	4	0	0
12	Mason	7	9	9
13	Mechanical	79	57	176
14	Mining	43	39	39
15	Motor Mechanic	0	1	0
16	Networking Course	0	0	5
17	Post Graduate Diploma in computer application	10	5	61
18	Stitching & Tailoring	8	10	10
19	Tally Computer course	3	1	42
20	Tractor mechanic	7	0	0
21	Typing	15	18	10
22	Welder	1	1	0
-	Grand Total	464	358	641

Source: IAMR Survey, 2011

For the most recent year, it was observed that one-third of pass-outs were placed in different establishments. The maximum proportion of placement was in mining related activities followed by electrical, civil and mechanical trades (Table 3.13). Students specializing in trades related to mining activities were employed in large mining companies, while those specializing in electrical, civil and mechanical trades were mostly employed with small establishments. It may be noted that even though there is a demand for skilled manpower in electrical, civil and mechanical trades among the large enterprises (power plants), they usually avoid recruiting fresh pass-outs. The argument provided by them is that the recruitment process in their establishments is centralized. However, they also reported that the quality of technicians produced by the local VTPs is not as per their standard, and hence they generally prefer skilled personnel with some work experience.

Table 3.13: Broad Discipline wise Pass-out and Placement, Singrauli, 2010-11

Broad Discipline	Pass-out	Placement	Placement as % of Pass-outs
Mechanical	368	176	47.8
Electrical	230	141	61.3
Civil	92	45	48.9
Mining	53	39	73.6
Computer	731	216	29.5
Others	437	24	5.5
Total	**1911**	**641**	**33.5**

Financial Position of Vocational/Training Provider Institutions

Survey of VTPs in Singrauli District revealed that total annual receipts of all surveyed (36) VTPs was Rs.51.62 million, while the annual expenditure was Rs.46.80 million, Rs.4.82 million and was balance in their account. Total Receipt of formal VTPs was Rs. 50.34 million and total expenditure was Rs.45.84 million, thereby Rs. 4.50 million was balance in their account. Total receipt of informal VTPs was Rs.1.28 million while the expenditure was Rs.0.96 million, and Rs. 0.32 million was balance in their account.

The analysis further indicates that majority of receipts and expenditure was incurred in formal VTPs. (97.74 percent and 97.51 percent respectively). A meagre portion of 2.26 percent and 2.49 percent of total receipt and expenditure respectively was incurred in informal VTPs.

Average annual expenditure per student was Rs.3,671 in informal VTPs, while the average annual expenditure per student in formal VTPs was Rs.11844.

Infrastructure Facilities in Vocational/Training Provider Institutions

Infrastructure facilities include classrooms, laboratories, Equipments and Transport. VTPs were asked whether they have adequate infrastructure facilities or not in different items. Twenty-Six VTPs reported about classrooms. Out of 26, 16 (61.54 percent) reported that classrooms were adequate. Twenty VTPs reported about the laboratories. Out of 20 VTPs, 13 (65.00 percent) reported that laboratories were adequate. Thirteen VTPs reported about equipments. Out of 13 VTPs, 10 (76.92 percent) reported that equipments were adequate. Ten VTPs reported about transport facilities. Out of 10 VTPs Nine (90.00 percent) reported that there were adequate transport facilities. Majority of VTPs reported that infrastructure facilities were adequate (Table 3.14).

Table 3.14: Infrastructure Facilities/Reported in Vocational Training Provider Institutions in Singrauli District of Madhya Pradesh

Sl. No.	Items	Number of Institutes Reporting		
		Adequate	Inadequate	Total
1	Class Rooms	16 (61.54)	10 (38.46)	26 (100.00)
2	Laboratories	13 (65.00)	7 (35.00)	20 (100.00)
3	Equipments	10 (76.92)	3 (23.08)	13 (100.00)
4	Transport	9 (90.00)	1 (10.00)	10 (100.00)

Source: IAMR Survey, 2011
Note: Figures with in parentheses shows percentages to row total.

Demand for New Courses

Out of total 36 surveyed institutions, 26 VTPs reported that there was a demand of new courses in their institutes. Out of 27 VTPs, seven (highest) (25.93 percent) reported that there was demand for Polytechnic trades followed by two VTPs each reporting the demand of ITI courses and Nursing. Remaining other seven VTPs reported that the courses in demand in Singrauli/District are Diploma in Computer Application, Wireman, Instrumentation, Mechanic, Power System and Electronics, Post-Graduate Diploma in Computer Applications, Beautician, Mining, Mobile Repairing, Insurance, Interior Designing, Basic Computer course, Computer Hardware and Basic Electrical course (Table 3.15).

Table 3.15: Demand for New Courses as Reported by VTPs in Singrauli District of Madhya Pradesh

Sl. No.	Name of the Course	Number of Institutions reporting demand
1	ITI Courses	2
2	Certificate Course in Computer Application	1
3	Diploma in Computer Application	1
4	Wireman	1
5	Instrumentation	1
6	Mechanic	1
7	Nursing	2
8	Power System and electronics	1
9	Post Graduate Diploma in Computer Applications	1
10	Polytechnic trades	7
11	Beautician	1
12	Mining	1
13	Mobile Repairing	1
14	Insurance	1
15	Interior Designing	1
16	Basic Computer Course	1
17	Computer Hardware	1
18	Basic Electrical	1
	Total	26

Source: IAMR Survey, 2011

Conclusions

- ***Concentration of VTPs in Waidhan block***

  Like in case of establishments, majority of VTPs (32 out of 36) are located in Waidhan block and a vast majority of them are in the private sector. Out of 36 VTPs, 27 (75.00 percent) were recognised and 9 (25.00 percent) were not recognized. Analysis of recognised VTPs according to the recognising body indicates that out of 27 recognised VTPs, highest 12 highest, (44.44 percent) were recognised by Universities followed by 4 VTPs (14.81 percent) that are recognised by State Government Agencies and 3 VTPs (11.11 percent) are recognised by other agencies.

  Total 36 VTPs in the district are running 80 courses, out of which 38 courses (47.50 percent) are certificate level courses followed by 36 diploma level courses (45.00 percent) and 6 (7.50 percent) are informal type of courses.

- ***Most of the diploma level courses are in computer related trades, while certificate level courses are in mechanical trades***

  Analysis of broad Discipline-wise level of courses indicate that out of 36 diploma level courses, 28 courses (77.78 percent) are in computer discipline followed by two courses each (5.55 percent) in Mechanical, Electrical and Civil discipline. Out of 38 courses of certificate level, 12 are (31.58 percent) in Mechanical discipline followed by 7 courses (18.42 percent) in Computer discipline and 6 courses (15.79 percent) in Health discipline.

- ***Average number of teaching and non-teaching staff lower in informal institutions***

  Survey results revealed that 36 VTPs in the district had a total staff strength of 437 of which 247 (56.52percent) were teaching staff and 190 (43.48 percent) were non-teaching staff. On an average per VTP there were seven teaching staff and on an average five non-teaching staff were working in one VTP. On an average, formal institutions have 10 teaching staff, as against 2 in the informal sector. Similarly, in case of non-teaching staff, formal institutions on an average have 6, while informal institutions have 4.

- ***One-third of the passed-out students got placement***

  During 2010-11, there were 2,358 students enrolled, out of which 1,911students were passed outs (81.04 percent) and 104 students dropped out. Analysis of data indicates that placement of pass-outs decreased from 2008-09 to 2009-10 and is increasing from 2009-10 to 2010-11. During 2008-09, there were 470 pass-outs who were placed in their jobs, while in 2009-10 373 students were placed into jobs. In 2010-11, 710 students were placed into their jobs.

Year-wise and course/trade-wise analysis revealed that during 2008-09, highest placement of 191 pass- outs was observed in Computer related trades followed by Mechanical trades (92 pass-outs) and Electrical trades (66 pass-outs). During 2009-10 also, highest placement (116 students) was observed in Computer related trades followed by Electrical trades (64 pass-outs) and Mechanical trades (58 pass- outs). During 2010-11, highest placement of 216 pass-outs of Computer related trades was observed followed by Mechanical trades (176 pass outs) and Electrical trades (141 pass outs).

For the year 2010-11, maximum proportion pass-outs who got employment were in mining related activities, followed by electrical, civil, and mechanical trades.

Chapter 4

Assessment of skill Gaps in Singrauli District

Introduction

The previous two chapters discussed about courses/trades demanded by the local industries and courses/trades offered by the existing vocational training provider institutions in the district. The present chapter focuses on the assessment of skill gaps or the course/trades which are not offered by the VTPs of Singrauli District, while these courses/trades are demanded by the industries of Singrauli District.

Courses/Trades in Demand

Since the district has potential for power generation industries and coal mining, there will always be demand for basic courses/trades related to this industries such as, Mechanical, Electrical, Civil, Mining, Control & Instrumentation and Electronics and Telecommunication.

These courses are required both at diploma level (Polytechnic) as well certificate level (ITI). At present, there is one Government Polytechnic and one ITI in the district. Both institutions are situated in Waidhan Block. There is no institution in private sector.

In addition to basic Engineering trades, there are other Engineering trades which are also in the demand by the industries such as, Amateur Winding, Auto Electrician, Auto Mechanic, Bicycle and Motor Bike Repairing, Cable man/Wireman, Fitter, Diesel Mechanic, Denting Technician, Draftsman (Civil/Mechanical), Fabrication, Welding, Mining, Machinist, CAD/CAM, Moulding, Sheet Metal Mechanic, Storekeeping, Signals & Telecommunications, Surveyor, Motor Mechanic, Tractor Mechanic and T.V. Repairing.

Non-engineering trades which are in demand by the local industries are Accountancy, Beauty Culture and Hair Dressing, Computer related courses, Waiter/ Steward, Carpentry, Data Entry Operator, Cook, Driving. This also includes all types of Mechanical Vehicular Equipments, Embroidery, English speaking Course, Food Processing, Horticulture, Hotel Management & Hospitality, Librarian, Handicrafts and Garment Making, Masonry, Secretarial Practice and Office Management, Painting, Sanitary, Security, Shoes/Slipper Repairing, Stenography and Tailoring & Stitching. Health related courses which are in demand by the Health Institutions of the district are Nursing/Compounder, Darkroom Assistant, Dialysis Technician, Dietician, Dresser cum First-aid Assistant, ECG Technician, Male/ Female Ward Assistant/ Attendant, Medical Test laboratory Technician, Multipurpose Health workers, Optometrician, Audiometrician, OT Technician, Pharmacist, Radiology Technician and X-Ray Technician.

Courses/Trades offered by Vocational Training Provider Institutions

The range of courses offered by VTPs of Singaruli district is of very limited in nature. These courses include Computer related courses, Ayurvedic compounder, Bar Bending, Beautician,

Carpentry, Medical Test Laboratory, Civil, Computer Operator, Construction, Vocational Study, Draftsman, Driving (only light vehicle driving)) Electrician/Electrical, Electronics and Telecommunication, English Speaking Course, Fabrication, Fitter, Gas Cutting, Computer Hardware, Health Inspector, Mining, Motor Mechanic, OT Technician, Tailoring & Stitching, Tractor Mechanic, Turner, Welder and X-Ray Technician.

Courses/Trades which are not offered by the VTPs but demanded by the Industries (Skill Gap)

A large number of trades are required by the local industries but there are no institutions in the district which offer these courses. In the absence of these courses at local level, skilled persons from other districts or other states usually come to Singrauli to fill up the gap. If these courses/trades are available in the district then local people will get the benefit in the upcoming industries in the district. The trades/courses which are not available in the district are given below:

Engineering Trades

Amateur Winding, Auto Electrician, Auto Mechanic, Cable man/Wireman, Civil, Control & Instrumentation, Bicycle and Motorbike Repairing, Denting Technician, Diesel Mechanic, Surveyor, Machinist, CAD/CAM, Moulding, Sheet Metal Mechanic, Store-keeping, Signal and Telecommunication, Motor Mechanic and T.V Mechanic.

Non-Engineering Trades

Accountancy, Blacksmith, Waiter/Steward, Cook, Embroidery, Food Processing, Horticulture, Hotel Management and Hospitality, Librarian, Masonry, Handicrafts & Garments Making Secretarial Practice & Office Management, Painting, Security, Shoes/Slipper Repairing, and Stenography.

Health Related Courses

Audiometrician, Nursing, Dialysis, technician, dietician, Dresser cum First-Aid Assistant, Male/Female Ward Assistant/Attendant, Medical Test Laboratory, Multipurpose Health Workers, Optometrician, OT Technician, Pharmacist, Radiology Technician and X-Ray Technician.

Suggestion

In the light of survey and analyses of data the study suggests the following:

1. For Health related courses at least one institution set up in association with Government District Hospital and other big hospitals of the district. In this institute, all types of health related vocational courses may be started.

2. For Engineering and Non-engineering trades at least one institute at Polytechnic level and three institutes at ITI level may be opened in the district to cater to the need of the skilled persons in the district. It is also suggested that ITI level institutions may be opened one each in three blocks. In ITI level institutions, in addition of above-listed courses, other trades which are also in demand but are not offered at present by the VTPs may be started. These institutions may be opened in the government or in private sector or PPP mode

3. Under the State Level Skill Development Mission, Government of Madhya Pradesh, Department of Technical Education and Skill Development issued a order dated 4th Feb., 2011 to set up Skill Development Committee at Divisional Headquarter and District level to expedite the skill development initiatives. But so far no such committee was formed at District level in Singrauli District. It is suggested that District level committee for skill development should be formed. So that skill development work in Singrauli district may speed up in the district.

Table 4.1: The Courses/Trades in Demand, Courses/Trades offered by Vocational/Training Provider Institutions (VTPs) and Courses/Trades which are not offered by VTPs but demanded by Industries of Singrauli District of Madhya Pradesh

Sl. No.	Courses/Trades in Demand	Courses/ Trades offered by VTPs	Courses are not offered by the VTPs but demanded by the Industries (Skill Gap)
1.	Accountancy	Computer related Courses	Accountancy
2.	Armature Winding	Ayurvedic Compounder	Audiometrician
3.	Auto Electrician	Bar Bending	Amateur Winding
4.	Auto Mechanic	Beautician	Auto Electrician
5.	Beauty Culture and Hair Dresser	Carpentry	Auto Mechanic
6.	Blacksmith	Medical Test Laboratory	Blacksmith
7.	Cable Man/Wireman	Civil	Cable Man/Wireman
8.	Computer related Courses	Computer operator	Waiter/Steward
9.	Waiter/Steward	Construction	Nursing
10.	Carpentry	Vocational Studies	Control & Instrumentation
11.	Nursing/Compounder	Draftsman	Cook
12.	Data Entry Operator	Driving	Bicycle and Motorbike Repair
13.	Control & Instrumentation	Electrician/Electrical	Darkroom Assistant
14.	Fitter	English Speaking Course	Denting Technician
15.	Cook	Fabrication	Dialysis Technician
16.	Bicycle and Motor bike	Fitter	Diesel Mechanic
17.	Darkroom Assistant	Gas Cutting	Dietician
18.	Denting Technician	Computer Hardware	Dresser cum First-Aid Assistant
19.	Dialysis Technician	Health Inspector	Surveyor
20.	Diesel Mechanic	Mining	ECG Technician
21.	Dietician	Motor Mechanic	Electronic Mechanic
22.	Draftsman (Civil/Mech.)	O.T. Technician	Embroidery
23.	Dresser cum First-Aid Assistant	Tailoring & Stitching	Male/Female Ward Assistant/Attendant
24.	Driving including all types of Mechanical Vehicular Equipments	Tractor Mechanic	Food Processing

25.	Surveyor	Turner	Horticulture
26.	ECG Technician	Welder	Hotel Management and Hospitality
27.	Electrician	X-Ray Technician	Mechanist
28.	Electronics Mechanic	Mechanical	CAD/CAM
29.	Embroidery	Electronics and Telecommunication	Handicrafts & Garments Making
30.	English Speaking	Masonry	Moulding
31.	Fabrication		Multipurpose Health Worker
32.	Male/Female Ward Assistant/Attendant		Secretarial Practices & Office Management
33.	Food Processing		Optometrician
34.	Horticulture		Painting
35.	Welding		Pharmacist
36.	Mining		Radiology Technician
37.	Hotel Management & Hospitality		Security
38.	Medical Test Laboratory Technician		Sheet Metal Mechanic
39.	Mechanist		Shoes/Slipper Repairing
40.	Librarian		Stenography
41.	Computer Aided Design/Manufacturing		Storekeeping
42.	Handicrafts and Garments Making		Signal & Telecommunication
43.	Masonry		Motor Mechanic
44.	Moulding		T.V. Repairing
45.	Multipurpose Health Worker		Librarian
46.	Secretarial Practice and Office Management		
47.	Optometrician		
48.	O.T. Technician		
49.	Civil		
50.	Painting		
51.	Pharmacist		
52.	Radiology Technicians		
53.	Sanitary		
54.	Security		
55.	Sheet Metal Mechanic		
56.	Shoes/Slipper Repairing		
57.	Stenography		
58.	Storekeeping		
59.	Tailoring & Stitching		
60.	Signal & Telecommunication		
61.	Tractor Mechanic		
62.	Motor Mechanic		
63.	Turner		
64.	T.V. Repairing		

Source: IAMR Survey, 2011

Chapter 5

Traditional Skills in Singrauli

Introduction

As noted earlier in this report, agriculture plays an important role in the livelihood of people in Singrauli. Villages grew up as self-sustaining units of production, and therefore, over the period different kinds of activities developed which by and large catered to the daily requirement of people in the villages. Some of these activities are related to agriculture while others are mostly caste based traditional activities. These activities form important complementary sources of incomes for rural households. The skills required in these activities are acquired by one generation of artisans from the previous generation. In other words, there is inter-generational transfer of traditional skills without any formal training being provided by training institutes. Such home-based training of traditional artisans is extremely limited in scope and reach of the market for their products is confined to the same village or in a few neighbouring villages. Many of these traditional skills are therefore not lucrative for the present generation, although with active government participation, these skills can be revived, and villages can continue to being units of production and not get converted as units of neighbourhood.

As part of this study on skill development in Singrauli, a detailed enquiry has been done on some of the traditional activities in different villages in Singrauli. The primary focus of this enquiry is to analyse the income generating potential of different traditional activities, and the role that government can play in enhancing incomes of the artisans. In what follows, traditional activities are discussed for some of the villages along with their growth potential.

Village Banholi

The people of this village are fed up with non-responsiveness of government regarding school education in the village. There was one primary school in the village with three teachers. Out of these three teachers, only one was regular, while the other three hardly visited the school. Middle school was 2 km away, while the high school was in Khuttar Village (4 km away). There was a major problem of regular supply of electricity in the village, and the villagers complained that electricity was available only for 3–4 hours during the night. No electricity was available in the village during the day.

Income from dairy could be enhanced by 50 per cent by making provision for marketing and storage facility

Dairy was an important activity in this village, and almost all the households owned milch animals. 1,000 ltr. of milk on an average was sold by the villagers in different places like Shaktinagar, Vindhyanagar (both at least 20 km away). The price which they received varied from Rs. 15–20 per ltr. On an average, one family sold 10–12 ltr. of milk daily for seven months. Because of lack of dairy firms and cold storage, the price received was lower than the

actual market price which was Rs. 25–30 per ltr. depending upon the content of the cream. Clearly, therefore, household income can be enhanced by providing milk-storing facility along with development of dairy industry. There was a veterinary hospital (2 km away) but the facilities there was rather inadequate.

Availability of electricity and machines can reduce hardship of potters and also enhance their income

Potters in the village complained that the traditional activity was not at all remunerative and involved a lot of hardship. Churning clay was the most difficult part of the job and this activity can be greatly facilitated by using electric machine (worth Rs. 15,000). However, non-availability of electricity was a major hindrance and the younger generation was not at all interested in taking up this activity because of the hardship involved. Further, there was no training facility on manufacturing of fashionable and daily utility items, which makes the scope of marketing extremely limited. The traders supplied clay (in units of trolley) and purchased their products (tubs of different shapes and sizes, pots, and one or two other items). Waidhan is an expanding market given the fact that a lot of new industries were being set up. If the artisans were trained in the manufacture of modern household utility and show pieces, their earning potential can be greatly expanded, and the new generation can think of taking up this hereditary profession again. At the time of survey, potters earned Rs. 2,500 – 3,000 per month. If electricity was made available, and training in manufacture of new items provided, earnings of the potters could be doubled. Marketing was not a big issue for them because the main town was not so far away and the villagers could make their own arrangements for carrying their products up to there.

Agricultural and allied activities have growth potential if support services and marketing are made available

Vegetable cultivation is an important activity in the village and the villagers earn on an average Rs. 3,000 per month (for a period of 6 months) by selling vegetables in the local market.

Similarly, poultry farming is an area which has got huge potential because of the new hotels which are coming up in the district as a response to the large establishments being set up in the region. There were six poultry firms in the village till three years ago, but now there are only two. The remaining four closed down closed down primarily due to credit constraints. Also, knowledge of modern feed, timely availability of medicines are important inputs for the sustenance of poultry farming. No support services are available for the farmers in these regards. Also, vegetable farming is taken up only as a subsidiary activity in the village. But there was a huge demand for vegetables in the local markets, and therefore, if taken up as a principal activity, it can enhance the earning potential. The reason why these are not taken up as a principal activity is lack of knowledge about increasing productivity, and there is always an inherent risk of taking up a new activity on a large scale.

Village Khuttar

With more than 8000 population, Khuttar is one of the largest villages in the District, and more than 70 per cent of its population belonged to OBC social group. There are primary, middle, secondary, and higher secondary schools in the village. As in the case of other villages, here too, agriculture is the principal occupation. However, there are no extension services or training facilities available in the village. The gram sewak provides some preliminary information about seeds and pesticides. Adulteration of both seeds and fertilizers was rampant and this is one of the reasons why villagers did not prefer using them. Every seed and fertilizer shop was selling adulterated products and so the villagers have no choice. Along with crop cultivation, animal husbandry is also an important activity in this village.

Pickle making can become an important economic activity if training in preservation, packaging and marketing of pickles is provided.

Pickle making can also be encouraged on a commercial basis as it can employ rural females and empower them economically. In this regard, training can be provided primarily on preservation, packaging, and marketing. At the moment, pickle making is carried out at the household level for household consumption. This activity lasts for three months (April – June). The details of pickle-making are described in tables below:

Table 5.1: Expenses and Earnings in Traditional Activities in Singrauli

Pickle Making	
Item	**Cost/Price (Rs)**
1 kg Mango	20
Spices	25
Packaging	5
Transportation	25
Total Cost	75
1 kg pickle	150
Net profit from 1 kg pickle	75

2 persons in 4 days can prepare 10 kg pickle	
	Net profit/earning (Rs)
Net profit from 10 kg pickle	750
Net earnings per person per day	94

During season (3 months), one worker can earn up to Rs. 2800 per month.

No follow up despite providing training in dari making

In 1997, there was a training programme in *dari* making in this village organized by Madhya Pradesh Handicrafts Development Corporation. In this programme, 30 females were trained for 6 months and were paid a monthly stipend of Rs. 500. Raw materials were provided by the Corporation, and two trainers from the Corporation regularly visited the village during the period. The finished product was taken away by the Corporation. However, there was no follow-up action to ensure that those trained could fully utilize their training through self-employment. The villagers reported that woman can prepare a *dari* (6ft*4ft) in four days, and the net profit is Rs. 400 (price Rs. 1500 – cost of raw materials Rs. 1,100).

Training in sewing can contribute positively towards household income and saving

In this village, a training programme was organized in sewing 15 years ago, and 12 women participated in that training. The duration of the programme was six months. After the programme, trainees were provided loans at 33 per cent discount to purchase sewing machines. All these women started part-time home based shops and are earning Rs. 2,000 – 2,500 per month. However, since then no other training programme has been organized in the village. One of the advantages of such kind of training progamme is that even if women do not start their own home-based enterprises, they can do the necessary stitching for their own household members and in the process save some money.

One of the most important advantages of this village is its proximity to the main road. Therefore, a large part of the marketing can be taken up by the villagers themselves. The *gram sabha* (village committee) can take initiatives in organizing training programmes for the villagers. However, *gram sabhas* do not perform the functions which they are supposed to, and instead, have become places to settle personal scores.

Village Piparia

Agriculture is the principal activity in this village with paddy and wheat being the principal crops. A large number of villagers (approximately, 200) work as unskilled manual worker on the construction site of Reliance Power Plant (Sasan). There were around 100 small brick kilns units in the locality. But recently (from July, 2011), the District officials have closed down all brick kiln units in the District due to environmental reasons. The owners of brick kilns used to earn a net profit of Rs. 30,000 – 50,000 per month (for 6 months) during the peak season. In addition, this was an important source of income for the small and marginal farmers who have to supplement their agricultural income through non-agricultural activities.

Almost all households in the village own some milch cattle but there was no proper facility for veterinary care. There are only three veterinary hospitals in the entire District and they too are mostly run by the support staff. Milk productivity is low (4-6 ltr. per day for 6-7 months) and was primarily due to lack of knowledge about feed, proper medication, and proper care of the cattle. However, with dissemination of knowledge about proper care and feed, animal husbandry can also generate positive return to the household.

Table 5.2: Expenses and Earnings in Milk Production (excluding cost of one buffalo)

Item	**Cost / Price (Rs)**
Straw (Rs. 5 per kg *10 kg per day*365 days)	18250
Other feed (Rs. 70 per day*365 days)	25550
Other expenses (primarily veterinary)	1000
Total expenses	44800
Milk produced 12 ltr. per day for 8 months	
Household consumption 2 ltr. per day	
Revenue from sale of milk (10 lts per day*240 days*Rs.25 per lt)	60000
Net income per year from one buffalo	15,200

In order to facilitate and encourage milk production, it is imperative that along with training in dairy farming, cold storage facilities (chilling plants) be set up and proper marketing facilities introduced at the village level.

Poultry farming can also be a lucrative activity in the village, and access to credit and knowledge are the two key things needed to run the business successfully. At the moment, there are five poultry firms in the village. It may be noted here that the demand for poultry products are increasing very rapidly in this District due to expansion of market, which in turn is facilitated by the establishment of new industries and coal mines.

Table 5.3: Expenses and Earnings in Poultry – 700 chicken in one month during peak season

	Cost / Price (Rs)
5 labourers	25000
Purchase of small chicken (*chuza*)	200000
Feed	300000
Medicines	10000
Coal (room heating)	7000
Total cost	542000
Avg. wt. of chicken (1.5 kg) * 6800 chicken * Rs. 60 per kg	612000
Net profit per month	70000
Note: Usually 150-200 chicken die and so finally available for sale is 6800.	
Peak season is during winter (December to March)	

If villagers are trained in poultry farming, then many more poultry firms can come up and income earned by the villagers can be substantially increased.

The artisans in this village (carpenter, blacksmith) provide services to a specific set of households in exchange of foodgrains (barter system). Each artisan has this kind of arrangement with 10-12 households. From each household, the artisan gets 45 kg – 50 kg foodgrains per year and in return has to provide year-long service (repair work, making new items) to the household. In repairing (e.g., in carpentry), it is mostly repairing of simple agricultural implement, doors, windows, and other household articles. The carpenter is also required to make new doors and windows, if so required. The association between artisan household and the other household is usually long term and has been there since generations. The carpenters wanted training in manufacture of furniture like almirah, sofa sets, different kinds of chairs etc., which can allow them to participate in the local market which is expanding and whose demand is quite diverse. This will definitely improve the economic condition of the artisans. The buyers are always in look for new designs which the artisans can deliver only when trained appropriately.

Village Harawah

This is a rather remote village and the nearest pucca road from the village is 2 km away. As in other villages, agriculture is the principal occupation, but the villagers are more interested in shifting to non-agricultural occupations. Lack of training facilities is a major hindrance towards this shift in occupational pattern. The FGD was attended by goldsmiths, potters, carpenters, and blacksmiths. But all of them are involved in crop cultivation as well, primarily for the purpose of self-consumption.

Willingness to stick to their traditional occupations

An interesting thing about this village is that the younger generation is interested in pursuing their traditional activities. They are working in different shops related to their skills in the main town (Waidhan), and also in other districts. The older generation however is carrying on with the traditional skills in the village itself. In a sense, there is a very strong motivation among the villagers to hold on to their traditional activities, and not get swayed by the construction boom in different parts of the District and start working on these sites as unskilled manual workers (though that might have fetched a slightly higher sum of money).

Goldsmiths in the village earn on an average Rs. 2,000 per month. After giving their children preliminary training, they have sent them to work in jewellery shops outside their villages so that they can learn new designs and techniques. In these shops, they can earn around Rs. 3,000 per month.

Availability of electricity can enhance the income of potters substantially

Electricity supply in this village is particularly in a dismal state, and this itself is a big stumbling block in enhancing the earning potential of the villagers. Out of 500 households in

this village, 26 households have been traditionally involved in pottery. This is an extremely labour intensive activity and non-availability of electricity makes the task even more difficult. Motorized wheel substantially reduces the work effort needed as compared to manual wheel (*ghara*). Availability of electricity is necessary for the working of motorized wheel. With all the hardship, on average a potter household (which involves the labour of more than one member) can earn at most Rs. 1,000 per month.

Potters in another village named Majan, which is located just beside the State highway where availability of electricity is much better than that in village Harawah, could earn on an average Rs.2,450 per month. The higher income is primarily due to larger quantities of products, being produced which in turn is possible due to availability of electricity.

Table 5.4: Expenses and Earnings in Pottery

Item	Cost / Price (Rs)
1 trolley of mud (can employ 2 members of household for 1 month)	350
Electricity cost	500
Coal	700
Total cost	1550
Sale of product (400 items * Rs. 10 per item)	4000
Net income	2450

During peak season (March – May), the net income can be doubled by employing almost all the members of the household. But in this village too, the type of products made are extremely limited (tubs of different sizes, small water containers, and few other items). The traders who supply clay to the potters are the ones who buy back the finished products, and therefore, buy at much cheaper rate. The potters on the other hand accept this arrangement because they are assured of buyers and need not take up the extra responsibility of marketing the products. If provided appropriate training, these potters can manufacture toys and other fancy items which fetch higher returns as compared to the traditional items which they have been producing ever since.

Village Katauli

Carpenters in this village are trained in making furniture of new designs. This is however a phenomenon for the last one and half decade. Earlier, carpenters in this village could only make ploughs, simple hand implements, and cots. They have slowly learnt making new types of furniture under the influence of a person named Mahadev who came and settled in this village 15 years ago. He is an expert carpenter and proficient in making new varieties of furniture. At least one member of each carpenter family at some point of time worked as apprentice with Mahadev and learnt new techniques from him. Usually, after working with him for 5–7 years, the apprentices can themselves make such items on their own.

Availability of appropriate implements and tools can reduce human effort needed substantially and also enhance income

It was highlighted that in the absence of implements, time required to perform certain tasks is much greater, and therefore, net return is not very remunerative. This is illustrated by taking an example of manufacture and fitting a window frame:

Table 5.5: Labour days in manufacture and fitting of window frame

Table 5.5: Labour days in manufacture and fitting of window frame	
Activity	*Labour days*
Cutting the wood	2 persons - 1 day
Giving shape to the wood (Ara)	2 persons - 1 day
Straightening the wood (Basula)	2 persons - 1 day
Plaining the wood (Randha)	1 person - 1 day
Fitting the frame tightly on the window + Pressing it so that it fits well (Sikanji)	2 persons - 1 day
Polishing	1 person - 1 day
Total	**10 Labour days**

Using a machine, the first four activities would require 4 labour days. The cost of the machine is Rs. 50,000 and the same machine can be used for different activities by attaching different tools to it.

The younger generation of carpenters of this village is mostly residing in Waidhan and is working as free labourers in various shops. They are mostly employed on piece-rate basis.

Lack of irrigation is a constraint for cultivating high value crops

Vegetable cultivation is also an important activity in the village and is carried out for 3 months (May–July), in the period between harvesting of wheat and transplanting of paddy. During these three months, villagers can earn Rs. 3,000–Rs. 4,000 per month. Even though it is a profitable economic activity, it cannot be carried out throughout the year primarily because of lack of irrigation facilities. Irrigation in this region is dependent on ground water, which is extracted using pumps. Extraction of water from underground for irrigation is cost effective only when electric pump sets are used. Diesel pump sets increase the cost of irrigation and therefore vegetable cultivation becomes non-remunerative.

Village Hirawah

There are 32 weaver households in this village (all Muslims) and for these households weaving (using handloom) was the principal occupation till 4 years ago. But this activity has totally stopped in this village since then and these households now have to depend on crop cultivation for their survival.

High price of raw material pushed out weavers from their traditional occupation

Weaving was carried out on piece-rate basis. Traders from outside supplied raw material (threads) and also purchased the finished products (cloth) from the weavers. The price of thread has been increasing for quite some time now as a result of which the occupation was on the decline. Finally, since the last 4 years, it has stopped totally. If the weavers are provided with credit, this activity can resume in this village. Marketing will not be a problem because they can sell their product in the local market in Waidhan.

2 persons in 1 day can weave 8 pieces of cloth (each can be sold at Rs. 75), and the amount of thread required to prepare it is 4 kg (cost Rs. 175). So 2 persons can earn a net income of Rs. 225 (400-175) in one day. Therefore, each person can earn a net income of Rs. 112 per day from this activity.

The government organized a 3-month training programme in 1985, in which the trainees got a stipend of Rs. 75 per day. This training was quite useful because most of the present day weavers got formal in-hand training through this programme. Therefore, in addition to providing credit, formal training in weaving should be provided to enhance the income earning potential of these households.

Conclusion

It is true that with the establishment of new industries in the region, there will be a growing demand for technical skills, as discussed in the previous chapters. However, industries cannot absorb the growing labour force entirely, and therefore, alternative sources of non-agricultural employment has to be encouraged. With knowledge about traditional skills already in place, it is only a matter of appropriate training and financial support towards the traditional artisans which can really enhance economic development of the people in this region. Also, government participation is needed in ensuring marketing of the products produced by the artisans in remote areas of the District.

Annexure-2.1

Block and Main activity-wise Distribution of Establishments in Singrauli District of Madhya Pradesh

Sl.No.	Main Activity	Blocks		
		Chittrangi	Deosar	Waidhan
1.	Aluminium Production	0	1	0
2.	Auto Repairing	0	2	5
3.	Auto Sale and Service	0	1	0
4.	Battery Sales and Repairing	1	0	1
5.	Beauty Parlour	0	1	5
6.	Brick Manufacturing	0	2	2
7.	Bulk Explosive Manufacturing	0	0	1
8.	Bus Body Making and Repairing	0	0	2
9.	Carpenter	0	0	2
10.	Coal Mining Activities	0	0	2
11.	Computer Work	0	0	1
12.	Construction Material Supplier	0	0	1
13.	Cooking	0	0	2
14.	Decoration	0	0	1
15.	Denting and Painting	0	0	3
16.	Diesel Engine Repairing	0	0	4
17.	Diesel Pump Repairing	0	1	2
18.	Electrical Motor Repairing and Winding	0	2	14
19.	Electrical Repairing	0	4	15
20.	Export Import Work	0	0	1
21.	Fabrication Work	0	0	1
22.	Finance	0	0	2
23.	Food Processing	0	0	1
24.	Garment Making	0	0	1
25.	Generation of Power	0	0	3
26.	Hair Cutting	0	0	4
27.	Handicraft Manufacturing	6	0	0
28.	Head Repairing	0	0	1
29.	Hospital and Clinic	1	0	4
30.	Hotel/Restaurant	0	0	4
31.	Ice Factory	0	0	1
32.	Jack Repairing	0	0	1
33.	Kamani Repairing	0	0	1
34.	Machine Repairing	0	0	2
35.	Manufacturing and Repair of Steel Furniture	0	0	3
36.	Manufacturing of Bakery Products	0	0	2
37.	Manufacturing of Calcium Nitrate	0	0	1

38.	Manufacturing of Emulsion Matrix	0	0	4
39.	Manufacturing of Furniture	0	2	14
40.	Manufacturing of Iron Grills, Gates and Boxes	0	0	4
41.	Manufacturing of Machine Items	0	0	3
42.	Manufacturing of Medical and Industrial Gas	0	0	1
43.	Manufacturing of Metals & Steels	0	0	1
44.	Manufacturing of Nuts Bolts	0	0	1
45.	Manufacturing of Ornaments	0	0	1
46.	Manufacturing of Sponge Iron	0	1	0
47.	Manufacturing of Steel Boxes	0	0	1
48.	Manufacturing of Trolleys	0	0	2
49.	Marble Cutting and Selling	0	0	1
50.	Mechanical Work	1	0	4
51.	Medical Store	0	0	4
52.	Medical Testing Laboratory	0	0	3
53.	Motor Cycle Repairing	0	3	1
54.	Motor Vehicle Repairing	2	6	48
55.	Namkeen Manufacturing	0	0	1
56.	Office Work	0	0	1
57.	Painting Work	0	0	2
58.	Pottery	22	1	0
59.	Repairing and Selling of Cycles	0	0	1
60.	Repairing of Agriculture Implements	0	0	2
61.	Repairing of Electrical Equipment	0	0	1
62.	Sale and Repair of Vehicle Parts	0	2	15
63.	Selling and Fitting of Hardware Items	0	0	3
64.	Selling Hard Ware	0	0	1
65.	Share Broker	0	0	1
66.	Shoes Slipper Repairing	0	1	0
67.	Stone Crushing	2	0	0
68.	Sweets Manufacturing	0	0	1
69.	Tailoring	2	2	41
70.	Teaching/Coaching	0	0	4
71.	Tractor Repair and Selling	1	0	4
72.	Trading Activities	0	0	2
73.	Travel Agency	0	0	2
74.	Typing	0	0	2
75.	Tyre Repairing	0	1	3
76.	Welding	0	2	23
Total		38	35	299

Annexure-2.2

Main Activity-wise Distribution of Establishments by Size of Employment in Singrauli District of Madhya Pradesh

Sl. No.	Main Activity	Size of Employment						
		Up to 5	6-10	11-25	26-100	101-500	501 & above	Total
1	Aluminium production	0	0	0	0	0	1	1
2	Auto Repairing	3	3	1	0	0	0	7
3	Auto Sale and Service	1	0	0	0	0	0	1
4	Battery Sales and Repairing	2	0	0	0	0	0	2
5	Beauty Parlour	4	2	0	0	0	0	6
6	Brick Manufacturing	0	0	2	2	0	0	4
7	Bulk Explosive Manufacturing	0	0	0	1	0	0	1
8	Bus Body Making and Repairing	2	0	0	0	0	0	2
9	Carpenter	2	0	0	0	0	0	2
10	Coal Mining Activities	0	0	0	1	0	1	2
11	Computer Work	1	0	0	0	0	0	1
12	Construction Material Supplier	0	1	0	0	0	0	1
13	Cooking	1	0	1	0	0	0	2
14	Decoration	1	0	0	0	0	0	1
15	Denting and Painting	3	0	0	0	0	0	3
16	Diesel Engine Repairing	3	1	0	0	0	0	4
17	Diesel Pump Repairing	2	1	0	0	0	0	3
18	Electrical Motor Repairing and Winding	16	0	0	0	0	0	16
19	Electrical Repairing	16	3	0	0	0	0	19
20	Export Import Work	1	0	0	0	0	0	1
21	Fabrication Work	1	0	0	0	0	0	1
22	Finance	0	2	0	0	0	0	2
23	Food Processing	1	0	0	0	0	0	1
24	Garment Making	1	0	0	0	0	0	1
25	Generation of Power	1	0	0	0	0	2	3
26	Hair Cutting	1	3	0	0	0	0	4
27	Handicraft Manufacturing	5	1	0	0	0	0	6
28	Head Repairing	1	0	0	0	0	0	1
29	Hospital and Clinic	1	1	1	1	1	0	5
30	Hotel/Restaurant	1	1	1	1	0	0	4
31	Ice Factory	1	0	0	0	0	0	1
32	Jack Repairing	1	0	0	0	0	0	1
33	Kamani Repairing	1	0	0	0	0	0	1
34	Machine Repairing	1	1	0	0	0	0	2
35	Manufacturing and Repair of Steel Furniture	1	2	0	0	0	0	3
36	Manufacturing of Bakery Products	0	2	0	0	0	0	2
37	Manufacturing of Calcium Nitrate	0	1	0	0	0	0	1
38	Manufacturing of Emulsion Matrix	0	0	1	3	0	0	4

39	Manufacturing of Furniture	12	4	0	0	0	0	16
40	Manufacturing of Iron Grills, Gates and Boxes	4	0	0	0	0	0	4
41	Manufacturing of Machine Items	3	0	0	0	0	0	3
42	Manufacturing of Medical and Industrial Gas	0	0	0	1	0	0	1
43	Manufacturing of Metals & Steels	1	0	0	0	0	0	1
44	Manufacturing of Nuts Bolts	0	1	0	0	0	0	1
45	Manufacturing of Ornaments	0	1	0	0	0	0	1
46	Manufacturing of Sponge Iron	0	0	0	0	1	0	1
47	Manufacturing of Steel Boxes	1	0	0	0	0	0	1
48	Manufacturing of Trolleys	2	0	0	0	0	0	2
49	Marble Cutting and Selling	1	0	0	0	0	0	1
50	Mechanical Work	5	0	0	0	0	0	5
51	Medical Store	4	0	0	0	0	0	4
52	Medical Testing Laboratory	3	0	0	0	0	0	3
53	Motor Cycle Repairing	3	1	0	0	0	0	4
54	Motor Vehicle Repairing	45	6	3	2	0	0	56
55	Namkeen Manufacturing	1	0	0	0	0	0	1
56	Office Work	1	0	0	0	0	0	1
57	Painting Work	2	0	0	0	0	0	2
58	Pottery	21	2	0	0	0	0	23
59	Repairing and Selling of Cycles	1	0	0	0	0	0	1
60	Repairing of Agriculture Implements	2	0	0	0	0	0	2
61	Repairing of Electrical Equipment	1	0	0	0	0	0	1
62	Sale and Repair of Vehicle Parts	16	1	0	0	0	0	17
63	Selling and Fitting of Hardware Items	3	0	0	0	0	0	3
64	Selling Hard ware	1	0	0	0	0	0	1
65	Share Broker	1	0	0	0	0	0	1
66	Shoes Slipper Repairing	1	0	0	0	0	0	1
67	Stone Crushing	1	1	0	0	0	0	2
68	Sweets Manufacturing	0	1	0	0	0	0	1
69	Tailoring	28	13	4	0	0	0	45
70	Teaching/Coaching	1	2	0	1	0	0	4
71	Tractor Repair and Selling	2	3	0	0	0	0	5
72	Trading Activities	0	2	0	0	0	0	2
73	Travel Agency	0	0	1	0	1	0	2
74	Typing	0	2	0	0	0	0	2
75	Tyre Repairing	2	1	0	1	0	0	4
76	Welding	24	0	0	1	0	0	25
-	**Grand Total**	269	66	15	15	3	4	372

Annexure-2.3

Main Activity-wise Distribution of Establishments Acquired New Equipments During Last Five Years in Singrauli District of Madhya Pradesh

Sl.No.	Main Activity	No. of Establishments reporting acquirement of new equipments		
		Chittrangi	Deosar	Waidhan
1.	Auto Repairing	0	2	0
2.	Battery Sales and Repairing	1	0	0
3.	Brick Manufacturing	0	0	1
4.	Coal Mining Activities	0	0	1
5.	Computer Work	0	0	1
6.	Denting and Painting	0	0	1
7.	Diesel Engine Repairing	0	0	1
8.	Diesel Pump Repairing	0	0	1
9.	Electrical Motor Repairing and Winding	0	1	0
10.	Electrical Repairing	0	1	1
11.	Generation of Power	0	0	1
12.	Hospital and Clinic	0	0	1
13.	Machine Repairing	0	0	1
14.	Manufacturing of Emulsion Matrix	0	0	1
15.	Manufacturing of Furniture	0	0	1
16.	Manufacturing of Sponge Iron	0	1	0
17.	Mechanical Work	1	0	0
18.	Motor Vehicle Repairing	0	2	1
19.	Office Work	0	0	1
20.	Repairing of Electrical Equipment	0	0	1
21.	Selling and Fitting of Hardware Items	0	0	1
22.	Stone Crushing	1	0	0
23.	Tailoring	2	0	2
24.	Tractor Repair and Selling	0	0	1
25.	Trading Activities	0	0	1
26.	Tyre Repairing	0	1	0
27.	Welding	0	1	2
-	**Grand Total**	5	9	22

Annexure-2.4

Main Activity wise Establishments Reporting Shortage of Skills in Singrauli District of Madhya Pradesh

Sl.No.	Main Activity	No. of Employees	Required Employees	Shortage (No.)
1	Accountancy	207	252	45
2	Armature Winder	4	8	4
3	Audiometrician/Speech Therapist	1	1	0
4	Auto Electrician	5	14	9
5	Auto Mechanic	45	55	10
6	Bachelor in Arts	10	10	0
7	Bachelor in Commerce	17	17	0
8	Bachelor in Education	3	3	0
9	Bachelor in Science	13	13	0
10	Beautician	13	14	1
11	Bhritya	17	18	1
12	Blacksmith	15	21	6
13	Blasting Mazdoor	60	65	5
14	Block Bose	3	4	1
15	Brick Maker	50	55	5
16	Cable man	278	454	176
17	Canteen Staff	0	1	1
18	Care Taker	3	4	1
19	Carpenter	29	38	9
20	Cashier	963	980	17
21	Chainman	28	44	16
22	Chemical Engineer	2	2	0
23	Chemist	60	70	10
24	Chemistry (M.sc)	1	1	0
25	Civil Engineer	920	925	5
26	Coach	0	1	1
27	Company Social Responsibility	24	51	27
28	Compounder	17	33	16
29	Computer Engineer/Operator	510	511	1
30	Console Operator	7	10	3
31	Construction Equipment Operator	40	40	0
32	Control & Instrumentation	563	569	6
33	Conveyor Mover/Fitter	1	5	4
34	Cook	46	52	6
35	Craftsman Trainer/Equipment Trainer	0	4	4
36	Crane Operator	830	859	29
37	Crusher	3	6	3
38	Cycle Sell/Repair	12	12	0
39	Dai	2	2	0
40	Dark Room Assistant	0	1	1

41	Data Entry Operator	6	9	3
42	Denting Technician	22	23	1
43	Dentist	3	3	0
44	Dhobi	2	2	0
45	Dialysis Technician	0	2	2
46	Diesel Mechanic	39	39	0
47	Dietician	1	2	1
48	Doctor	57	84	27
49	Door Machinist	2	2	0
50	Dozer Operator	349	503	154
51	Draftsman	137	146	9
52	Dragline Operator	113	152	39
53	Draughtsman	3	5	2
54	Dresser cum First aid assistant	47	70	23
55	Drill Machine Operator	165	345	180
56	Driving	865	1034	169
57	Dumper Operator	1446	1811	365
58	Dy. Surveyor	6	16	10
59	ECG Technician	1	7	6
60	Education	40	40	0
61	Electrical Conductor	46	46	0
62	Electrical Engineer	216	221	5
63	Electrician	2256	2758	502
64	Electronics	333	333	0
65	Embroidery	4	5	1
66	Engine Mechanic	12	12	0
67	English Teaching	3	3	0
68	Estate Management & Administration	544	930	386
69	Eye Specialist	6	10	4
70	Fabricator	609	610	1
71	Female Attendant	1	1	0
72	Field Work/Field Assistant	1	1	0
73	Finance and Accounts	69	71	2
74	Fitter	3124	3294	170
75	Food Processing	3	4	1
76	Foreman (Mechanical)	1141	1363	222
77	Forest Supervisor	3	5	2
78	Furnace Operator	0	5	5
79	Furniture Manufacturing/Carpenter	16	18	2
80	Garden Supervisor	1	2	1
81	Gas Welder	6	6	0
82	Geology	1	1	0
83	Gestetner Operator	3	7	4
84	Grader Operator	55	99	44
85	Grill Maker	3	3	0

86	Hair Cutting	213	214	1
87	Header	1	1	0
88	Heat Treatment Man	0	3	3
89	Horticulture Inspector.	1	1	0
90	Hotel Manager	3	3	0
91	Human Resource & Administration	61	67	6
92	IT Engineer	55	65	10
93	Lab Technician	104	148	44
94	Lathe Mechanist	6	8	2
95	Law Assistant	1	6	5
96	Legal Inspector	2	5	3
97	LHV	3	19	16
98	Liaison Officer	1	1	0
99	Librarian	0	1	1
100	Lift Operator	2	16	14
101	Lineman	19	30	11
102	Machine Operator	489	687	198
103	Machinist	752	776	24
104	Mali	4	6	2
105	Management Trainee	16	26	10
106	Manufacturing Design	3	3	0
107	Manufacturing of Handicraft	56	66	10
108	Marble Cutter	1	1	0
109	Mason	1589	1590	1
110	Master Armature Winder	6	6	0
111	MBA(Finance)	4	4	0
112	Mechanical Engineer	948	1127	179
113	Mechanical Fitter	417	640	223
114	Mechanical Foreman	4	4	0
115	Mechanical ITI	6	6	0
116	Mechanical Mechanic	14	15	1
117	Medical Attendant	2	2	0
118	Metrical Management	10	10	0
119	Mine Survey Diploma	2	2	0
120	Mining Engineering	16	16	0
121	Mining Explosion	15	15	0
122	Mining Sirdar	51	66	15
123	Mining Surveyor	8	22	14
124	Motor Mechanic	154	174	20
125	Motor Winder	5	5	0
126	Motorbike Mechanic	2	2	0
127	Moulding	405	405	0
128	Multipurpose Health Worker	214	300	86
129	Nurse	165	270	105
130	Office Assistant	216	256	40

131	Office Management(Clerk)	550	754	204
132	Office Management (Daftary)	9	15	6
133	Office Manager	10	29	19
134	Otometrician	2	2	0
135	Organic Chemistry	1	1	0
136	Orthopedics	4	5	1
137	OT Technician	7	18	11
138	Overman	277	375	98
139	Overseer	3	4	1
140	Painting	338	345	7
141	Pathology	4	4	0
142	Pattern Maker	0	4	4
143	Pay & Account	114	141	27
144	Peon	66	102	36
145	Personnel	68	96	28
146	Pharmacist	19	28	9
147	Pit Supervisor	7	8	1
148	Plant Operator	3	13	10
149	Plumber	330	342	12
150	Pottery	10	13	3
151	Pump Attendant	163	227	64
152	Purchaser	15	15	0
153	Quality Assurance Inspector	1	1	0
154	Radiography	16	20	4
155	Revenue Inspector	9	14	5
156	Rigger	531	541	10
157	Road Roller Operator	0	1	1
158	Safety cum Production Assistant	10	30	20
159	Sanitary Inspector	3	6	3
160	Sanitary Jamadar	0	2	2
161	Secretarial Practice and Office Management	109	166	57
162	Security	1831	2193	362
163	Selling of Hardware, Diesel Engine & Motor Parts	49	50	1
164	Service Boy	23	23	0
165	Sheet Metal Mechanic	2	2	0
166	Shoes/ Slipper Repairing	2	2	0
167	Shovel Operator	280	391	111
168	Sports Supervisor	1	6	5
169	Stenographer	29	35	6
170	Storekeeper	250	297	47
171	Structural Fitter	0	4	4
172	Sub-Station Attendant	42	122	80
173	Supervisor (Electrical)	70	115	45

174	Surveyor	9	17	8
175	Sweeper	53	113	60
176	Tailoring	172	180	8
177	Teachers	26	26	0
178	Tech civil	2	2	0
179	Technician Lineman/Wireman	2	2	0
180	Technician Telecommunication	1	1	0
181	Technician Telephone	1	1	0
182	Telephone Operator	8	20	12
183	Timekeeper	5	15	10
184	Tractor Repairing	19	21	2
185	Trailer Operator	4	4	0
186	Translator	3	9	6
187	Trip man	53	99	46
188	Truck/Bus Body Repair	1	3	2
189	Turner	128	165	37
190	TV repairing	9	9	0
191	Janitor	35	55	20
192	Typist	6	16	10
193	Tyre Handler Operator	4	8	4
194	Unskilled Worker/Labourer/Attendant/Cleaner/ Helper/Khalasi/Mazdoor/Other staff	12045	12631	586
195	Valveman	13	30	17
196	Waiter	7	7	0
197	Ward Attendant	77	125	48
198	Welder	1372	1556	184
199	Wireman	518	519	1
200	X-ray Technician	2	2	0
-	**Grand Total**	42441	48616	6175

Annexure-2.5

Main Activity-wise Distribution of Establishments which have planning for Expansion/ Modernisation/ Diversification during next five years in Singrauli District of Madhya Pradesh

Sl. No.	Main Activity	No. of Establishments reporting		
		Chittrangi	Deosar	Waidhan
1.	Aluminium Production	0	1	0
2.	Auto Repairing	0	1	4
3.	Auto Sale and Service	0	1	0
4.	Battery Sales and Repairing	0	0	1
5.	Beauty Parlour	0	1	1
6.	Brick Manufacturing	0	1	0
7.	Coal Mining Activities	0	0	2
8.	Computer Work	0	0	1
9.	Cooking	0	0	1
10.	Denting and Painting	0	0	3
11.	Diesel Engine Repairing	0	0	2
12.	Electrical Motor Repairing and Winding	0	1	4
13.	Electrical Repairing	0	2	4
14.	Generation of Power	0	0	3
15.	Hair Cutting	0	0	1
16.	Handicraft Manufacturing	1	0	0
17.	Head Repairing	0	0	1
18.	Hospital and Clinic	0	0	1
19.	Machine Repairing	0	0	1
20.	Manufacturing of Emulsion Matrix	0	0	3
21.	Manufacturing of Furniture	0	0	2
22.	Manufacturing of Machine Items	0	0	1
23.	Manufacturing of Medical and Industrial gas	0	0	1
24.	Manufacturing of Sponge Iron	0	1	0
25.	Mechanical Work	1	0	0
26.	Motor Cycle Repairing	0	1	1
27.	Motor Vehicle Repairing	1	4	14
28.	Painting Work	0	0	1
29.	Pottery	7	0	0
30.	Repairing of Electrical Equipment	0	0	1
31.	Sale and Repair of Vehicle Parts	0	1	1
32.	Selling and Fitting of Hardware Items	0	0	1
33.	Shoes Slipper Repairing	0	1	0
34.	Stone Crushing	2	0	0
35.	Tailoring	2	1	7
36.	Teaching/Coaching	0	0	4
37.	Tractor Repair and Selling	1	0	1
38.	Trading Activities	0	0	1

39.	Travel Agency	0	0	1
40.	Typing	0	0	1
41.	Tyre Repairing	0	1	1
42.	Welding	0	2	5
-	**Grand Total**	15	20	77

Annexure-2.6

Trade-wise Future Additional Requirement of Skilled Personnel by Trade in Establishments of Singrauli District of Madhya Pradesh

Sl. No.	Trade	Total number required		
		Chittrangi	Deosar	Waidhan
1.	Accounts	5	0	32
2.	Auto Mechanic	0	5	0
3.	Bakery Production/Food craft	5	0	0
4.	Beauty Care/Beautician	0	0	10
5.	Boiler Attendant	0	20	10
6.	Brick Making	0	15	0
7.	Business Administration	1	0	0
8.	Canteen Staff	0	20	0
9.	Carpentry	0	0	5
10.	Chemical Engineering	0	0	11
11.	Chemist	0	65	12
12.	Civil Engineering	0	5	24
13.	Computer Engineering	0	0	2
14.	Computer Operator	0	0	51
15.	Control & Instrumentation	0	100	35
16.	Cook	0	0	5
17.	Denting Technician	0	0	3
18.	Diesel Mechanic	0	0	1
19.	Dresser cum First aid Workers	0	0	5
20.	Driver	0	0	62
21.	Electrical Engineering	0	0	120
22.	Electrician/Technician	0	557	513
23.	Electronic Engineering	4	0	0
24.	Electronics Mechanic	0	50	14
25.	Finance	0	0	8
26.	Fitter	0	40	72
27.	Food Analyst Quality Control	0	0	1
28.	Garment Stitching	8	0	0
29.	Gas Work	0	0	5
30.	Handicraft Artisan	3	0	0
31.	Housekeeping/Guest house staff	0	50	110
32.	IT Engineers	0	200	28
33.	Lab Assistant Chemist	0	0	8
34.	Lab Technician(Pathology)	0	0	1
35.	Labour(unskilled)	0	0	503
36.	Lathe Machine Operator/Mechanic	2	0	9
37.	Machinist/Machine Operator	0	535	427
38.	Marketing	0	0	3

39.	Mason	0	0	1
40.	Material Management	0	0	14
41.	Mechanical Engineering	0	0	55
42.	Mining Engineering	0	0	13
43.	Motor Mechanic	0	3	9
44.	Moulder	0	20	10
45.	Nurse	0	0	12
46.	Office Management	22	20	292
47.	Operator Crane/JCB	23	0	4
48.	Operator Print Room	0	0	1
49.	Operator Signal	0	0	1
50.	Painter	0	0	7
51.	Personal & Administration/Stenographer/Typist	0	5	70
52.	Plant Machine Operator	1	0	0
53.	Plumber	0	50	10
54.	Pottery Artisan	2	0	0
55.	Rigger	0	0	12
56.	Security	0	100	260
57.	Tailor	0	2	7
58.	Technician Signal & Telecommunication	0	0	11
59.	Tractor/Workshop Mechanic	2	0	3
60.	Traditional Craft Artisan	2	0	0
61.	TV Mechanic	0	3	0
62.	Welder	0	33	25
-	**Grand Total**	80	1898	2907

Annexure-2.7

Activity-wise Distribution of Establishments Those Who Provide Training to Their Workers in Singrauli District of Madhya Pradesh

Sl.No.	Main Activity	No. of Establishment		
		Chittrangi	Deosar	Waidhan
1.	Auto Repairing	0	0	1
2.	Battery Sales and Repairing	1	0	0
3.	Beauty Parlour	0	0	3
4.	Brick Manufacturing	0	1	0
5.	Coal Mining Activities	0	0	1
6.	Electrical Motor Repairing and Winding	0	1	0
7.	Electrical Repairing	0	0	4
8.	Finance	0	0	1
9.	Generation of Power	0	0	1
10.	Hair Cutting	0	0	1
11.	Handicraft Manufacturing	1	0	0
12.	Manufacturing of Emulsion Matrix	0	0	1
13.	Manufacturing of Furniture	0	0	2
14.	Manufacturing of Iron Grills, Gates and Boxes	0	0	1
15.	Manufacturing of Machine Items	0	0	1
16.	Manufacturing of Metals & Steels	0	0	1
17.	Manufacturing of Trollys	0	0	1
18.	Motor Cycle Repairing	0	1	1
19.	Motor Vehicle Repairing	1	2	4
20.	Painting Work	0	0	1
21.	Pottery	2	0	0
22.	repairing of agriculture implements	0	0	2
23.	Stone Crushing	1	0	0
24.	Tailoring	1	0	1
25.	Teaching/Coaching	0	0	1
26.	Tractor Repair and Selling	1	0	2
27.	typing	0	0	1
28.	Tyre Repairing	0	0	1
29.	Welding	0	0	1
-	**Grand Total**	8	5	34

Annexure-2.8

Main Activity-wise Distribution of Establishments by Preference of Workers for Employment in Singrauli District of Madhya Pradesh

Sl. No.	Main Activity	Preference for Workers for Employment		
		Skilled Persons	Freshers	Both
1	Aluminium Production	1	0	0
2	Auto Repairing	5	2	0
3	Auto Sale and Service	1	0	0
4	Battery Sales and Repairing	1	1	0
5	Beauty Parlour	4	2	0
6	Brick Manufacturing	3	1	0
7	Bulk Explosive Manufacturing	1	0	0
8	Bus Body Making and Repairing	2	0	0
9	Carpenter	1	1	0
10	Coal Mining Activities	1	0	1
11	Computer Work	1	0	0
12	Construction Material Supplier	0	1	0
13	Cooking	1	1	0
14	Decoration	0	1	0
15	Denting and Painting	1	2	0
16	Diesel Engine Repairing	3	1	0
17	Diesel Pump Repairing	3	0	0
18	Electrical Motor Repairing and Winding	13	3	0
19	Electrical Repairing	15	4	0
20	Export Import Work	0	1	0
21	Fabrication Work	0	1	0
22	Finance	0	2	0
23	Food Processing	1	0	0
24	Garment Making	1	0	0
25	Generation of Power	3	0	0
26	Hair Cutting	3	1	0
27	Handicraft Manufacturing	1	5	0
28	Head Repairing	1	0	0
29	Hospital and Clinic	5	0	0
30	Hotel/Restaurant	3	0	1
31	Ice Factory	1	0	0
32	Jack Repairing	1	0	0
33	Kamani Repairing	1	0	0
34	Machine Repairing	2	0	0
35	Manufacturing and Repair of Steel Furniture	1	2	0
36	Manufacturing of Bakery Products	0	2	0
37	Manufacturing of Calcium Nitrate	1	0	0
38	Manufacturing of Emulsion Matrix	4	0	0

39	Manufacturing of Furniture	14	2	0
40	Manufacturing of Iron Grills, Gates and Boxes	2	2	0
41	Manufacturing of Machine Items	1	0	2
42	Manufacturing of Medical and Industrial gas	1	0	0
43	Manufacturing of Metals & Steels	1	0	0
44	Manufacturing of Nuts Bolts	1	0	0
45	Manufacturing of Ornaments	1	0	0
46	Manufacturing of Sponge Iron	1	0	0
47	Manufacturing of Steel Boxes	0	1	0
48	Manufacturing of Trollys	2	0	0
49	Marble Cutting and Selling	0	0	1
50	Mechanical Work	4	1	0
51	Medical Store	4	0	0
52	Medical Testing Laboratory	2	1	0
53	Motor Cycle Repairing	4	0	0
54	Motor Vehicle Repairing	28	25	3
55	Namkeen Manufacturing	0	1	0
56	Office Work	0	1	0
57	Painting Work	1	1	0
58	Pottery	1	22	0
59	Repairing and Selling of Cycles	0	1	0
60	Repairing of Agriculture Implements	1	1	0
61	Repairing of Electrical Equipment	1	0	0
62	Sale and Repair of Vehicle Parts	3	14	0
63	Selling and Fitting of Hardware Items	2	0	1
64	Selling Hard ware	0	1	0
65	Share Broker	1	0	0
66	Shoes Slipper Repairing	1	0	0
67	Stone Crushing	2	0	0
68	Sweets Manufacturing	1	0	0
69	Tailoring	14	31	0
70	Teaching/Coaching	4	0	0
71	Tractor Repair and Selling	4	0	1
72	Trading Activities	1	1	0
73	Travel Agency	1	1	0
74	Typing	1	1	0
75	Tyre Repairing	4	0	0
76	Welding	14	10	1
-	**Grand Total**	209	152	11

Annexure -3.1

List of Vocational Training Provider Institutions of Singrauli District Madhya Pradesh

1	Construction Skill Training Centre, Waidhan
2	Kaustubh Infotech Academy, Waidhan
3	Shri Sai Mahavidayala, Waidhan
4	Sririti College Professional, Waidhan
5	I.A.C.M Learning Centre, Waidhan
6	C.L. Masonry, Waidhan
7	Shri Sai Shail Manglam College, Waidhan
8	Harsh Deo College of Computer of Management, Waidhan
9	Software IT Academy, Waidhan
10	British School of English, Waidhan
11	Shah R.T.C Institute, Waidhan
12	Singrauli Institute of Technical Education, Singrauli, Waidhan
13	Singrauli Infotech Pvt. Ltd. (NIIT Singrauli), Waidhan
14	ASEL Spoken English, Jayant, Waidhan
15	Motor Driving Training School, Waidhan
16	Govt. Polytechnic College, Waidhan
17	Vikalp Institute of Paramedical Science, Waidhan
18	Speak Well, Chittrangi
19	Gospel Institute, Waidhan
20	Rakesh Beauty Parlor, Waidhan
21	Mansarouar College, Waidhan
22	Remme-Beauty Parlor, Waidhan
23	National Computer College, Deosar
24	Vidyawati Singh Beauty Parlor, Waidhan
25	Sonu Computer College Deosar
26	Mahima Typing, Waidhan
27	Akta Computer College, Deosar
28	NICE Beauty Parlor, Waidhan
29	AISECT Study Centre, Waidhan
30	Rajiv Gandhi Institute, Waidhan
31	Softtech Institute of Computer, Waidhan
32	E-Sail Computer, Waidhan
33	Geem Beauty Parlor, Waidhan
34	NICT Computer, Waidhan
35	Navodaya Institute, Waidhan
36	Govt. ITI, Singrauli, Waidhan

Annexure -3.2

Distribution of Courses offered by Vocational Training Provider Institutions according to the Level of Courses in Singrauli District of Madhya Pradesh

Sl. No.	Name of Course /Trades	Level of course			
		Diploma	Certificate	Informal /Paper	Total
1	Advanced Diploma in Computer Application	5	1	0	6
2	Ayurvedic Compounder	0	1	0	1
3	Bar Bending	0	1	0	1
4	Beautician	0	0	2	2
5	Carpentry	0	1	0	1
6	Laboratory	0	1	0	1
7	Certificate in Information Technology	0	1	0	1
8	Civil Engineering	1	0	0	1
9	Computer Operator	0	1	0	1
10	Diploma in Computer Application	9	0	0	9
11	Diploma in construction	1	0	0	1
12	Diploma in Vocational Studies	1	0	0	1
13	Diesel Mechanic	0	1	0	1
14	Draftsmen	0	1	0	1
15	Driving	0	1	1	2
16	Electrician /Electrical	2	5	0	7
17	Electronics and Telecommunication	1	0	0	1
18	English Speaking Course	0	2	2	4
19	Fabrication	0	1	0	1
20	Fitter	0	2	0	2
21	Gas cutting	0	1	0	1
22	GNIIT	2	0	0	2
23	Computer Hardware	0	1	0	1
24	Health Inspector	0	1	0	1
25	Mason	0	1	0	1
26	Mechanical	1	0	0	1
27	Mining	1	0	0	1
28	Motor Mechanic	2	3	1	6
29	Networking Course	0	2	0	2
30	OT Technician	0	1	0	1
31	Para Medical Course	0	1	0	1
32	Postgraduate Diploma in Computer Application	9	0	0	9
33	Stitching & Tailoring	0	1	0	1
34	Tally Computer Course	1	1	0	2
35	Tractor Mechanic	0	1	0	1
36	Turner	0	1	0	1
37	Welder	0	2	0	2
38	X-Ray Technician	0	1	0	1
-	**Grand Total**	36	38	6	80

Annexure –3.3

Table 9: Course-wise Enrolment, Pass-out and Drop-outs in Vocational Training Provider Institutes in Singrauli District of Madhya Pradesh

Sl. No.	Name of Course	No. of Students		
		Enrolled	Pass-out	Drop-outs
1	Advanced Diploma in Computer Applications	135	92	1
2	Ayurvedic Compounder	26	0	0
3	Bar Bending	36	36	0
4	Beautician	35	35	0
5	Carpentry	21	21	0
6	Certificate course in Medical Test Laboratory	26	0	0
7	Certificate in Information Technology	1	1	0
8	Civil Engineering	60	53	1
9	Computer Operator	26	26	0
10	Diploma in Computer Applications	367	296	31
11	Diploma in Construction	38	0	0
12	Diploma in Vocational Studies	24	0	0
13	Draftsmen	21	21	0
14	Driving	18	18	0
15	Electrician	244	230	2
16	English Speaking Course	372	332	40
17	Fabrication	20	20	0
18	Fitter	42	42	0
19	Gas Cutting	20	20	0
20	GNIIT	10	10	0
21	Computer Hardware	2	2	0
22	Health Inspector	19	0	0
23	Mason	3	3	0
24	Mining	60	53	1
25	Motor Mechanics	167	159	1
26	Networking Course	48	38	10
27	OT Technician	38	0	0
28	Post Graduate Diploma in Computer Application	270	207	17
29	Stitching & Tailoring	26	26	0
30	Tally Computer Course	62	59	0
31	Tractor Mechanic	42	42	0
32	Turner	16	16	0
33	Typing	10	0	0
34	Welder	48	48	0
35	X-Ray	5	5	0
-	**Grand Total**	2358	1911	104

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