STATE INDUSTRIAL PROFILE

OF

PUNJAB

2015-16

MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम
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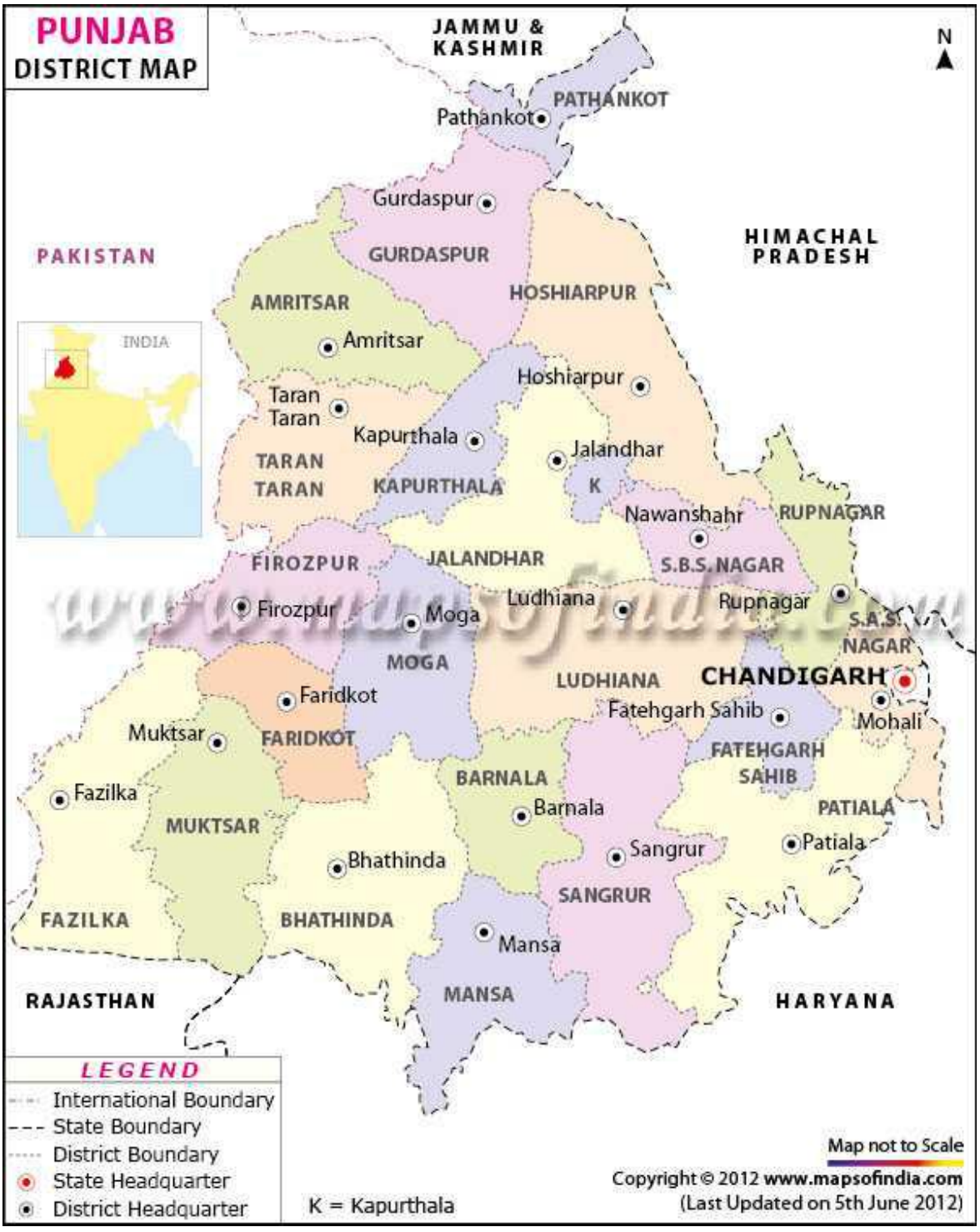
MAP of PUNJAB



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FOREWORD

Punjab is the land of lush green fields with vibrant entrepreneurial culture. It is one of the fastest growing States of the country. With congenial industrial climate, progressive and promotional steps taken by the Punjab Government and economic liberalization adopted by the Government of India, the opportunities for setting up MSME ventures have increased manifold in the State.

In view of this, there is a need for providing first-hand information pertaining to the development of MSMEs to the entrepreneurs for taking investment decisions. The MSME - Development Institute, Ludhiana has, therefore, revised and updated the Industrial Profile of Punjab.

This document contains details relating to human and material resources availability, existing industrial structure, institutional support infrastructure, incentives and concessions available for industrial development.

This report contains the MSME datas up to the year 2014-15 as for the year 2015-16 are not available presently with state govt of Punjab. However, after getting these datas by end of 2016, this state profile will be suitably revised.

It is hoped that the entrepreneurs will find the document useful for taking investment decisions, besides proving immensely helpful information to various agencies engaged in the promotion and development of industries in the state.

I am thankful to various government departments, industrial associations and other agencies for supplying information and data for compiling the document. Data has also been obtained from the websites of concerned department.

Place: Ludhiana **(VIJAY KUMAR)**

Dated: 20-06-2016 **DIRECTOR**

CHAPTER - 1

HISTORY OF PUNJAB
&
DEMOGRAPHIC PROFILE

A. HISTORY OF PUNJAB

Punjab also spelt Panjab, is a state in the northwest of the Republic of India, forming part of the larger Punjab region. The state is bordered by the Indian states of Himachal Pradesh to the east, Haryana to the south and southeast, Rajasthan to the southwest, and the Pakistani province of Punjab to the west. To the north it is bounded by the Indian state of Jammu and Kashmir. The state capital is located in Chandigarh, a Union Territory and also the capital of the neighboring state of Haryana.

After the partition of India in 1947, the Punjab province of British India was divided between India and Pakistan. The Indian Punjab was divided in 1966 with the formation of the new states of Haryana and Himachal Pradesh alongside the current state of Punjab.

Punjab is the only state in India with a majority Sikh population.

The term Punjab comprises two words: "punj meaning five and ab meaning water, thus the land of five rivers." The Greeks referred to Punjab as Pentapotamia, an inland delta of five converging rivers. In Avesta, the sacred text of Zoroastrians, the Punjab region is associated with the ancient hapta hindu or Sapta Sindhu, the Land of Seven Rivers. Historically, the Punjab region has been the gateway to the Indian Subcontinent for most foreign invaders.

Punjabi civilization is one of the oldest on earth, with its distinguished language, culture, food, attire, script, folklore, people, etc. Punjabi language has its originating source in Sanskrit (not Hindi or Urdu as many young Indian Pakistanis believe), i.e. the family of Indo-European group of languages which includes Persian and Latin. Punjab has always been land of great saints and fighters. In 450 B.C (2450 years ago) Alexander invaded Punjab and conquered a great Punjabi king named Porus whose kingdom was on the banks of river Chenab. He did not accepted defeat and asked Greek king to show him the same respect as kings. He was restored back to his throne by Alexander. Alexander returned to Greece right before crossing the river Beas, as his forces refused to fight.

B. ADMINISTRATIVE SET-UP

Punjab has 22 districts, each under the administrative control of a District Collector. The districts are subdivided into 82 Tehsils, which are under the administrative control of a Tehsildar. There are 86 sub Tehsils. The state has 146 Blocks, 143 Towns and 74 Cities. The blocks consist of revenue villages and the total number of villages in the state is 12,581. Apart from these there are 22 Zila Parishads, 159 Municipal Committees and 23 Improvement Trusts looking after 143 towns and 74 cities of Punjab.

Geographical area, number of villages and blocks in different districts of Punjab

S.No	Name of the Districts	Area in Sq. KM	Population (nos)	Literacy (%)
1.	Gurdaspur	3564	1621725	78.00
2.	Pathankot	*	676598	84.60
3.	Amritsar	2467	2490656	76.30
4.	Tarn Taran	2440	1119627	67.80
5.	Kapurthala	1632	815168	79.10
6.	Jalandhar	2632	2193590	82.50
7.	SBS Nagar	1267	612310	79.80
8.	Hoshiarpur	3365	1586625	84.60
9.	Rupnagar	1369	684627	82.20
10.	SAS Nagar	1093	994628	83.80
11.	Ludhiana	3767	3498739	82.20
12.	Firozpur	5303	1002874	68.90
13.	Fazilka	*	1026200	68.90
14.	Faridkot	1469	617508	69.60
15.	Shri Muktsar Sahib	2615	901896	65.80
16.	Moga	2216	995746	70.70
17.	Bathinda	3385	1388525	68.30
18.	Mansa	2171	769751	61.80
19.	Sangrur	3610	1655169	68.00
20.	Barnala	1410	595527	67.80
21.	Patiala	3218	1895686	75.30
22.	Fatehgarh sahib	1180	600163	79.40
		50362	**27743338**	**75.80**

*** Area of Pathankot and Fazilka are included in Gurdaspur and Ferozpur respectively**

C. SOILS

There are different classifications of soils of Punjab by different sources. The layman does not easily understand the soil taxonomy classification. What follows is the simple texture based soil classification on the basis of texture, climate, and topography and denudation process. The soils of Punjab have been classified into the following major types:

Flood Plain or Bet Soils Loamy Soils
Sandy Soils
Desert Soils
Kandi Soils
Sierozems
Grey- Brown Podzolic & Forest Soils
Sodic and Saline Soils

D. CLIMATE AND RAINFALL

The climate of Punjab is mainly influenced by the Himalayas in the north and the Thar Desert in the south and south-west. The periodic circulation of the moist air masses from the south-east and north-western sectors decides the occurrence of two wet periods each followed by a dry period. The presence of Himalayas in the north greatly modifies the temperature. As the distance from the Himalayas increases the temperature also increases, whereas rainfall decreases. In general, summers are hot and winters are cool.

The state experiences three distinct seasons, the hot season from April to June, the rainy season from July to September and the winter season extending from October to March. The highest temperature (between 44.2° and 44.7° C) in the state is recorded in the month of June and the lowest (between 0° and 2.2°C) in December. The mean annual rainfall is 705 mm, which varies from 1200 mm at Pathankot to less than 300 mm at Abohar, representing wettest and driest stations, respectively. The major part of the rainfall occurs between the months of July and September, and is essential for growing Kharif crops and subsequent sowing of Rabi crops. Hence the climate of the state is dominantly semi-arid and monsoon type. The soil moisture regimes are udic, ustic and aridic and the soil temperature regime is mainly hyper thermic.

Temperature: Day temperatures are more or less uniform over the plains except during winter and monsoon season. In general, the night temperature is lower in higher altitudes except during the post monsoon when they are more or less uniform. June is the hottest month with mean maximum temperature of 410 C in plains and with 2 to 50 lower temperatures at elevated places. Highest temperature recorded in the plains is 450. January is the coldest month with mean minimum temperature for the state on a whole is 5.50C, varying from 40 to 50C in the west to 60 to 70 C in the east. Both maximum and minimum temperature rise from January till June.

Rainfall: State receives about 648.8 mm of average annual rainfall. 75% of which is received during monsoon months from July to Sept. July and August are rainiest months. Rainfall in the state varies from 26 cm in extreme southwest parts to 72 cm in extreme southern parts and varies from 42 cm in southern parts to 13.5 cm over northern parts. Districts north of Gurdaspur constitute the area of maximum rainfall and districts southwest of Ferozepur receive minimum amount of rainfall. These districts represent lowest and highest rainfall in the state.

E. OVERVIEW OF STATE ECONOMY

Economic activities in state are showing structural changes over a period of time and primary sector is experiencing a decline in terms of share in State Domestic Product (SDP). GSDP of Punjab at constant prices (2004 - 05) has increased from Rs 1, 23,223 crore in 2007 - 08 to Rs 1, 48,069 crore in 2010 - 11. Overall economy of Punjab state has witnessed a growth rate of 5.85%, 6.29% and 6.81% during 2008-09, 2009-10 and 2010-11, respectively. At constant prices (2004 - 05), the contribution of primary sector consisting of agricultural and allied activities towards GSDP has increased from Rs 34,107 crore in 2007-08 to Rs 35,740 crore in 2010-11. This sector had shown growth of 2.05 and 3.01% during 2008-09 and 2010-11, respectively. However, its growth was recorded marginally negative during year 2009-10.

Secondary sector mainly consisting of manufacturing, construction and power sectors has increased at rate of 4.22%, 8.79% and 6.93% during 2008-09, 2009-10 and 2010-11, respectively. In absolute terms, contribution of this sector in GSDP increased from Rs 37,711 crore in 2007-08 to Rs 45,722 crore in 2010-11. The contribution of tertiary sector of state comprising trade, transport, banking, insurance and public administration towards GSDP had increased from Rs 51,405 crore in 2007- 08 to Rs 66,608 crore in 2010-11. Per annum increase in this sector was recorded at 9.57%, 8.62% and 8.88% percent during 2008-09, 2009-10 and 2010-11,

respectively. The share of agriculture in GSDP at constant prices (2004-05), which was 17.51% during 2007-08 declined to 15.47% during 2010-11. During the same period, the share of overall primary sector including livestock, forestry, and allied agricultural activities along with agriculture declined from 27.66% to 24.12%. On the other hand, over this period while the share of secondary sector in GSDP remained almost constant at 31%; that of tertiary sector increased from 41.72% to 44.98%. At current prices the Per Capita Income in Punjab state increased from Rs 49,380 in 2007-08 to Rs 68,998 in 2010-11. At constant prices (2004-05), the Per Capita Income which was Rs 39,567 during 2007-08 increased by 13.44% to Rs 44,885 in 2010-11.

F. POPULATION

Total population of Punjab, as per 2011 census is 2,77,43,338 of which male and female are 1,46,39,465 and 1,31,03,875 respectively. In 2001, total population was 24,358,999 in which males were 12,985,045, while females were 11,373,954. The total population growth in this decade was 13.73% while in previous decade it was 20.10%. The population of Punjab forms 2.29% of India in 2011. In 2001, the figure was 2.37%. Literacy rate in Punjab has seen upward trend and is 76.68% as per 2011 population census. Of that, male literacy stands at 81.48% while female literacy is at 71.34%. In 2001, literacy rate in Punjab stood at 69.65% of which male and female were 75.23% and 63.36% literate, respectively. With total geographical area of Punjab at 50,362 sq. km the population density of Punjab is 550 per sq km which is higher than national average of 382 per sq km. In 2001, density of Punjab was 484 per sq km, while national average at that time was 324 per sq km. Sex Ratio of Punjab is 893 i.e. for each 1000 male, which is below national average of 940. In 2001, the sex ratio of female was 876 per 1000 males in Punjab. From 2001 to 2011, the share of rural population in the total population of state declined from 66.08% to 62.51% where as that of urban population increased from 33.92% to 37.49%. During this time period the rural literacy rate increased from 64.7 per cent to 72.45 per cent and that of urban literacy from 79.1% to 83.70%. The details of population statistics is as follows:

Population	**2,77,43,338**
Population Growth	13.73
Population Density/sq. km	550
Male	1,46,39,465
Female	1,31,03,875
Sex Ratio	893
Percentage of total Population	2.29%
Literacy	75.80 %
Male Literacy	81.48%
Female Literacy	71.34%
Total Literate	18,988,611
Male Literate	10,626,788
Female Literate	8,361,823

CHAPTER 2

RESOURCES AVAILABLE

A. MINES MINERALS & ENERGY

The basic mover of Punjab economy is its resources basically energy and the minerals. However, there is a scarcity of minerals as well as energy resources. There are potential areas of petroleum and oil bearing. Adequate as well as dependable availability of energy and minerals are important to sustain growth in the economy of the state. The Renewable as well as non-renewable sources of energy are the 2 forms of energy.

The Renewable energy sources consist of hydro-power, bio-gas, fuel wood, solar, wind, tidal power and geo-thermal power. The Non-renewable energy sources can be got from coal, gas and oil. In the state of Punjab, there is no availability of oil wells and coal mines and therefore the state is basically dependent on hydel, thermal and solar power.

Because of the deficiency of energy and minerals, the Punjab resources have been growing exponentially in the field of agricultural products and therefore, the state is the major agro-economic sector in the country. The electricity form of Energy is the prominent input for the development of economy.

B. FISHERIES

Fisheries department Punjab is one of the oldest department in the Fisheries Department in the Country. The department was established in 1912 with the appointment of Mr. G.G.L. Howell I.C.S. as Director & Warden of Fisheries. Main activity of the Fisheries Department was to exploit and conserve Fisheries resources in the natural waters. The Punjab Fisheries Act was framed in 1914 under Fisheries Act, 1897. In addition to 5 major rivers in the State, there were large-stretches of waters and lakes available for the production of fish. The catching fish on licensing system was in vogue. Keeping in view, the economy in expenditure, after 1st World War, the department was merged with the Agriculture Department and the post of Director and Warden of Fisheries was reduced to the Warden of Fisheries. Mr. Donald became the Warden of Fisheries in 1915 and afterward Dr. Khan took over as Warden of Fisheries till partition of the country in 1947.

After independence the Fisheries Department was managed by two Governments i.e. Punjab Government and PEPSU Government. In PEPSU Fisheries Department was attached to Forest Department while in Punjab it was attached to Animal Husbandry Department. The activity of the Fisheries Department was to exploit and conserve the fishes in natural waters. In PEPSU

Government the fishing rights of the natural waters used to leased out to the contractor annually whereas in Punjab the system of licensing was followed.

It was in PEPSU that Mirror Carp and scale carp, species of fish were introduced and made to breed in the Fish Seed Farm, Patri Khan (Patiala) in 1952 for the first time in the country. In 1956 the Fisheries Department of PEPSU was merged with Fisheries Department of Punjab State. During the first five year plan, Scheme for the stocking of village ponds in the three districts i.e. Hoshiarpur, Gurdaspur and Amritsar was introduced for production of fish as food in the State.

The Punjab Fisheries Department was separated from Animal Husbandry Department in the year 1962 and started functioning as independent Department. Dr. D. Bhatia became the first Director and Warden of Fisheries. The activity of the Fisheries Department was extended for covering more pond water area under fish culture in addition to the conservation of fisheries in the natural water bodies. During the year 1958-59, five cold storage plants at Amritsar, Ludhiana, Sonipat, Patiala and Kapurthala were established for better preservation and storage of surplus fish under the cold chain scheme of Government of India. During the year 1961-62 induced breeding of Indian Major Carps was undertaken in the state for the first time in Northern India. The main activity of the department was to develop Fisheries in Bhakhra reservoir, stocking of Chandigarh lake, demonstration of fish culture in 400 hectare water area, setting up of 5 fish seed farms, providing training to fisheries personals, survey of culturable waters and survey fish seed sources of the State and establishment of Fisheries Research Station-cum-Aquarium. By the end of 1965-66. Punjab Fisheries Department was responsible for stocking of fast growing fishes in Gobindsagar. During the year 1966, under the reorganization of States Haryana and Himachal Pradesh States were carved out from the combined Punjab State. Numerous good fisheries resources such as GobindSagar, the river Yamuna became the part of Himachal Pradesh and Haryana. Sh. A.K.Kawatra became the Director & Warden of Fisheries of the Fisheries Department in 1964. Exploitation and Conservation of fisheries in natural water bodies was the main activity. New Fish seed farms at Amritsar, Kapurthala, Gurdaspur and Patiala were established to produce quality fish seed in the state. The scheme for the renovation of village ponds was introduced to increase the scope of social fisheries.

A break through for the actual development of social fisheries was made during this period. Ist Fish Farmer Development Agency in Gurdaspur district was established in the year 1976 to create a unique class of trained fish farmers. New fish seed farms to supply quality fish seed to the fish farmers at Katli(Ropar) and Haryiana (Hoshiarpur) under World Bank Scheme for development of

fisheries in Kandi Area. 2 New Fish seed farms at Dhandua (Shaheed Bhagat Singh Nagar) and Phaganmajra (Fatehgarh Sahib) were constructed under Central Scheme National Fish Seed Programme.

During the period 1983-91, 2 fish seed hatcheries were constructed and 6 more fish farmer development agencies one each in the district of Ropar, Hoshiarpur, Bhatinda, Kapurthala, Ferozepur and Faridkot were set-up covering the entire state under the fish farmers development agency programme. Thus by the end of 7th five year plan, 12 fish seed farms were in full operational form and the entire state had been brought under fish farmers development agency programme. The introduction of fish farmers development agency programme proved a big success and a step towards bringing blue revolution in the state and 12 fish farmer development agencies had been set-up one in each district of the state. New fisheries rules for the conservation of fisheries in natural waters were framed in 1985. Later on 4 more fish seed farms one each in the district Sangrur, Bhatinda, Ferozepur and Faridkot were set up thus raising the number of govt. fish seed farms to 14.

A State Fisheries Development Board has been set up in the State which has helped in boosting fish culture in the State. Special emphasis is being laid down to bring more and more saline affected water logged areas of the south-west districts viz Shri Mukatsar Sahib, Ferozepur, Mansa, Fazilka and Faridkot of the State under fish culture. Various check dams and small reservoirs in the State were notified during the years 1987(Dolbaha, Maili and January), 1997(Perch Dam, Mehngrowal, chohal and Saleran), 2006(RanjitSagar Dam), 2012(Patiarhi, Thana and Jainti) and 2013(Mirzapur and Siswan). There are 13 notified reservoirs in the State. Punjab State is having good inland resources comprising of 868 km of rivers, 11200 Km of Canals, 14510 acres of small water reservoirs and lakes. In addition to this there are 9318 village ponds covering an area of 32597 acres in various districts of the State. The fishing rights of the check dams/reservoirs are leased out for five years and those of rivers, canals etc are leased out annually in an open auction. The revenue generated from auction of fishing rights of these water bodies during the year 2014-15 is Rs.2, 08, 02,000/- which is increasing steadily every year.

C. HORTICULTURE RESOURCES

Geographical area of State is 5036 thousand hectares with estimated population of about 2.43 crores. The State has 22 districts and is classified as a sub-tropical region. There are three types of agro-climatic zones i.e. Arid-irrigated zone, Sub mountain Zone and Central Zone. The soil is mostly sandy loam with pH range 8-9. Therefore, it has good potential for cultivation of various

horticultural crops.

Potential of Horticulture in Punjab

Horticultural crops are being grown in the State in about 2.77 lakh hectares area with an annual production of 51.74 lakh tonnes. The horticulture sector is contributing significantly to GDP in agriculture of the State. Commodity-wise details are given below.

Crops	Area ('000ha)	Production ('000MTS)
Fruits	71.47	1409.86
Vegetables	178.00	3674.53
Flowers (Seed Production)	2.04	10.05
Spices & Aromatic crops	18.37	68.21
Flowers (fresh fruit)	7.12	1.29
TOTAL	**277.25**	**5173.64**

The Punjab State leads in citrus production among the fruit crops with the largest production of Kinnow. This crop occupies an area of 38837 ha contributing 64.20% of the total fruit production of Punjab. Likewise, Potato is the major leading vegetable crop of Punjab having an area of 84110 ha with 60.11 % the vegetable production. Apart from Kinnow, other fruit crops like Guava, Peach and Pear has significant area in the state. Strength of Horticulture Due to the sandy loam soil and agro climatic condition, Punjab State leads in Kinnow production. Based on the regional natural growing conditions state has established Estates of different fruit viz. Citrus Estate, Litchi Estate and Pear Estate for holistic development. End to end approach has been followed resulting in uplifting the socio economic status of the farmers. Besides this, it also leads in potato seed production and supply seed to the other states. State is self sufficient in planting material. There are 85 nurseries in public & private sector. Apart from this about 7 T.C units have been established which are supplying true to type planting material of Potato, Banana & Papaya etc.

Focus Crops of the State

Main fruit crops of the State are Kinnow, Peach, Pear & Guava. Main vegetable crop of the State is potato apart from the Pea, Cucurbits, & Carrot etc. Besides this seed production of flowers is also done which has great export potential. Flower seeds are exported to Holland. Among spices turmeric & garlic are grown. Emphasis will be given to promote high yielding and certified varieties. District-wise details of crops covered under National Horticulture Mission (NHM) are given below. Only the crops having potential are covered under NHM with end to end approach.

D. POWER GENERATION

PSPCL was incorporated as company on 16-04-2010 and was given the responsibility of operating and maintenance of State's own generating projects. The business of Generation of power of erstwhile PSEB was transferred to PSPCL.

Milestone

All the power Stations operated at their best plant load factor. Net Power generated during 2008-09 is 37,222 Million units, which is more than in 2006-07 by 2238 Million Units resulting of 6.40% increase in two years. The 1980 MW (3x660) Talwandi Sabo Power Project awarded to M/s Sterlite Energy Ltd. Mumbai on 4.7.08 and PPA signed on 1.9.08. Power purchase agreement with M/S GVK for installing 2x270 MW thermal power station at Goindwal Sahib signed on 26 May 2009. The foundation stone has been laid and the company has started the construction.4.76 lakh new connections including 61849 No. tube well connections were released during 2007-09. 24 Hrs. Urban pattern supply made available to 12428 villages and 6158 Deras/ Dhanies with 5 or more houses. To help SC & BPL consumers, free monthly consumption up to 200 units allowed for connected load of 1000 watts w.e.f. 12-10-06 instead of earlier 500 watts. Strict measures have been taken to reduce power theft. Disciplinary action taken against the erring employees and 5 numbers Anti Power Theft Police Stations have been set up. New technologies like electronic meters, remote control of transformers, remote meter reading and HVDS system for AP/ Industries introduced. 20.29 lakh meters out of 55.98 lakh General/ Industrial Consumers shifted out of their premises as on 31.3.09 to curb theft of energy. All these measures have helped in reducing losses by 4% from 23.92% (2006–07) to 19.91% (2008–09) / which resulted in substantial increase in revenue. During 2007-09, 62 numbers New Grid substations erected and capacity at 132 number Grid substations augmented besides addition of 1070 circuit km. Transmission line and 149 MVAR shunt capacitors to State Grid.

Power plants

- Guru Nanak Dev Thermal Plant, Bhatinda. It is a **460 MW** (110x2 + 120x2 MW) coal-based thermal power plant.
- Guru Gobind Singh Super Thermal Power Plant, Ropar. It is a **1260 MW** (6x210 MW) coal-based thermal power plant.
- Guru Hargobind Thermal Plant, Lehra Mohabbat, Bhatinda. It is a **920 MW** (2x210 MW, 2x250 MW) coal-based thermal power plant.

- Shanan Power House. It is a **110 MW** hydro power plant.
- Rajpura Thermal Power Plant. It is a **700 MW** thermal power plant.

E. IRRIGATION FACILITIES

After partition of the country, Indus water Treaty-1960 restricted India's rights of usage to only three Eastern rivers (Sutlej, Ravi and Beas), the three Western rivers (Indus, Chenab and Jhelum) were earmarked for exclusive usage of Pakistan. Punjab does have a very well developed and interlinked river system and widespread 14500 kms long Canal Systems.

These Systems are more than a century old and it is difficult to even imagine today to develop such a system of high level strength and utility. The estimated value at the present price level of Water Resource Infrastructure in the State is more than Rs.50, 000.00 crore. Punjab Irrigation Department was set up in the year 1849 and has a number of milestones worth mentioning. Construction of upper Bari Doab Canal from river Ravi at Madhopur, Sirhind Canal from river Sutlej at Ropar, Eastern Canal & Bikaner Canal from river Sutlej at Hussainiwala headwork's date back to pre-independence era. Post-independence period is still brighter when monumental multipurpose projects like Bhakra Dam on river Sutlej, Pong Dam on river Beas, Beas Sutlej Link Project and Ranjitsagar Dam on river Ravi have been constructed in addition to construction of Nangal Hydel Channel, Anandpur Sahib Hydel Channel, Bhakra Canal System, Mukerian Hydel Channel, Shah Nehan Barrage, Harike Barrage etc.

Water Resources Organization

Water Resources Organization is primarily entrusted with Research and Development activities relating to ground water and surface water. Various activities being undertaken by this organization are Ground Water monitoring, collection of ground water data, preparations of various maps to depict ground water level fluctuations, ground water investigations dynamic ground water estimation, collection and storage of rainfall data and surface water data, up-gradation of hydro meteorological and surface water observation sites in Punjab State. In addition to this, this organization also deals with framing of policy matters like ground water legislation, state water policy and other matters relating to water resources referred by Government from time to time. Water Resources Organization is regularly collecting, monitoring the ground water levels, rainfall data, preparing various maps and carrying out

Dynamic Ground Water Estimation Studies along with Surface Water Studies such as Feasibility Studies of Low Dams in Kandi area of Punjab State to provide irrigation facilities in this area. So far13 such low dams have been constructed and this has helped to improve the economic conditions of the people of this area.

Five Rivers of Punjab

Sutlej River originates from Rakshasthal Lake adjacent to Mount Kailash in Tibet. This 1450 kms long river flows west throughout Himalayas, Himachal Pradesh and Punjab, then enters Pakistani Punjab in southwest direction. Sutlej is the energy source of Himalayan area due to its fast flow and about 50% of 20, 000MW power potential of Himachal Pradesh is generated from the Sutlej Basin. Bhakra Dam is situated at Himachal Pradesh and Indian Punjab borders on Sutlej River which is further used widely for irrigation.

Beas River is one of the “five rivers” of Punjab which has its source in great Himalaya’s Rohtang Pass located at an elevation of 13100 feet in Himachal Pradesh. Beas River merges with Sutlej River after flowing a distance of nearly 300 miles at HarikePattan situated towards the south of Holy city of Amritsar to finally exhaust its stream into the Arabian Sea. The ancient name of Beas River in Indian and Greek literature was Vipasa and Arjiki respectively. The present Beas name may be the distortion of Vyas word related to the great sage Veda Vyas who was the main architect behind the great Hindu epic Mahabharata. This river is still called “Vipasa” in Himachal Pradesh by the academicians specially.

Ravi River comes out from the Himalaya’s range of Chamba district of Himachal Pradesh which flows nearly 725 kms distance. The second largest city of Pakistan after Karachi and capital of Pakistani Punjab, Lahore, is located near to Ravi River. This river is also the border river of India and Pakistan and flows in the northern side of Lahore city. The famous Indus civilization, Harappa, and one of its utmost cities was situated close to the earlier route of this River. The fruitful water of Ravi River is used both for irrigation and drinking purposes.

Chenab River also has its source in the Himalayan range district of Lahaul and Spiti of Himachal Pradesh state of India. The literary meaning of “Chenab” is “Moon River” and its ancient Indian name was also “Chandrabhaga”. The Chenab River enters Jammu region of the state of Jammu and Kashmir from Himachal Pradesh to reach further in Punjab plains. This river

has also been dammed for the purposes of irrigation and Hydroelectric generations and plays significant role for energy source and agriculture for both India and Pakistan. Pakistan may depend on more imported wheat if Indian side of Chenab River is blocked.

Jhelum River is located at the most western side of “five rivers” of Punjab. Jammu and Kashmir is the originating state of this river which passes through the district of Srinagar to enter the Jhelum district of Pakistani Punjab. The Jhelum River has 775 kms as a total flowing length. This river like Chenab has also been dammed for irrigation and hydroelectric generation purposes.

The land of “five rivers” (Pentapotamia in Greek) Punjab is one among the highly productive regions on Earth. The Punjab region is generally referred as the “food bowl” of both India and Pakistan. Wheat, Maize, Bajra, Barley, Paddy, Cotton and Sugar-cane are the chief crops of Punjab.

F. FLORA & FAUNA OF PUNJAB

The plains in the state of Punjab do not have any thick forests, the only available patches are of grass, small bush and shrubs. In the southern east part of state of Punjab and the areas of Hoshiarpur and Multan, the delicious mango fruit is grown. The other varieties of fruits that are grown in abundance here are orange, apple, fig, quince, almond, pomegranate, peach, mulberry, apricot and plum. The region that has major cultivation of rich flora and fauna can be majorly seen in the Shivalik ranges in the state of Punjab. Due to rich flora and fauna in the Shivalik region, it has been also termed as the zone of micro-endemic in India. The variety of angiosperms in the area includes 355 different types of herbs, trees of 70 different types; shrubs all in big and small sizes are of 70 different kinds, climbers of 19 different types can also be seen while 21 different types of twines can also be seen here. Other than angiosperms, other varieties available are 31 kinds of pteridophytes, bryophytes of 27 different kinds while a special species of gymnosperms named as Pinus Rox burghii can be seen in the ranges in state of Punjab. The fauna of the area is also rich that has birds of 396 different types, Lepidoptera is of 214 different kinds, 55 varieties of fish species can also be seen, reptiles of 20 different types are also available and mammals of 19 different kinds can be seen in these ranges. The state of Punjab is adorned with large wetland area, number of bird sanctuaries that houses different varieties of

numerous species of birds and a large number of zoological parks. Few of them to be named are wetland named as National wetland Hari-Ke-Pattan, the wetland of Kanjli, the wetlands of Kapurthala Sutlej, the number of wildlife sanctuaries include the Harika wildlife in district of Tarn Taran Sahib, Zoological Park in Ropar, ChhatbirBansar Garden located in SangrurAamKhasBagh situated in Sirhind, Amritsar's famous Ram Bagh, Shalimar Garden in Kapurthala and the famous Baradari Garden in city of Patiala.

G. AIRPORTS IN PUNJAB

The place of five rivers, Punjab is well developed state equipped with excellent airport system. Currently, this state is gaining significant importance because of its tourism concept. Reachability is the vital factor which enhances the tourism department in Punjab. Decently organized and well-positioned airports in Punjab saturate all the demands of an outstanding airport system. This airport system provides strong connection between different regions inside and outside Punjab. There are both international and domestic airports meeting the requirements of both external and internal travel. Both types of airports are fully equipped with ultra-modern amenities including dining spots, disabled care services, wheel chair access, juice corners, book stalls, money exchange counters, ATM centers and much more.

The state possesses five civil airdromes. Among them, the most significant and largest airport is Sri Guru Ram Dass Jee International Airport situated in Amritsar and also carries the credit of being the second busiest airport in North India following Delhi Airdrome.

Punjab also carries other airports like.

Bhatinda Airport
Pathankot Airport
Patiala Airport
Sahnewal Airport

Sri Guru Ram Dass Jee International Airport

International airport, Sri Guru Ram Dass Jee International Airport is located at 11 km northwest direction of Amritsar city. The airport is situated on Amritsar-Ajnala road, besides Raja Sansi village. The airport got its name from the founder and fourth Sikh guru of Amritsar, Sri Guru Ram Das Ji. This airport does its service in Amritsar, other states of Punjab, Jammu region in Jammu and Kashmir and also Himachal Pradesh. This is the largest aerodrome in Northern part

of India. The newly constructed terminal possesses double the space of old terminal. Thus, Amritsar city has become the central hub for Punjab tourism.

Presently, this airport manages 100 commercial airplanes in a week including domestic and international (Middle East and central Asia).

Bhatinda Airport

Bhatinda Airport in civil area at Bhisiana Air Force Station belongs to Indian Air Force. This domestic airport was constructed besides Virk Kalan village, about 20 km northwest of the region Bhatinda, Punjab.

This airport, Bhatinda Civil Enclave was constructed on 42 acres at the cost of Rs 25 crores by Airports Authority of India (AAI). This land can inhabit two ATR 42 aircraft at a time whereas the steel and glass building carries two conveyor belts, 30-seater security hold, 2 check-in counters and a VIP lounge. There is also parking facility for 25 cars.

Pathankot Airport

This military airport is situated at Pathankot district of Punjab. This Airdrome is mostly occupied by Indian Air Force. Squadron No. 108 and 26 operate from this airfield, maintained by No. 108 Wing Indian Air Force and also Western Air Command. IAF operates Mikoyan-Gurevich MIG-21, the fighter aircraft. The airport is highly secured because of the presence of several squadrons. This airport is located inside IAF cantonment.

Recently, they have initiated commercial flight operation connecting with Delhi and Kullu. This airport was inaugurated by Mr. Praful Kumar on November 21st 2006 at Pathankot. There is only domestic flight facility in Pathankot.

Patiala Airport

Patiala Aviation Complex or Patiala Airport is a civil airport located at Patiala, Punjab. This airport was constructed by Patiala Maharaja Dhiraj Bhupinder Singh during first decade of 20th century to operate his personal aircraft. After 1947, this aerodrome was taken by Indian Government and transformed into civil airport. Patiala Aviation Complex comprises of 5 hangars totally.

First Hangar serves Patiala Aviation Club (P.A.C), a flying training institute recognized by our Directorate General of Civil Aviation (D.G.C.A).

Second Hangar was originally Government controlled Engine and Instrument overhauling workshop followed by moderate usage of Northern India Flying Club (N.I.F.C).

Third Hangar functions as workshop of Punjab Aircraft Maintenance Engineering College (P.A.M.E.C) where students are trained to transform themselves as future engineers.

Fourth Hangar is allocated to National Cadet Crops (N.C.C) Air Wing.

Fifth hangar otherwise known as 'VIP Hangar' is employed for housing and also maintenance of V.I.P airplane possessed by Punjab Government.

Sahnewal Airport

Otherwise called as Ludhiana airport is a local aerodrome operating in Ludhiana city of Punjab. The airport is situated besides Sahnewal town, about 5 km (3.1 miles) in southeast direction of Ludhiana on Grand Trunk route. This airport covers 130 acres of land. Present arrival/departure halls in this airport can inhabit 40 passengers. There is manual baggage delivery. Air India operates Regional ATR flight three times a week.

H. LIVESTOCK & POULTRY RESOURCES

Livestock population has increased substantially in some states including Punjab. As per the Report of 19th Livestock Census conducted by Ministry of Agriculture, Govt. of India the states are Gujarat (15.36%), Uttar Pradesh (14.01%), Assam (10.77%), **Punjab (9.57%)** Bihar (8.56%); Sikkim (7.96%), Meghalaya (7.41%), and Chhattisgarh (4.34%). The Status of total number of livestock and poultry in Punjab as per 19th Census is available at **Annexure –I.**

I. FORESTRY RESOURCES

Punjab State was reorganized in the year 1966 and was left with only 1875 Sq. Km of recorded forest area in that year which has now increased to 3058 Sq. Km. i.e. about 6.1% of the State's Geographical area. Since the State has 84% of its Geographical area under agriculture with intense competition among different land-uses, there is limited scope to increase the area under forests except for bringing the available vacant wastelands/degraded lands under Tree Cover by application of Agroforestry and Social Forestry in the Farmlands and Institutional lands.

Punjab Forest & Wildlife Preservation Department is making efforts to increase the forest/tree cover in accordance with the National Forest Policy. Simultaneously, measures are being taken to protect & conserve the existing tree species and fauna to arrest and reverse ecological degradation. The area under Forest as in 2012-13 is 262 (000' hectares)

ACTIVITIES

Besides plantation of quality tree species and conservation of forests and wildlife, the Department undertakes scientific management of forest areas that helps to increase forest productivity, check soil erosion in hilly areas and improve ground water recharge.

AT CITIZENS SERVICE

The Department encourages farmers to take-up agro-forestry on their farm lands by providing technical guidance for plantation of tree species of economic importance. At times it cautions farmers against plantation of spurious variants of tree species available in the market. It also supplies saplings from forest nurseries at nominal rates to the public in general and farmers in particular.

The Department inculcates participatory approach amongst the rural poor living in the backward hill (Kandi) region of the State. To this end, in order to bring about an attitudinal change in department, its personnel have been trained in Joint Forest Management. Under this approach, the local stakeholders get a share of the forest produce in return for participating in forest development and protection. This would help in improving both the ecological condition of the forest and the economic condition of the people.

Under Punjab Apportionment of Tree Rules 2000, a benefit sharing mechanism has been devised for farmers who own their cultivable lands adjoining the Road Strip Forests. This mechanism entitles a farmer a reasonable proportion of revenue of the trees of Road Strip Forests in lieu of the responsibility rendered by the farmer by way of protection of those trees from theft or illicit felling or grazing or fire. The present status of area under forest, trees, wetlands etc is available at **Annexure –II**.

J. AGRICULTURE RESOURCES

Punjab holds place of pride among the Indian States for its outstanding achievements in agricultural development. The state has witnessed tremendous increase in the agricultural production during the Green Revolution period, mainly due to healthy mix of institutional and technological factors. Agrarian economy, consolidation of landholdings, reclamation of new agricultural lands, development of irrigation, use of biochemical inputs comprising high yielding variety seeds, chemical fertilizers, insecticides and mechanical inputs were among the important

factors which helped Punjab agriculture in making rapid strides. Dominating rural based political power with agricultural background provided favorable environment through thrust on rural and agricultural development. In this context, extension of irrigation network, rural link roads, rural electrification, establishment of focal points and agricultural market centers, efficient delivery system of credit and other agricultural inputs along with effective implementation of agricultural price policy for wheat and paddy played significant role in agriculture and rural development of state. Consequently, the Punjab state comprising only 1.54 per cent of the total geographical area of country now contributes 13-14 per cent towards the total food grain production of the country. State has earned a name of granary of India through contributing 35-40 per cent of rice and 40 to 75 per cent of wheat to the central pool in the past two decades.

Green Revolution sustained till the eighties, after which the agricultural production in the state showed the signs of stagnation. In nineties, the exalting cost of cultivation of major crops further aggravated the situation through squeezing the profitability of agriculture adversely affecting the socio-economic condition of farmers in the state. Thus, the agriculture in state has reached a plateau making it very hard to make further progress under available technologies and natural resource base. Its relative contribution in central pool of food grains both for wheat and paddy has also been declining during last few years, though, still being the largest contributor of wheat and second largest of paddy after Andhra Pradesh to central pool of the country. The emerging scene of Punjab agriculture is not free from some serious concerns. The state cropping pattern dominated by wheat-rice rotation is causing a serious damage to the state's natural resource base. Paddy in particular, a water-intensive crop is blamed for water-table depletion in tube-well irrigated areas and water-logging in canal irrigated areas. Increasing incidence of nutrient deficiency in the soils, including micronutrients and insect-pest attacks on the crops are also posing major threats to productivity, food grain production and sustainability of agriculture in the long run. Diversification of cropping pattern towards environment friendly high value crops with emphasis on quality output and promotion of agro-processing industry is the need of hour.

In the wake of new technology, Punjab agriculture made rapid progress since mid-sixties. This progress has been made possible by speedy adoption of improved seeds, irrigation and increased use of non-conventional inputs like fertilizers, machinery and pesticides supported by the natural resource base of state. The progress was spectacular in early phase due to rising agricultural productivity and expansion in gross cropped area. However, of late the progress in agricultural production has slowed down and signs of stagnation are visible.

Growth performance of Punjab Agriculture

The progress made by agriculture in Punjab state is unparalleled in the history of world agriculture. The state which was deficit in food at the time of independence had made rapid strides in agricultural development. Dominating agrarian structure, consolidation of holdings, development of irrigation infrastructure and hardworking peasantry led to the early progress. With adoption of new agricultural technology in mid-sixties backed with adequate agricultural policies, the state turned surplus in food grains and became a model of India's successful green revolution strategy. Punjab state with only 1.5 per cent geographical area of the country besides feeding its growing population has been contributing 35-40 per cent of rice and 45-70 per cent wheat to the central pool since last two decades. Selected agricultural growth indicators of state reveals that between 1971-72 and 2010-11 the production of wheat in state has gone up by about three times from 5.62 million tonnes to 16.5 million tonnes. Similarly, production of rice another major crop of state, during this period increased by about twelve times from 0.92 million tonnes to 10.8 million tonnes. Total food grain production over this period increased by more than three and half times. Yields of wheat, paddy and total food grains nearly doubled over this period of time. Besides, production of cotton, potato and milk during this period has been gone up by 1.76, 7.24 and 4.47 times, respectively. On the other hand, the production of pulses and oilseeds went down drastically over this period and that of sugarcane with some variations remained almost same. The reason of decline of production of these crops was the drastic decline of area under these crops due to encroachment by paddy and wheat. However, except pulses yields of these crops increased significantly during this time period. It has 10.26% production cotton of India, 19.5% of wheat of India and 11% of rice of India. The Ferozepur and Fazilka Districts are the highest wheat and rice producers of state. As far as the world is concerned, Punjab in India grows 2% of world's cotton and 2% of wheat along with 1% of rice. The largest crop cultivated here is wheat. Other prominent crops grown here are cotton, rice, sugarcane, maize, pearl millet, fruit and barley. Wheat and rice are double cropped in state of Punjab and rice stalks are being burned off across thousands of acres before wheat planting. The practice done across large area is wasteful and polluting. The fertilizer consumption per hectare here is 223.46 kg although it is 90 kg nationally. This state was honored with the National Productivity Award for extension services of agriculture for 10 years from 1991-92 to 1998-99 as well as from 2001-04. Recently, there has been productivity drop because of falling fertility level of soil. Reason may be because of too much of use of pesticides and fertilizers over years. Details of area under cultivation (A), production (P) & yield (Y) of major crops is available at **Annexure III.**

CHAPTER 3

INSTITUTIONAL
&
FINANCIAL SUPPORT
TO INDUSTRIES

A. INSTITUTIONAL SUPPORT TO INDUSTRIES

1. MSME - DEVELOPMENT INSTITUTE, LUDHIANA

The Micro, Small & Medium Enterprises Development Institute was set up at Ludhiana in 1956 (formerly known as SISI) to serve the erstwhile combined Punjab. At present, the Institute caters to the needs of micro, small & medium industries sector in the State of Punjab and U.T. Chandigarh. It is one of the 30 Institutes functioning all over the country under Ministry of MSME, Govt. of India. Its Headquarters is situated at Nirman Bhawan, New Delhi under the Additional Secretary & Development Commissioner, MSME. The main services provided by this institute are as below:

1. Technical counseling
2. Managerial counseling
3. Economic counseling
4. Management development training
5. Modernization
6. Skill development training
7. Marketing development to exporters
8. Ancillary development
9. Technology upgradation
10. Sub-contract exchange
11. Pollution control
12. Energy conservation
13. Testing facilities by chemical laboratory
14. Quality management
15. Common facility workshop (Engineering)
16. Vendor development
17. Export Counseling & Training
18. Cluster Development
19. Bar Coding
20. Product/Process oriented entrepreneurship development training

2 MSME TOOL ROOM, LUDHIANA

The Government of India established this MSME-Tool Room (previously known as Central Tool Room) at Ludhiana in the year 1980-81 with financial and technical collaboration of the Government of Federal Republic of Germany and the active support of the government of Punjab. The Centre has been providing services to the industry in general and MSME units' in particular viz. Tooling development, Rapid prototyping, Heat treatment, technical consultancy and Training; Short-Term courses address various topics in the field of Tool Engineering. Now they are mostly dealing with CNC programming and machining as well as CAD/CAM.

3 MSME TOOL ROOM, JALANDHAR

The Government of India has set up this Tool Room at Jalandhar, with UNDP assistance and active participation of Punjab Government. It was previously known as Central Institute of Hand Tools. The Institute was registered as Society in 1983. The Centre provides comprehensive support in the field of design and development of latest hand tools, consultancy and provides common facility services to MSME entrepreneurs.

4 MECHANICAL ENGINEERING RESEARCH & DEVELOPMENT ORGN.

The Central Mechanical Engineering Research Institute (CMERI) Durgapur under the aegis of the Council of Scientific & Industrial Research (CSIR) established a Centre in Ludhiana in 1965 known as MERADO to boost the Mechanical Engineering Research & Development in Punjab State. The Centre helps the industry in the following fields:

Design, development and standardization of industrial machinery and equipment, farm machinery and equipment and jigs, fixtures, tools and gauges, Testing of materials, components and products for hardness, tensile, compression, bending and impact strength, internal flaws by ultra-sonic, radiographic, magnetic and penetrate methods, measurement of coat thickness and crack depth, precision measurements of linear and angular dimensions, profiles and surface finish, calibration of instruments and gauges, performance testing of I. C. engines, pumps, sprayers etc. chemical analysis of materials, microstructure analysis and foundry sand testing.

Preparation of feasibility reports for light and medium industry, Industrial consultancy, expert guidance to foundry industry and precision jig boring etc.

5 BUREAU OF INDIAN STANDARDS (BIS)

The Bureau of Indian Standards has also set up an office at SCO 335-336, Sec 34-A, Chandigarh Ph. 0172-601640, to provide quality testing of industrial products of the State.

6 CENTRAL INSTITUTE OF PLASTICS ENGINEERING & TECHNOLOGY, AMRITSAR.

The Institute core activities are as under:

Technology Support Services (TSS) is an integral part of the activities of CIPET. TSS of CIPET renders quality services to its customers in Tooling, Precision Machining on CNC machines, Design and Manufacturing of Moulds for Plastics products, CAD/CAM/CAE services, Plastics product manufacturing through state of art Injection moulding machines, Blow moulding, PET Stretch blow moulding, Pipe and Film extrusion etc, Testing and quality control for Plastics Materials and products, Pre delivery inspection of plastics products like PVC and PE pipes, Woven sacks, Water storage tanks, Micro-irrigation plastics implements, Engineered bamboo boards, Polymer based composite doors etc. Project consultancy, technology consulting and assessment in the field of Plastics are the important service portfolio of TSS. CIPET has successfully

accomplished consulting assignments in India and abroad. CIPET has created complete infrastructure under one roof from testing stage to validation through testing. It offers TSS in the following fields:

1. Design CAD/ CAM/ CAE services
2. Tooling and Mould manufacturing for Plastics
3. Plastic product manufacturing
4. Plastic Testing and Quality Control
5. Calibration
6. Predelivery Inspection
7. Consultancy on Plastic projects

7. ELECTRONIC TEST & DEVELOPMENT CENTRE, MOHALI

This Centre has been set up to provide testing facilities to electronic industries besides developing the new techniques for the growth of electronics industries in the State.

8 NATIONAL INSTITUTE OF SECONDARY STEEL TECHNOLOGY, MANDI GOBINDGARH

This Institute is providing technical services to secondary steel sector by arranging seminars and workshops in the State and undertake consultative projects and pollution studies in the industry.

9 NATIONAL PRODUCTIVITY COUNCIL, CHANDIGARH

The Council is engaged in the improvement of productivity of SSI units in the State of Punjab.

10 CENTRAL SCIENTIFIC INSTRUMENTS ORGANISATION, CHANDIGARH

The Organization is equipped to carry out research, design and development in the electrical, electronic, electro-mechanical, optical and medical instruments of different natures and specifications.

11 CENTRAL LEATHER RESEARCH INSTITUTE, JALANDHAR

This Organization is providing testing facilities, training in leather manufacturing, leather garments, research and development and extension services including common facilities services.

12 WOOL GRADING & MARKETING CENTRE, LUDHIANA

The Centre was set up at Ludhiana in 1968 to purchase quality wool and to save the producers and the consumers from the exploitation of middlemen. The centre was established in collaboration and assistance of the United Nations Development Programme (UNDP).

13 INSTITUTE FOR AUTO PARTS TECHNOLOGY, LUDHIANA

In order to accede to the long awaited and persistent demand of Auto parts industry in the State, the

Punjab Government with the assistance of UNDP/UNIDO has established above institute. This institute is catering to the overall development and growth of auto parts industry in Punjab and neighboring States. This institute is providing the following facilities.

1. Testing and Evaluation
2. Design and Development
3. CAD/CAM
4. Precision Engineering
5. Heat Treatment
6. Total Quality Management
7. Constancy Service and Training

14 INSTITUTE FOR MACHINE TOOLS TECHNOLOGY, BATALA

Institute for Machine Tools Technology is a Punjab Government project assisted by the UNDP/UNIDO. It has come up on a plot area of 5.85 acres in the Industrial Focal Point of Industrial Town Batala. UNDP is contributing in the shape of imported latest plant and machinery, foreign experts, fellowship training of the staff at the renowned Institutes in India. The Institute primarily assists SSI units to upgrade their technological base and quality of their products in changing economic and technological environment. The capabilities are being established in the areas relating to TQM, testing & evaluation, design, prototype development, heat treatment, production process, CAD and R&D. The following facilities have been installed:

1. Tool Room and Manufacturing
2. Metallurgical Testing Lab
3. Metrology Lab
4. Heat Treatment

15 NORTHERN INDIA TECHNICAL CONSULTANCY ORGANISATION, CHANDIGARH

The organisation provides a package of total consultancy services covering all stages in a project implementation. It also provides consultancy services to the State Government Departments and other Financial Institutions.

16 PUNJAB SMALL INDUSTRIES & EXPORT CORPORATION LIMITED

Punjab Small Industries & Export Corporation limited was set in 1962 with the objective of supporting the individual in his endeavor to set up his own industrial unit. And help him and the small-scale industry to grow in Punjab. Today PSIEC Ltd. has grown to become a Rs. 2000 million profit making corporation, with committed workforce of about 1000 people. With

growing interests in infrastructure development, distribution of raw materials, promotion of exports from state, providing marketing assistance to small scale industries & show casing & developing handicrafts through training & marketing finished products. As PSIEC Ltd. moves hand in hand with the individual in the 21st century, it envisages a border role for itself in laying the infrastructure for the industrial development in Punjab.

Development of industrial infrastructure

PSIEC Ltd. has been acting as a Catalyst & springboard for all round development and promotion of industries in Punjab through the development of Industrial infrastructure, namely Industrial Focal Points (IFP) ranging between 50 acres to 500 acres of land at various towns and cities of Punjab. Therefore to facilitate the spirit of industry, PSIEC Ltd. provides self-sufficient industrial focal points. These industrial hubs, consist of developed plots equipped with power substations & distribution networks, telecommunication facilities, residential area for workers, common effluent treatment plants and parts for the clean environment.

PSIEC Ltd. has a distribution network of raw materials across Punjab. It is the handling agency of SAIL, MMTC, IISCO, HZL, HCL. It is also First State Corporation to get itself accredited by Joint Accreditation system of Australia and New Zealand (JAS-ANZ) under ISO-9001.

17 PUNJAB POLLUTION CONTROL BOARD, PATIALA

The Board has been entrusted the task of implementation of the Pollution Control Act in the State. Some of the obligations of industrial entrepreneurs towards the control of pollution are (a) Clearance of site from environmental angle. (b) Consent to establish an industry (N.O.C). For detailed information and guidance the entrepreneurs may contact the below noted regional offices of the board:

Address of the Office	**Districts Covered**	**Address of the Office**	**Districts Covered**
Environment Engineer Pb. Pollution Control Board 11-A, The Mall, Patiala.	Patiala, Ropar, Sangrur, Fatehgarh Sahib districts.	Environmental Engineer Pb. Pollution Control Board G.T. B. Nagar, Jalandhar	Jalandhar, Kapurthala, Hoshiarpur districts
Environmental Engineer-I Pb. Pollution Control Board, Gill Road, Ludhiana	Ludhiana City (within Municipal Limits excluding Focal Point)	Environmental Engineer Pb. Pollution Control Board 74, Chanderpuri, Taylor Rod, Amritsar	Gurdaspur, Amritsar districts
Environment Engineer-II	Ludhiana district (excluding Municipal	Environmental Engineer,	Bathinda, Faridkot, Ferozepur, Mansa,

Pb. Pollution Control Board Gill Road, Ludhiana	Limits of Ludhiana including Focal Point)	Pb. Pollution Control Board, Government Quality Marking Centre Bathinda	Moga, Muktsar districts

18 PUNJAB STATE ELECTRONIC DEVELOPMENT CORPORATION

This corporation is engaged in the promotion of electronics industry in the State of Punjab in public, joint and private sectors. It is also engaged in the creation of other infrastructure facilities necessary for the growth of electronics industries.

19 PUNJAB ENERGY DEVELOPMENT AGENCY, CHANDIGARH

The agency assists in installation of wind water pumps and small aero generators for battery charging and stand-alone power generator on subsidy.

20 SCIENCE & TECHNOLOGY ENTREPRENEURS PARK (STEP)

Science & Technology Entrepreneurs Park is a unique and dynamic entity, which provides space and environment for creative thinking/innovation, self-development, product development and venture development for Science and Technology Entrepreneurs.

21 GOVT. TANNING INSTITUTE, NAKODAR ROAD, JALANDHAR

This institute is providing Diploma in Tanning & Footwear Technology and Training for Artisans.

22 CENTRAL INSTITUTE OF POST-HARVEST ENGINEERING AND TECHNOLOGY (CIPHET)

Established in 1989 at Ludhiana and 1993 at Abohar (Punjab), Central Institute of Post-Harvest Engineering and Technology (CIPHET) is a nodal institute for lead researches in the area of post-harvest engineering and technology appropriate to the agricultural production catchments, agro-processing industries, pilot plants, industrial liaison, technology transfer and national and international cooperation to meet national needs.

23 NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (NIPER) S.A.S. NAGAR

NIPER is the first national level institute in pharmaceutical sciences with a proclaimed objective of becoming a Centre of excellence for advanced studies and research in pharmaceutical sciences. The Government of India has declared NIPER as an 'Institute of National Importance'. It is an autonomous body set up under the aegis of Ministry of Chemicals and Fertilizers, Government of India. The Institute is conceived to provide leadership in pharmaceutical sciences and related areas

not only within the country, but also to the countries in South East Asia, South Asia and Africa. NIPER is a member of Association of Indian Universities and Association of Commonwealth Universities.

24 BICYCLE & SEWING MACHINE RESEARCH & DEVELOPMENT CENTRE, LUDHIANA

Punjab Government has set up the Bicycle & Sewing Machine Research & Development Centre with assistance of UNDP & UNIDO in 1984. The centre is working to initiate and implement R&D in the field of Bicycle and Sewing machine for the upgradation of technology, improvement in quality and productivity. The centre is fully equipped to provide the following facilities to the Industry:

To design and develop new models of bicycle & Sewing Machines, Components, and accessories as per the latest trend.
To develop complete package of production technology for new product.
To develop special purpose testing and production machine, low cost semi-automatic and automatic machine for small-scale industry.
To develop special tooling, jigs, fixtures, and test rigs which are being used for producing quality goods for export.
To train manpower in small-scale industry for energy conservation and pollution control.
To give consultancy services for improvement in processing techniques, Low cost automations, Modernization of plant, effluent treatment and quality control.

25. CENTRAL POLLUTION CONTROL BOARD

Every person who is engaged in generation, processing, treatment, package, storage, transportation, use, collection, destruction, conversion, offering for sale, transfer or like of the hazardous waste as categorized in the Schedule- I & II (Annexure **IX)** shall make an application in Form I duly completed in all respects, to the Punjab Pollution Control Board for the grant of authorization for any of the said activities. Annexure –I may please be seen as

B. FINANCIAL SUPPORT

1. Banks

Punjab is well served by the banks. There are 66 commercial bank branches per 000' sq. km against the national average of 25 Bank branches per 000' sq. km. Details of Banking Network is as follows :

S. No.	Type of Bank	Rural Branches	Semi Urban	Urban	Total
1.	Public Sector Banks	1650	1344	1283	4277
2.	Private Sector Banks	519	362	248	1129
3.	Regional Rural Banks	305	49	19	373
4.	Cooperative banks	602	129	101	823
	Total	**3076**	**1875**	**1651**	**6602**

The Bank wise details is submitted at **Annexure -IV**

2. SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA

SIDBI is an apex institution established for promotion, financing and development of MSE industries. All projects in the Small-Scale sector are normally eligible for assistance in the form of refinance through primary lending institutions.

New Schemes

1. To enhance the export capabilities of SSI units.
2. Scheme for Marketing Assistance.
3. Infrastructure Development Scheme.
4. Scheme for acquisition of ISO 9000 certification.
5. Factoring Services and
6. Bills Re-discounting Scheme against inland supply bills of SSIs.

For availing the SIDBI schemes entrepreneurs are advised to contact

The Branch Manager
Small Industries Development Bank of India
SCO 145-146, 2nd Floor Sector-17C Email: namgial@sidbi.in
CHANDIGARH-160 017 Tel: 0172-5000652

The Deputy General Manager
Small Industries Development Bank of India
Ludhiana BO Email: paramjot@sidbi.in
SCO 16 & 17, First Floor, Feroze Gandhi Market Tel: (0161)-2775763, 9417220505
Ludhiana (Punjab) – 141001 Fax: (0161)-2774666

The Assistant General Manager
Small Industries Development Bank of India
Jalandhar Retail BO
Upper Ground Floor, Email : rcraina@sidbi.in
Hotel Centre point Building, BMC
Chowk Tel: (0181)-5061241, 9417293480
Jalandhar (Punjab) – 144001 Fax: (0181)-2225110

3. NATIONAL SMALL INDUSTRIES CORPORATION (NSIC)

The NSIC supplies machinery and equipment on hire purchase and lease basis to the small entrepreneurs. NSIC also provide finance for purchase of raw materials under the Government Purchase Programme. NSIC Ltd has introduced a Single Point Registration Scheme under which small scale units are provided with different marketing assistance like supply of tenders free of cost, exemption from payment of earnest money, waiver of security deposit and issue of competency certificate. The corporation has opened a Prototype Development and Training Centre at Rajpura

(Punjab). Besides development of Prototypes the Centre is providing training facilities in the trade of electronics, plastics and computer.

1. Supply of both indigenous and imported machines on lease/hire purchase terms. Special concessions have been introduced for units promoted by entrepreneurs from weaker sections of the society, women entrepreneurs, Ex-servicemen and those units located in the backward areas.
2. Marketing of small industry's products within the country.
3. Export of small industry's products and developing export worthiness of small-scale units.
4. Enlistment of competent units and facilitating their participation in Government Stores Purchase Programme.
5. Development Prototypes of machines, equipment and tools which are then passed on to small scale units for commercial production.
6. Technical Training in several industrial trades with a view to create technical culture in the young entrepreneurs.
7. Development and Upgradation of technology and implementation of modernization programme.
8. Supply and distribution of indigenous and imported raw materials.
9. Supply of both indigenous and imported machines on easy lease terms to existing units for diversification and modernisation.
10. Providing of common facilities through Prototyped Development & Training Centres.
11. Setting up of small-scale industries in other developing countries on turnkey basis.

For availing above incentives entrepreneurs are advised to contact

The Branch Manager,
National Small Industries Corporation Ltd.,
Guru Gobind Singh Tower,
G.T. Road, Ludhiana – 141003 (Punjab)
Tel: 0161-2531946
Email: boludh@nsic.co.in

The Branch Manager,
National Small Industries Corporation Ltd.,
SCO - 378, 2nd Floor,
Sector 32-D, Chandigarh (UT)
Tel: 0172-2620538
Email: bochd@nsic.co.in

The Branch Manager,
National Small Industries Corporation Ltd., Tanda Road, Jalandhar
E-mail : bojal@nsic.co.in
Ph. No. 0181-2292242

4. PUNJAB FINANCIAL CORPORATION

Punjab Financial Corporation, a premier lending Institution was set up in the year 1953 under the State Financial Corporation's Act 1951 to boost industrial growth in the State. It provides medium

and long-term loans to the entrepreneurs for setting up new industrial units under various schemes and for expansion/diversification, renovation, modernisation and rehabilitation of existing units. The Corporation also grants foreign exchange loans under IDA line of credit to entrepreneurs for setting up units for new industrial products, and for designing, expansion, diversification and modernisation. Assistance provided by Punjab Financial Corporation under different schemes is as following:

1. Special scheme for un-employed persons
2. Composite loan scheme (AVIC)
3. Single window scheme
4. Scheme for scheduled castes/scheduled tribes.
5. Scheme for physically handicapped entrepreneurs.
6. Scheme for ex-servicemen (SEMFEX).
7. Scheme for women entrepreneurs (Mahila Udhyam Nidhi scheme)
8. Scheme for quality control facilities
9. Equipment finance scheme
10. Special capital scheme
11. Modernisation scheme
12. Scheme for purchase of generating sets
13. Scheme for hotel industry
14. Scheme for rehabilitation of sick units
15. General scheme
16. Scheme for transport industry

<u>For availing financial assistance, entrepreneurs are advised to the branch managers</u>

1. Punjab Financial Corporation
   Kothi No. A-99
   Ranjeet Avenue
   Amritsar
2. Punjab Financial Corporation
   Building No. 1, 1st Floor
   Near Sandhu Hospital
   Dukhniwaran Road
   Patiala
3. Punjab Financial Corporation
   SCO 24, Phase 1,
   Near Indian Overseas
   Bank Mohali
4. Punjab Financial Corporation
   Opp. Sangrur Central Co-op. Bank Ltd Bamba Ghar Road, Sangrur
5. Punjab Financial Corporation
   DIC, Malwal Road,
   Ferozepur

6. Punjab Financial Corporation
   Above Bank of India
   Main Garha
   Road Jalandhar
7. Punjab Financial Corporation
   B-5, Civil Lines
   Bathinda
8. Punjab Financial Corporation
   SCO- 6, Indl. Dev. Colony
   Jalandhar Road,
   Hoshiarpur
9. Punjab Financial Corporation
   Bank of Maharashtra, Link
   Road, Ludhiana

5. PUNJAB STATE INDUSTRIAL DEVELOPMENT CORPORATION, CHANDIGARH

The PSIDC was set up in 1966 to promote medium and large-scale industries in the State. The corporation acts as an institutional entrepreneur for developing new industries in these sectors. The corporation provides financial assistance to the projects promoted by private entrepreneurs in the State in the form of direct participation and under-writing of equity and preference share capital. The corporation also bridges the gaps in term lending in participation with other financial institutions. Some important projects promoted by the Corporation are: manufacturing of tractors, dry cell batteries, television sets, leather & footwear, steel billets, oxygen gas, food processing etc.

CHAPTER - 4

INDUSTRIES IN PUNJAB
&
POLICY MEASURES

A PROCEDURE FOR THE ALLOTMENT OF INDUSTRIAL PLOTS

The allotment of developed plots/land in the existing and coming up Industrial Focal Points, Growth Centres, Industrial. Estates etc., developed by any agency of the State Govt. is notified as follows:

Export obligation undertaken:

1.	**Reservation for various categories**	
	Allotment under Off the Shelf?	a. All pieces of land above 2 acres b. 30% of plots of 2500 sq. Yds. and above up to 2 acres c. 15% of plots from 1000 Sq. Yds. but less than 2500 sq. Yds.
	Non-Resident Indians and for Export-oriented Industry Scheduled Castes Backward Classes Ex-servicemen or War Widows Riot affected victims/ Sikhs migrants.	10% 20% 05% 05% .02%
	Provided further that in case sufficient eligible candidates are not available in any of the above reserved categories, the un-allotted plots failing under the concerned reserved category shall be treated as unreserved and allotted in the General category.	
2.	**Procedure for inviting application**	
	Applications, except for the allotments under Off-the- Self Scheme, shall be invited by PSIEC/concerned developing agency through Press Advertisement. The concerned developing Agency shall undertake the entire secretariat work, such as Scrutiny of Applications, Placing proposals before respective sub-groups/committees. The concerned developing Agency shall as far as possible endeavor to finalize the process of allotment within 90 days of the closing date of receipt of applications.	
3.	**Earnest Money**	
	Earnest money will be submitted along with application @ 10% of the cost of plot.	
4.	**Scrutiny of Applications**	
a.	**Nature of Industry**	**Sub Group headed by**
	Light Engg. & other Industries.	Industrial Adviser-cum-Addl. Director of Industries Managing Director, PSEDPCL
	Electronic Industries including	

	Information Technology	Addl. Managing Director, PSIDC
	Textile & Hosiery Industries	Addl. Director, (Admn.)
	Chemical & Pharmaceutical Industries	Directorate of Industries
	Agro Industries	M.D. PAIC
	The above Sub-groups shall comprise of the following other members:-	
	1. Representative of MD/PFC	
	2. Representative of MD/PSIDC	
	3. Representative of NITCON	
	4. Representative of PPCB	
	5. Representative of MD/PSIEC	
	6. Nominee of DI/GM, DIC concerned	
	7. Estate Officer of the concerned Developing Agency Convenor	
b.	**The Sub-Groups shall examine the received applications, keeping in view the following parameters**:-	
	1. Viability of Project	
	2. Whether the Project is in thrust areas	
	3.. Impact on environment	
	4. Technology involved	
	5. Export obligation undertaken	
	6. Value addition	
	7. Scope of employment	
	8. Import substitution	
	9. Financial resourcefulness;	
	10. Qualification, experience and general suitability.	
c.	The Sub-Group/s shall undertake preliminary scrutiny and make their recommendations to Allotment Committee having regard to requirement of land and eligibility of the applicants.	
5.	**Allotment Committee**	
a.	Allotment of plots upto 2 acres, excepting under Off-the-Shell Scheme be made by Allotment committee consisting of the following :-	
	Director of Industries, Punjab	Chairman
	Managing Director/PSIEC	
	Managing Director/PSIDC	
	Managing Director/PFC	
	Chairman/Member Secretary/PPCB	
	Heads of Sub-Groups	
	Industrial Advisor-cum-Additional Director Industries	
	Nominee of the developing Agency	Member Secretary

b.	The recommendations of the Sub-Group/s shall be placed before the Allotment Committee for consideration and making allotments.
c.	The decision of the Allotment Committee on applications for allotment of plots shall be final and no appeal shall lie against it. The Allotment Committee would meet as and when required and devise its own procedure for conducting the business.
6	**Issuance of Letter Intend**
a.	The developing Agency will issue letter of Intent (LOI) to the allottee/s, incorporating therein among other conditions that the LOI holder will be required to get the project appraised regarding techno-economic feasibility from financial institution, scheduled commercial banks or other public sector consultants and submit the appraisal report to developing Agency within three months of issue of LOI.
b.	The developing agency will hand over possession of land to the Allottee on submission of appraisal report.
c .	The LOI holder will be required to deposit additional 30% of the cost of plot within 45 days from the date of issue of LOI. The allottee will be required to complete the following additional formalities within a period of Twelve Months from the date of Possession:-
	1. Obtain provisional registration of his unit from the concerned GM/DIC or SIA registration as applicable.
	2. Submit Building Plans/Drawings for scrutiny.
	3. Obtain consent of financial institution/bank to advance loan for the proposed project or In case of self financing, submit proof of own sources.
	4. Obtain NOC/Consent to establish from PPCB
	5. Make application for power/electric connection.
d.	In case an entrepreneur fails to complete the above formalities within the prescribed period of Twelve Months, he can apply, for seeking extension of LOI for additional six months, to the developing Agency, provided, he has taken partial effect steps.
the e .	However, another special extension of LOI for six months can be considered by developing Agency upon payment of extension fee @2.5% of the cost of plot in exceptional cases. No further extension shall be allowed under any circumstances.
7.	**Payment towards cost of Plots**
a .	The LOI holder shall be required to deposit the balance 60% cost of the plot in six equal half yearly instalments along with applicable interest etc. as may be decided by the developing Agency, 10% rebate shall be given in case of lump sum payment by LOI holder.
b.	In the event of failure to complete the conditions of LOI or payment of due instalments within stipulated/ extended period, LOI shall be deemed to have been withdrawn/lapsed. In such an eventuality, the amount deposited by the LOI holder towards earnest money and extension fee, if any, shall stand forfeited and amount over the above thereof shall be refunded to the entrepreneur, on which no interest shall be payable.
8.	**Allotment of Plots under ?Off-the-Shell Scheme?**
a.	The applications under Off-the-Shell Scheme would be received in Udyog Sahayak and the entire secretarial work such as scrutiny of applications, placing the proposal before the sub-committee and allotment committee shall be done by the Udyog Sahayak.

b.	Earnest money will be submitted along with application @20% of the cost of the plot or Rs. 10 lac whichever is less.	
c.	The applications scrutinized by Udyog Sahayak shall be placed before a Sub-committee comprising of the following members:-	
	Director of Industries & Commerce	Chairman
	Chief Town Planner	Member
	Chief Architect	Member
	MD/PSIEC	Member
	MD/PSIDC	Member
	Member Secretary, Punjab Pollution Control Board.	Member
	Chief Coordinator, Udyog Sahayak	Convener
	Whenever an application has been sponsored by a particular Corporation/Agency, the representative of that Corporation/Agency may be called to the Committee as a special invitee.	
d.	The Sub-committee will examine the applications keeping in view the parameters as given under clause 4.2 Preference will, however be given to the Joint Sector projects or those who have signed MOU with Corporations.	
e.	The Sub-Committee will also make an assessment of the land requirement of the applicant based on the project and building plans to be submitted along with application.	
f.	The recommendations of the Sub-committee will be placed before the Committee under the Chairmanship of Chief Secretary to Government, Punjab with the following members.	
	1. Principal Secretary to Chief Minister, Punjab	
	2. Principal Secretary Industries & Commerce	
	3. Principal Secretary, Environment	
	4. Principal Secretary, Power	
	5. Principal Secretary, Housing & Urban Development	
	6. Principal Secretary, Labour	
	7. MD, PSIEC/concerned developing agency	
	8. Director of Industries & Commerce-Convener.	
g.	The Allotment committee may coop other Administrative Secretaries/State Government Officials as and when required.	
h .	The Allotment of Plots shall be subject to following conditions: 1. After approval of the Committee, an offer of allotment shall be issued by the concerned agency in favor of applicant. The applicant in case of pieces of land above 2 acres shall be required to deposit balance 80% of the cost of plot in 60 days while in case of plots of 2 acres and less he/she shall be required to deposit 30% of the remaining cost of plot within 30 days and balance 50% in 2 half yearly instalments. 2. After the applicant has made full payment, Letter of Intent containing among others the following conditions for compliance within 4 months, will be issued in his/her favor.	

	a. LOI-holder shall get the project appraised regarding techno-economic feasibility from financial institutions/ scheduled commercial banks or other public sector consultants and submit the appraisal report. This condition may be waived off by the Allotment Committee in exceptional circumstances after recording the reasons. b. LOI holder shall obtain NOC/Consent to establish in principal from Pollution Control Board. c. LOI holder shall obtain provisional registration of his unit from the concerned General Manager, District Industries Centre or SIA registration as applicable. 3. The applicant shall be required to take following steps within one year from the date of getting possession of land: a. Start of construction of building and expenditure incurred up to 30% of the cost of civil work as projected in the project report. b. Place firm order for the purchase of plant and machinery. c. Obtain NOC/Consent to establish from Pollution Control Board and also make application for power connection. d. Get the loan application appraised from the financial institution or submit proof of financial resources of the Project.
8.9	On completion of one year from the date of getting possession of land, the LOI holder will submit a report to the developing agency about the compliance of the effective steps which were required to be taken by him. In cases where partial effective steps have been taken the LOI holder may seek instance and on payment of extension fee of 1% of the cost of plot for another automatically stands lapsed. The LOI shall automatically stand lapsed in case the allottee fails to submit the compliance report or to seek extension after one year from the date of getting possession of land. Consequent upon lapse of LOI the earnest money shall stand forfeited and the remaining cost of plot shall be refunded to the applicant. No interest will be payable on refundable amount.
9.	**Issuance of regular allotment letter.** In the cases, where the LOI holder succeeds in completing the required formalities of LoI within admissible extended time period, regular Letter of Allotment will be issued by the concerned developing Agency.
10.	**Project Implementation Period**
10.1	The allottee shall ensure to commence commercial production after completing construction of factory building, within an overall period of three years from the date of issue of possession.
10.2	However, under exceptional circumstances, the allottee can apply to the allotting Agency seeking extension in time period of commencement of commercial production for additional six months upon payment of extension fee @ 6,.5% of the cost of plot.

10.3	In the event of failure of the allottee to achieve commercial production within admissible/ extended period, the allotment of plot shall be cancelled / resumed. Upon cancellation/resumption 15% of the cost of plot upto 2 acres and 25% for those measuring above 2 acres shall be forfeited by the allotting agency and amount over and above there of shall be refunded to the applicant. No interest shall be paid on the refundable amount.
10.4	However, in the cases of unit(s) having, fixed capital investment of Rupees One Hundred Crore or more, extension of LOI and period of commencement of commercial production shall be considered and allowed on merits of the case by Secretary industries & Commerce, Government of Punjab.
11.	**Transfer of Plots**
11.1	No transfer of LOI shall be admissible under any circumstances.
11.2	However, transfer of plots, exception Off-the-Shelf, allotted under this policy shall be allowed by the developing Agency, if the unit of the allottee has remained in commercial production as envisaged in the project at least for period of two years. The allottee shall be required to produce evidence of having gone into production in the shape of Permanent SSI Registration Certificate issued by GM/DIC concerned or proof of production issued by any other Government Agency.

B. MAJOR MULTINATIONAL CORPORATIONS IN PUNJAB:

- Nestle
- Glaxo Smithkline
- Pepsico
- GEC , USA
- Ollivetti , Italy
- Nippon
- Hitachi
- Fujitsu
- OKI of Japan
- Kenwood
- Motorola
- Dumax (M/S Vinton Healthcare Pvt. Ltd.)

C. ENHANCEMENT OF COMPETITIVENESS OF THE EXISTING INDUSTRY

(Initiatives from Industries Department, Government of Punjab)

INCENTIVES FOR LARGE MANUFACTURING SECTOR UNITS

2.0 VAT and CST Incentives

2.1 VAT & CST incentives for new Units with Fixed Capital Investment of above Rs.25cr:

2.1.1 VAT & CST incentive shall be available to new units with Fixed Capital Investment (FCI) of above Rs.25cr, as shown in Table-2.1. The quantum of incentive would be available on the VAT and CST payable per annum.

2.1.2 The incentive shall be available during Eligible Period, as given in Table 2.6, from the Date of Approval of the unit.

2.1.3 This incentive shall commence only after the Date of Production.

2.1.4 Maximum cumulative quantum of incentive for Eligible Period is given in Table -1 :

Table -1

Eligible Area*	**FCI above Rs.25cr to Rs.100cr**	**FCI above Rs.100 cr to Rs.500cr**	**FCI above Rs.500cr**
Zone I	60% VAT +75% CST	70%VAT +75%CST	80%VAT +75%CST
Maximum cumulative quantum of incentive	60% of FCI	70% of FCI	80% of FCI
Zone II	30% VAT+ 50% CST	35% VAT+ 50% CST	40% VAT+ 50% CST
Maximum cumulative quantum of incentive	30% of FCI	35% of FCI	40% of FCI
Eligibility Period in Years	10	11	13

* Zones are defined in Table-7

2.2VAT & CST incentive for Units with Fixed Capital Investment above Rs.10cr to Rs.25cr:

2.2.1 VAT& CST incentive shall be available to new units, having Fixed Capital Investment (FCI) above Rs.10cr to Rs.25cr, which have obtained a term loan from a Financial Institution/Bank, as shown in Table 2.2. The quantum of incentive would be available on the VAT and CST payable per annum.

2.2.2 The incentive shall be available during Eligible Period, as given in Table 2.6, from the Date of Approval of the unit.

2.2.3 This incentive shall commence only after the Date of Production.

2.2.4 Maximum Cumulative Quantum of Incentive for Eligible Period is given in Table -2:

Table -2

Eligible Area*	FCI above Rs.10cr to Rs. 25cr	Maximum cumulative quantum of incentive	Eligible Period from Date of Approval
Zone I	50% VAT+ 75% CST	50% of FCI	8 Years
Zone II	25% VAT+ 50% CST	25% of FCI	8 Years

* Zones are defined in Table-7

2.3 Electricity Duty Incentive:

2.3.1 Exemption from payment of Electricity Duty on Power, including Captive Power consumed by the same unit or exported to PSPCL shall be available to new units, as shown in Table-2.3, with the proviso that any contributions made out of the Electricity Duty levied, such as those deposited in the Social Security Fund, shall not be exempted.

2.3.2 This incentive shall be available during the Eligible period of availing incentives, as shown in Table-2.6.

2.3.3 This incentive shall commence only after the Date of Production.

2.3.4 Electricity Duty exemption is not available on Captive Power exported to entities other than PSPCL.

2.3.5 Maximum Cumulative Quantum of Incentive for Eligible Period is given in Table -3:

Table -3

Eligible Area*	FCI above Rs.10cr	Maximum Cumulative Quantum of ED Incentive for Eligible Period
Zone I	100%	100% of FCI
Zone II	50%	50% of FCI

* Zones are defined in Table-7

2.4 Stamp Duty Incentive:

2.4.1 Exemption from payment of Stamp duty as levied in Schedule 1-A of Indian Stamp Duty Act on purchase/lease of land is available from the date of submission of application with Nodal

Agency, as shown in Table 2.4, with the proviso that any other charges such as Social Security Fund as levied in schedule-1-B of the Act shall not be exempted.

2.4.2 This exemption shall be available for real estate purchased/leased within a period of 3 years from Date of Approval.

2.4.3 Refund of Stamp duty shall be allowed for all real estate which has been purchased/leased upto 3 years prior to the date of submission of application form, by the same entity. The refund, however, will be given only after the Date of Production.

2.4.4 The quantum of land shall be determined as per the project report appraised by the Financial Institution/Bank.

Table-4

Eligible Area*	**FCI above Rs.10cr**
Zone I	100%
Zone II	50%

* Zones are defined in Table-7

2.5 Property Tax Incentive:

2.5.1 Exemption from payment of Property Tax shall be available during the Eligible Period of availing incentives, as shown in Table-5.

2.5.2 Projects whose real estate subsequently falls, on extension of limits, in Municipal Corporation, Municipal Council or Notified Area Committee, shall also remain exempt from payment of Property Tax during the balance Eligible Period of availing incentives, as shown in Table- 6.

2.5.3 This incentive shall commence only after the Date of Production.

Table- 5

Eligible Area*	**FCI above Rs.10cr**
Zone I	100%
Zone II	50%

* Zones are defined in Table-7

2.6 Period of Incentives:

2.6.1 Eligible Period of availing VAT, CST, Electricity Duty and Property Tax incentives shall be as shown in Table-6.

2.6.2 Eligible Period of availing incentives shall be determined from the Date of Approval.

Table-6: Period of Incentives (for VAT, CST, Electricity Duty & Property Tax exemption.)

	FCI above Rs.10cr to 25cr	**FCI above Rs.25cr to 100cr**	**FCI above Rs.100cr to 500cr**	**FCI above Rs.500cr**
Eligible Period for availing incentives	8 Years	10 Years	11 Years	13 Years

2.7 Investment Zones:

Units shall be eligible for incentives as per the Zones given in Table-7

Table-7

Zones	**Districts & Other Areas**
Zone I:	Fazilka, Ferozepur, Tarn Taran, Amritsar, Gurdaspur, Pathankot, Hoshiarpur, Sangrur, Barnala, Mansa, Moga, Bathinda, Sri Muktsar Sahib and Faridkot. All approved Industrial Parks, Industrial Focal Points and Industrial Estates in all districts of the State.
Zones	Districts & Other Areas

INCENTIVES FOR SMALL AND MEDIUM UNITS

3.1 VAT and CST incentive for Units with Fixed Capital Investment (FCI) from Rs.1.0 cr to Rs.10 cr:

3.1.1 VAT and CST incentive shall be available to new Small & Medium Units, having FCI from Rs.1 cr to Rs.10 cr., which have obtained term loan from a Financial Institution/Bank, as shown in Table 3.1. The quantum of incentive would be available on VAT and CST payable per annum.

3.1.2 The incentive shall be available only to units setup in Industrial Focal Points, Industrial Estates and approved Industrial Parks.

3.1.3 The incentive would be available for a maximum period of 7 years from the Date of Approval.

3.1.4 This incentive shall commence only after the Date of Production.

3.1.5 Maximum Cumulative Quantum of Incentive for Eligible Period is as per Table 3.1.

Table 3.1.

Eligible Area	FCI Rs.1 cr to Rs.10 cr	Eligible Period from Date of Approval	Maximum cumulative quantum of incentive
Within approved Industrial Focal Points, Industrial Estates, Industrial Parks	50% VAT + 75% CST	7 Years	50% of FCI

3.2 Electricity Duty Incentive:

3.2.1 100% exemption from payment of Electricity Duty on Power, including Captive Power consumed by the same unit or exported to PSPCL, shall be available to new units, as shown in Table-3.2, with the proviso that any contributions made out of the Electricity Duty levied, such as those deposited in the Social Security Fund, shall not be exempted.

3.2.2 This incentive would be available for a maximum period of 7 years from the Date of Approval.

3.2.3 This incentive shall commence only after the Date of Production.

3.2.4 Electricity Duty exemption is not available on Captive Power generated and sold.

3.2.5 Maximum Cumulative Quantum of Incentive for Eligible Period is as per Table 3.2.

Eligible Area	FCI Rs.1 cr to Rs.10 cr	Eligible Period from Date of Approval	Maximum cumulative quantum of incentive
Within approved Industrial Focal Points, Industrial Estates, Industrial Parks	100% of ED	7 Years	100% of FCI

3.3 Stamp Duty Incentive:

3.3.1 100% exemption from payment of Stamp duty as levied in Schedule 1-A of Indian Stamp Duty Act on purchase/lease of land is available from the date of submission of application with

Nodal Agency, with the proviso that any other charges such as Social Security Fund as levied in schedule-1-B of the Act shall not be exempted.

3.3.2 This exemption shall be available for real estate purchased/leased within a period of 3 years from Date of Approval.

3.3.3 Refund of Stamp duty shall be allowed for all real estate which has been purchased/leased up to 3 years prior to the date of submission of application form, by the same entity. The refund, however, will be given only after the Date of Production.

3.3.4 The quantum of land shall be determined as per the project report appraised by the Financial Institution/Bank.

3.3.5 The incentive shall be available only to units setup in Industrial Focal Points, Industrial Estates and approved Industrial Parks.

3.4 Property Tax Incentive:

3.4.1 100% exemption from payment of Property Tax shall be available during the Eligible Period of 7 years from the Date of Approval.

3.4.2 Projects whose real estate subsequently falls, on extension of limits, in Municipal Corporation, Municipal Council or Notified Area Committee, shall also remain exempt from payment of Property Tax during the balance Eligible Period of 7 years.

3.4.3 This incentive shall commence only after the Date of Production.

3.4.4 The incentive shall be available only to units setup in Industrial Focal Points, Industrial Estates and approved Industrial Parks.

3.5 Conditions:

3.5.1. These incentives shall be applicable to new Small & Medium manufacturing Units with investment from Rs.1.0 cr to Rs.10 cr.

3.5.2 The incentives under this Chapter shall be available only to units set up in Industrial Focal Points, Industrial Estates and approved Industrial Parks.

3.5.3 These incentives shall be available only to Projects which have obtained term loan from a Financial Institution/Bank.

EXISTING CLUSTERS IN THE STATE

District	Existing Industrial Clusters
Amritsar	Powerloom Weaving, Wood & Machine Screws, Agricultural implements, Paints & Varnishes and Dyes, Electric fans, Pharmaceuticals, Printing machinery, Textiles, Chemicals, Soap, Acids, Handicraft & Traditional food items like Pickles, Papad and Sweet Meals
Barnala	Agriculture implements, Food and agro products
Bathinda	Cotton ginning and processing, Pharmaceutical and Flour mills
Fridkot	Agricultural implements, Cottonseed oil and Rice bran oil
Fatehgarh Sahib	Steel Re-rolling mills, C I Pump parts, Sewing machine parts and Truck body building.
Firozepur	Cotton Ginning & processing, Grey board, Flourmills, Agricultural implements and Millboard.
Gurdaspur	Agricultural implements, Conduit pipes, Machine tools, Soap & chemical products, C.I. castings and Brassware.
Hoshiarpur	Rosin & Turpentine oil, Paints & Varnish, Sugar, Agricultural implements, Pressure cookers, Paper, Paperboard and Handicraft.
Jalandhar	Surgical instruments, Sports Goods, Hand tools, Automobile parts, Cocks & valves, Pipe fittings, Bus body building, Leather tanneries, Ball bearings, Publishing, Switch & switch-gears and Rubber goods.
Kapurthala	Agricultural implements, Pressure cookers, Fans, Wood & Machine screws, Electrical goods, Rice Mills, Rubber goods, Bolts & Nuts and Diesel engines.
Ludhiana	Bicycles & bicycle parts, Automobile parts, Hosiery goods, Sewing machine & parts, Home appliances, Machine tools, Readymade garments, Hosiery needles, Rubber goods, Label (Metal & Cotton), Chemicals goods, Oil engines, Agricultural implements, Electronic goods, Tractor parts, Cycle tyres / tubes, Plastic goods, Hand Tools, Builders' Hardware and Fasteners.
Mansa	Agricultural implements and Cotton Spinning
Moga	Agricultural implements, Milk products and Truck body building.
Mukatsar	Cotton Yarn, Rice Bran Oil and Paper
Nawanshahar	Light Commercial Vehicles, Pharmaceutical, Yarn and Sugar.
Patiala	Automobile parts, Sewing machine parts, Enamelled copper wire, Electrical goods, Bakery machinery, Cutting tools, Biscuits, Shoes and Handicraft.
Rup Nagar	Agricultural implements, Pharmaceuticals, Tractor & Parts, Electronic components and Electrical components.

District	Existing Industrial Clusters
S.A.S. Nagar	Information technology & Bathroom fittings.
Sangrur	Agricultural implements, Tractor parts, Cycle parts, Sewing machine parts, Milk products, Chilled Rolls and Builders' Hardware.
TarnTaran	Agricultural implements, Power looms, Rice Shelling.

D. MICRO SMALL AND MEDIUM ENTERPRISES

Definitions of Micro, Small & Medium Enterprises

In accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified in two Classes:

(a) **Manufacturing Enterprises**- The enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries (Development and regulation) Act, 1951) or employing plant and machinery in the process of value addition to the final product having a distinct name or character or use. The Manufacturing Enterprise are **defined in terms of investment in Plant & Machinery.**

(b) **Service Enterprises**: The enterprises engaged in providing or rendering of services and are **defined in terms of investment in equipment**.

The limit for investment in plant and machinery / equipment for manufacturing / service enterprises, as notified, vide S.O. 1642(E) dtd.29-09-2006 are as under:

Manufacturing Sector	
Enterprises	**Investment in plant & machinery**
Micro Enterprises	Does not exceed twenty five lakh rupees
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees
Service Sector	
Enterprises	**Investment in equipments**
Micro Enterprises	Does not exceed ten lakh rupees:
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees
Medium Enterprises	More than two crore rupees but does not exceed five core rupees

The district wise cumulative number of small scale industries as on 31.3.2015 is 111743. The details is at **Annexure V**. The district wise EM Part-II filed in the State during the last five years starting 2010-11 to 2013-14 is at **Annexure VI**.

E. GROWTH OF VILLAGE & COTTAGE INDUSTRY

A large number of persons and families are engaged in Village & Cottage industries in the State such as pottery, black smithy & carpentry, weaving, leather & leather products, pulses & cereals processing, gur & khandsari, repair shops etc. KVIC under Ministry of MSME runs several scheme for employment generation and promotion of village and cottage industries as follows:

KVIC SCHEMES

- PMEGP Guidelines
- PMEGP
- SFURTI
- RISC
- EXPORT INCENTIVE SCHEME
- INTEREST SUBSIDY SCHEME

KHADI SCHEMES

- MARKET DEVELOPMENT ASSISTANCE (MDA)
- KHADI KARIGAR JANASHREE BIMA YOJANA
- INTEREST SUBSIDY ELIGIBILITY CERTIFICATE (ISEC)
- STRENGTHENING OF INFRASTRUCTURE OF EXISTING WEAK KHADI INSTITUTIONS AND ASSISTANCE FOR MARKETING INFRASTRUCTURE
- SCHEME FOR ENHANCING PRODUCTIVITY & COMPETITIVENESS OF KHADI INDUSTRY & ARTISANS
- WORKSHED SCHEME FOR KHADI ARTISANS

SCHEMES UNDER SCIENCE & TECHNOLOGY

- Mahatma Gandhi Institute for Rural Industrialization (MGIRI) R&D activities under KVIC-Technical Interfaces

Performance of PMEGP being one of the main schemes of KVIC is as follows :

PROGRESS UNDER PMEGP – 2014-15

Particulars	Target			Achievement		
	No. of Projects	M.M. in Lakhs	Emp (in No.s)	No. of Projects	M.M. in Lakhs	Emp (in No.s)
KVIC	697	783.45	5576	263	1075.84	1578
KVIB	697	783.45	5576	305	786.55	1830
DIC	930	1044.60	7440	505	1328.49	3030
Total	2324	2611.5	18592	1073	3190.88	6438

F. LARGE AND MEDIUM ENTERPRISES

There are 446 numbers of medium and large scale industries in Punjab. The district wise list showing number, fixed investment, working capital, employment and production as on 31.3.2014 is at **Annexure VII.** Also, the industry wise list of 446 large and medium industries is at **Annexure VIII.**

GURU GOBIND SINGH REFINERY (GGSR) PROJECT

Guru Gobind Singh Refinery (GGSR) project in Bhatinda, in the Punjab region of India, has been undertaken to boost India's refined hydrocarbon product capacity. With crude oil prices continuing to rise, India needs to be able to produce enough refined fuel products for the domestic market and, as in other Asian countries, have enough capacity for exporting.

In August 2007, the Punjab government put the long -delayed Guru Gobind Singh refinery project at Bhatinda back on track by signing a deed of assurance with main contractor Hindustan Petroleum Corporation Limited (HPCL). The nine-million-ton refinery had been on the drawing board since 1999 and, with the signing of the deed, HPCL began the groundwork at the project site.

The work for refinery started in 2008 and the refinery became operational in March 2012. Its annual capacity is nine million tons (180,000 barrels per day). It was built at a cost of $4 billion. The refinery will get its crude oil supply from Mundra a coastal town in Gujarat through a 1,017 km pipeline, where the oil is imported from abroad

The refinery came online in March 2012 and required an investment of $4bn. The refinery will produce polypropylene, pet coke, sulphur, aviation turbine fuel, hexane, naphtha, mineral turpentine oil, motor spirit, kerosene oil, liquefied petroleum gas and high speed diesel. Products from the refinery will be moved out in three ways - via pipeline (from Bhatinda to Udhampur), road and rail.

19th LIVESTOCK CENSUS-2012

Table 1: Total Number of Livestock and Poultry

a

SNo.	State/ UT	Rural		Urban		Total (Rural +Urban)	
		Livestock	Poultry	Livestock	Poultry	Livestock	Poultry
1	ANDAMAN & NICOBAR ISLANDS	149714	1149753	5036	15610	154750	1165363
2	ANDHRA PRADESH	54924966	159195345	1174441	2138584	56099407	161333929
3	ARUNACHAL PRADESH	1366179	2188749	46487	55482	1412666	2244231
4	ASSAM	18846897	26837618	235274	378551	19082171	27216169
5	BIHAR	31794467	12166096	1144134	581956	32938601	12748052
6	CHANDIGARH	8031	72212	16166	36507	24197	108719
7	CHHATTISGARH	14379883	22315641	664060	786517	15043943	23102158
8	DADRA & NAGAR HAVELI	44679	74028	5610	11944	50239	85972
9	DAMAN & DIU	4117	24568	510	3634	4627	28202
10	GOA	130028	270364	15825	21664	145853	292028
11	GUJARAT	25687687	14151593	1440513	854158	27128200	15005751
12	HARYANA	8174609	41735613	644909	1085735	8819518	42821348
13	HIMACHAL PRADESH	4815505	1088792	28926	15684	4844431	1104476
14	JAMMU & KASHMIR	8911441	7490476	289401	783233	9200842	8273709
15	JHARKHAND	17570555	13168223	482191	391305	18052746	13559528
16	KARNATAKA	26647874	51254779	1054022	2187251	27701896	53442030
17	KERALA	2555352	22985088	179810	1296840	2735162	24281928
18	LAKSHADWEEP	49596	164541	0	0	49596	164541
19	MADHYA PRADESH	34732291	11431358	1600336	473358	36332627	11904716
20	MAHARASHTRA	31092625	75696120	1396027	2098451	32488652	77794571
21	MANIPUR	610659	1920770	85113	578746	695772	2499516
22	MEGHALAYA	1951969	3379945	5658	20087	1957627	3400032
23	MIZORAM	200981	850755	110955	420598	311856	1271353
24	NAGALAND	806071	1838703	105091	339767	911162	2178470
25	NCT OF DELHI	329635	37332	30767	6499	360307	43831
26	ODISHA	20211774	19301803	520724	588735	20732498	19890538
27	PUDUCHERRY	95599	141882	24015	66839	119614	208721
28	PUNJAB	7697973	15901002	419128	893074	8117101	16794076
29	RAJASTHAN	56040021	7715491	1692183	308933	57732204	8024424
30	SIKKIM	288979	445734	2647	6232	291626	451966
31	TAMIL NADU	20478099	105918676	2244885	11430218	22722984	117348894
32	TRIPURA	1888782	4092513	47397	180220	1936179	4272733
33	UTTAR PRADESH	65092726	17185602	3622421	1482230	68715147	18667832
34	UTTARAKHAND	4689261	4567486	105469	74451	4794730	4641937
35	WEST BENGAL	29416951	51136605	931379	1700971	30348280	52837576
	Total	**491685846**	**697895256**	**20371455**	**31314064**	**512057301**	**729209320**

Note: Total Livestock covers Cattle, Buffalo, Sheep, Goat, pig, Horses& Ponies, Mules, Donkeys, Camels, Mithun and Yak and total poultry include total birds in the poultry farms and hatcheries.

Department of Forests & Wildlife Preservation, Punjab
PUNJAB AT A GLANCE

C Area Statistics (Km^2)

1 Comparison India vis-a-vis Punjab		India (1)	Punjab (2)	Percent of (2) to (1)
	Geographical Area (GA)	3,287,263	50,362	1.53
	Recorded Forest Area	769,626	3,084	0.40
		23.41	*6.12*	
	Forest Cover	677,088	1,558	0.23
		20.6	*3.09*	
	Tree Cover	91,663	1,823	1.99
		2.79	*3.62*	
	Forest & Tree Cover (F&TC)	768,751	3,381	0.44
		23.39	*6.71*	
	Per Capita GA	*0.003195*	0.002067	
	Per Capita (F&TC)	*0.000747*	0.000139	

N.B.The figures in Italics correspond to percent figures w.r.t. respective Geographical Area figure.

D Trees Outside Forest (TOF) Inventory

Estimated Stems and Volume		Total	Rural	Urban
Number	Total	**61,246,115**	57,793,003	3,453,112
	Stems/ha	**13.12**	12.94	16.84
Volume (cum)	Total	**19,853,836**	18,596,730	1,257,106
	Volume/ha	**4.25**	4.17	6.13

Source: Report on Inventory of Trees Outside Forests (TOF) in Punjab by FSI, Dehradun (2006)

E State Symbols

State Tree	Shisham (Dalbergia sissoo)
State Animal	Black Buck (Antelope cervicapra L.)
State Bird	Baaz (Eastern goshawk)

F Wetlands of International Importance (RAMSAR SITES)

	Name	Area (ha)	Designated as Ramsar site on
I	Harike Wetland	4,100	23/03/1990
II	Kanjli Wetland	183	22/01/2002
III	Ropar Wetland	1,365	22/01/2002

				(7.45)			(13.11)			(3.38)			(0.53)			(34.78)
	Y	3570	3839	269 (7.54)	3641	3908	267 (7.33)	3918	4034	116 (2.96)	4272	4156	-116 (-2.72)	3570	4156	586 (16.41)
Coarse cereals	A	242	212	-30 (-12.40)	208	184	-24 (-11.54)	338	180	-158 (-46.75)	175	156	-19 (-10.86)	242	156	-86 (-35.54)
	P	557	481	-76 (-13.64)	486	143	-343 (-70.58)	1634	552	-1082 (-66.22)	587	526	-61 (-10.39)	557	526	-31 (-5.57)
	Y	2302	2269	-33 (-1.43)	2337	777	-1560 (-66.75)	4834	3067	-1767 (-36.55)	3354	3372	18 (0.54)	2302	3372	1070 (46.48)
Pulses	A	99	91	-8 (-8.08)	84	49	-35 (-41.67)	44	29	-15 (-34.09)	27	19	-8 (-29.63)	99	19	-80 (-80.81)
	P	74	75	1 (1.35)	56	30	-26 (-46.43)	35	24	-11 (-31.43)	20	16	-4 (-20.00)	74	16	-58 (-78.38)
	Y	747	824	77 (10.31)	667	612	-55 (-8.25)	795	828	33 (4.15)	741	842	101 (13.63)	747	842	95 (12.72)
Total foodgrains	A	5696	5684	-12 (-0.21)	5875	6152	277 (4.71)	6288	6297	9 (0.14)	6298	6499	201 (3.19)	5696	6499	803 (14.10)
	P	20056	21546	1490 (7.43)	21139	23878	2739 (12.96)	24727	25310	583 (2.36)	26809	26947	138 (0.51)	20056	26947	6891 (34.36)
	Y	3521	3791	270 (7.67)	3598	3881	283 (7.87)	3932	4019	87 (2.21)	4257	4146	-111 (-2.61)	3521	4146	625 (17.75)
Total oilseeds	A	194	208	14 (7.22)	150	83	-67 (-44.67)	98	70	-28 (-28.57)	60	62	2 (3.33)	194	62	-132 (-68.04)
	P	236	277	41 (17.37)	156	84	-72 (-46.15)	85	78	-7 (-8.24)	78	84	6 (7.69)	236	84	-152 (-64.41)
	Y	1216	1332	116 (9.54)	1040	1012	-28 (-2.69)	867	1114	247 (28.49)	1300	1355	55 (4.23)	1216	1355	139 (11.43)
Cotton#	A	702	741	39 (5.56)	724	606	-118 (-16.30)	450	607	157 (34.89)	605	511	-94 (-15.54)	702	511	-191 (-27.21)
	P	2353	1920	-433 (-18.40)	937	1305	368 (39.27)	1085	2678	1593 (146.82)	2359	2006	-353 (-14.96)	2353	2006	-347 (-14.75)
	Y	570	440	-130 (-22.81)	220	366	146 (66.36)	410	750	340 (82.93)	663	641	-22 (-3.32)	570	641	71 (12.46)
Potato	A	28	48	20 (71.43)	55	57	2 (3.64)	68	76	8 (11.76)	90	83	-7 (-7.78)	28	83	55 (196.43)
	P	498	838	340 (68.27)	827	1147	320 (38.69)	1395	1353	-42 (-3.01)	1714	2116	a 402 (23.45)	498	2116	1618 (324.90)
	Y	17518	17463	-55 (-0.31)	15122	20054	4932 (32.61)	20515	17803	-2712 (-13.22)	19044	25494	6450 (33.87)	17518	25494	7976 (45.53)

*** Constitutes initial four year of plan. Figures in parentheses indicate percentage change.**

A : Area (000 ha), P: Production (000 metric tonnes) and Y: Yield (Kg/ha)

 # Production of cotton in 000 bales (cleaned lint)

ANNEXURE -III

Table 5.1: Area, production and yield (plan-wise) of major crops, Punjab

Crops		8Th Plan			9Th Plan			10Th Plan			11Th Plan*			Overall		
		1992-93	1996-97	Change over 1992.93	1997-98	2001-02	Change over 1997-98	2002-03	2006-07	Change over 2002-03	2007-08	2010-11	Change over 2007-08	1992-93	2010-11	Change Over 1992-93
Rice	A	2072	2159	87 (4.20)	2281	2487	206 (9.03)	2530	2621	91 (3.60)	2609	2802	193 (7.40)	2072	2802	730 (35.23)
	P	7026	7334	308 (4.38)	7904	8816	912 (11.54)	8880	10138	1258 (14.17)	10486	11236	750 (7.15)	7026	11236	4210 (59.92)
	Y	3391	3397	6 (0.18)	3465	3545	80 (2.31)	3510	3868	358 (10.20)	4019	4010	-9 (-0.22)	3391	4010	619 (18.25)
Wheat	A	3283	3229	-54 -1.64	3300	3420	120 (3.64)	3375	3467	92 (2.73)	3487	3522	35 (1.00)	3283	3522	239 (7.28)
	P	12399	13672	1273 (10.27)	12715	15499	2784 (21.90)	14175	14596	421 (2.97)	15716	15169	-547 (-3.48)	12399	15169	2770 (22.34)
	Y	3777	4234	457 (12.10)	3853	4532	679 (17.62)	4200	4210	10 (0.24)	4507	4307	-200 (-4.44)	3777	4307	530 (14.03)
Maize	A	190	166	-24 (-12.63)	165	165	0 (0.00)	153	154	1 (0.65)	154	139	-15 (-9.74)	190	139	-51 (-26.84)
	P	436	352	-84 (-19.27)	345	449	104 (30.14)	312	481	169 (54.17)	525	475	-50 (-9.52)	436	475	39 (8.94)
	Y	2297	2118	-179 (-7.79)	2091	2722	631 (30.18)	2040	3123	1083 (53.09)	3408	3414	6 (0.18)	2297	3414	1117 (48.63)
Gram	A	26	16	-10 (-38.46)	13	7	-6 (-46.15)	7	4	-3 (-42.86)	2	3	1 (50.00)	26	3	-23 (-88.46)
	P	17	15	-2 (-11.76)	11	6	-5 (-45.45)	7	4	-3 (-42.86)	2.1	3.4	1.3 (61.90)	17	3.4	-13.6 (-80.00)
	Y	672	915	243 (36.16)	824	873	49 (5.95)	953	1010	57 5.98	1046	1129	83 (7.93)	672	1129	457 (68.01)
Rapeseed & Mustard	A	73	92	19 (26.03)	72	51	-21 (-29.17)	65	41	-24 (-36.92)	30	30	0 (0.00)	73	30	-43 (-58.90)
	Y	947	1256	309 (32.63)	872	1191	319 (36.58)	912	1119	207 (22.70)	1182	1284	102 (8.63)	947	1284	337 (35.59)
Sugarcane	A	112	173	61 (54.46)	126	142	16 (12.70)	153	99	-54 (-35.29)	108	60	-48 (-44.44)	112	60	-52 (-46.43)
	P	688	1022	334 948.55)	715	925	210 (29.37)	902	602	-300 (-33.26)	657	370	-287 (-43.68)	688	370	-318 (-46.22)
	Y	6141	5905	-236 (-3.84)	5678	6512	834 (14.69)	5894	6083	189 (3.21)	6086	6172	86 (1.41)	6141	6172	31 (0.50)
Total cereals	A	5597	5593	-4 (-0.07)	5791	6103	312 (5.390	6243	6268	25 (0.40)	6271	6480	209 (3.33)	5597	6480	883 (15.78)
	P	19982	21471	1489	21083	23848	2765	24459	25286	827	26789	26931	142	19982	26931	6949

Table 5.2: Plan-wise compound annual growth rates of major crops in Punjab

Crop		8th Plan	9th Plan	10th Plan	11th Plan*	Overall (1992-93 to 2010-11)
Rice	A	0.85ns	2.11ns	0.84ns	2.67***	1.56***
	P	-0.25ns	3.68**	3.26*	1.16ns	2.79***
	Y	-1.09ns	1.53ns	2.40*	-1.48ns	1.20***
Wheat	A	-0.68ns	0.93***	0.60ns	0.19ns	0.47***
	P	1.29ns	4.81*	0.58ns	1.05ns	1.16***
	Y	1.98ns	3.84	-0.02ns	0.73ns	0.69***
Maize	A	-3.89**	0.69ns	-0.27ns	-5.09***	-1.47***
	P	-5.70ns	8.29**	7.63ns	2.76*	2.18
	Y	-1.95ns	7.55**	7.92ns	2.47*	3.71***
Gram	A	-9.25**	-15.83*	-14.14***	12.93*	-12.48***
	P	-1.32ns	-13.37*	-12.56**	16.22*	-10.82***
	Y	7.31ns	3.10ns	0.77ns	3.02*	1.86***
Sugarcane	A	15.47ns	4.08ns	-11.77*	-14.79*	-2.08*
	P	15.40ns	7.81ns	-10.58ns	-14.76*	-2.87**
	Y	-0.001ns	3.57***	1.36ns	0.01ns	-0.23ns
Cotton	A	3.66ns	-5.13ns	8.41**	-6.82***	-1.56**
	P	-1.65ns	14.61ns	25.69***	-8.65***	2.29ns
	Y	-5.13ns	20.79*	15.94**	-1.97ns	3.91**
Potato	A	19.07*	-2.02ns	3.00**	-9.61**	6.07***
	P	19.15*	4.25ns	-2.29ns	-1.39ns	7.45***
	Y	0.57ns	6.26*	-5.14ns	8.90*	1.32**
Total cereals	A	-0.31ns	1.24ns	0.05ns	1.08**	0.82***
	P	0.61ns	3.55ns	0.48ns	1.00*	1.78***
	Y	0.93ns	2.16ns	0.43ns	-0.07ns	0.95***
Total Pulses	A	-1.88***	-13.00***	-9.97**	-9.94*	-9.86***
	P	0.53ns	-13.37***	-9.15*	-6.38*	-9.50***
	Y	2.45ns	-0.44ns	0.94ns	3.93ns	0.41ns
Total foodgrains	A	-0.28ns	1.18ns	-0.01ns	1.04**	0.73***
	P	0.61ns	3.50ns	0.28ns	1.00ns	1.76***
	Y	0.89ns	2.29*	0.29ns	-0.04ns	1.01***
Total oilseeds	A	6.15ns	-16.12***	-7.18**	-1.73ns	-7.12***
	P	8.22ns	-16.55***	-3.35ns	-0.58ns	-6.89**
	Y	1.97ns	-0.52ns	4.13ns	1.17ns	0.25ns

* Constitutes initial four year of plan

***, ** and * Significant at one, five and ten percent level of probability, respectively

Annexure - IV

BASIC BANKING DATA AS ON MARCH 2015

(Amount Rs. in lacs)

	BRANCHES				AGG.DEPOSITS		TOTAL ADVANCES		DEPOSITS		ADVANCES	
	RURAL	S/U	URBAN	TOTAL	A/Cs	AMT.	A/Cs	AMT.	RURAL	S/URBAN	RURAL	S/URBAN
PUBLIC SECTOR BANKS												
PNB	342	147	188	677	5373883	4901127	209490	3591366	1548946	1371743	1171070	829360
SBOP	249	168	139	556	6547504	3565566	500065	2554445	731674	1342802	567214	935139
P&SB	402	112	107	621	2893827	1886359	189095	1036556	773256	730344	313458	356229
OBC	161	130	98	389	2324877	1862915	165207	1365080	446825	762387	298018	486924
UCO BANK	62	63	42	167	1328395	511868	55076	314376	169847	117638	110056	106119
ALL BANK	23	63	52	138	828913	403188	37661	681579	42979	78263	28211	102992
AND BANK	16	26	22	64	138000	78544	5222	73247	31869	46675	23789	49446
BOB	15	42	43	100	742358	551007	25234	322898	37927	436014	9528	142147
BOI	42	53	58	153	1764989	859396	82004	755317	183604	234399	120190	210200
BOM	1	18	12	31	45807	72244	12258	124790	5.72	497	6.85	386
CB	61	75	53	189	1601686	964495	73774	781658	296347	263833	85688	176692
CBI	28	50	59	137	1154251	575537	41163	433733	67595	177903	33348	103158
CORP BK	18	44	26	88	538922	178713	27608	337679	6895	39823	9918	65932
DENA BK	3	23	15	41	179589	59618	4993	78881	642	11963	153	7170
IB	11	29	27	67	463932	275248	11923	123094	32920	102105	2784	17643
IOB	19	37	50	106	90352	699006	28760	591627	51236	152385	37045	61283
SBI	142	134	156	432	4630017	3042100	315708	2941200	504738	1046730	301191	730523
SBBJ	0	4	10	14	89526	50502	7000	89795	0	568	0	742
SYN BK	8	19	20	47	290028	131800	15453	56750	3575	42256	1190	19321
UBI	32	50	58	140	1341287	744838	48111	383943	167937	181011	36999	105530
UT BOI	0	11	8	19		24197		37723	0	3429	0	1053
VJY BK	1	19	16	36	198328	137395	9140	103730	5393	31796	756	20940
IDBI Bk Ltd	14	27	24	65	390763	301357	13245	158879	10113	101108	13351	34102
TOTAL	1650	1344	1283	4277	32957234	21877020	1878190	16938346	5114324	7275672	3163964	4563031
PRIVATE SECTOR BANKS												
J&K BK Ltd	0	8	7	15	82288	108696	4517	48943	0	52048	0	22673
CAPITAL BK Ltd	17	15	6	38	387459	150678	18277	93008	74900	52054	31817	34453
HDFC BK Ltd	240	121	76	437		1747127	590833	1479931	207332	583436	117618	646909
ICICI Bk Ltd	51	80	67	198	88800	569927	94096	520092	8448	76612	9448	153415
Kotak Mahindr	2	10	7	19		77109	15014	93613	964	19077	2789	13355
Yes Bank	6	32	20	58	70972	278369	1918	53920	11649	82066	1463	3095
Federal Bank L	0	19	6	25	43315	38568	43316	31147	0	9838	0	14565
ING Vysya Ban	13	17	3	33	51939	44336	10097	353126	5806	15078	86234	134513
IndusInd Bank	15	6	21	42	138031	260986	130156	143800	19634	28447	2115	11309
AXIS Bank	175	54	35	264	937017	682498	34487	706441	132240	251786	99088	217017
TOTAL	519	362	248	1129	1799821	3958294	942711	3524021	460973	1170442	350572	1251304
REGIONAL RURAL BANKS												
Sutlej Gramin B	26	7	1	34	138732	32821	16098	33259	19493	10918	24425	8835
Pb. Gramin Bk.	209	38	17	264	1400050	418550	131676	310092	269985	84986	213425	65082
Malwa Gramin	70	4	1	75	371182	101352	52186	103429	80666	10007	90684	8526
TOTAL	305	49	19	373	1909964	552723	199960	446780	370144	105911	328534	82443
COOPERATIVE BANKS												
Citizen Urban B	0	6	15	21	249531	109159	9472	53130	0	26365	0	6988
COOP. BKS	602	114	86	802	2922611	1164345	1502704	1265984	694222	390945	802891	382019
TOTAL	602	120	101	823	3172142	1273504	1512176	1319114	694222	417310	802891	389007
SCHEDULED COMMERCIAL BANKS												
Comm.Bks (A+	2169	1706	1531	5406	34757055	25835314	2820901	20462367	5575297	8446114	3514536	5814335
RRBs (C)	305	49	19	373	1909964	552723	199960	446780	370144	105911	328534	82443
TOTAL (A+B+C)	2474	1755	1550	5779	36667019	26388037	3020861	20909147	5945441	8552025	3843070	5896778
SYSTEM												
G. TOTAL (A+B	3076	1875	1651	6602	39839161	27661541	4533037	22228261	6639663	8969335	4645961	6285785
									Source: Controlling Heads of Banks			

Annexure-IV

BASIC BANKING DATA AS ON MARCH 2015

(Amount Rs. in lacs)

SN	BANK NAME	PS ADVANCES		DIRECT AGRI. ADVANCES		INDIRECT AGRI. ADV.		MSE ADVANCES		OTHER PRIORITY SECTOR	
		NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT
A.	**PUBLIC SECTOR BANKS**										
1	PNB	341742	1775583	265095	682742	5469	125291	44449	873760	26729	93790
2	SBOP	329107	1608942	251382	758048	996	31195	43925	670735	32804	148964
3	P&SB	167534	869091	115979	388682	3095	34084	17625	209385	30835	236940
4	OBC	164730	973837	113971	499667	1763	33184	29131	323352	19865	117634
5	UCO BANK	48353	150807	33311	56866	933	3652	9961	114358	4148	24069
6	ALL BANK	32921	321594	21426	158199	1336	44577	6392	139310	3767	20492
7	AND BANK	492	40071	61	7303	2	312	395	8916	34	23540
8	BOB	15688	129795	7213	28011	336	6368	5394	93980	2745	1436
9	BOI	61961	375682	43721	203396	375	7602	8977	140120	8888	24564
10	BOM	4667	28354	1031	6338	155	2264	1377	22751	2104	2999
11	CB	59840	418974	30686	178680	3700	19536	17310	199228	8144	21530
12	CBI	35876	190667	19067	62528	982	15601	6694	80045	9133	32493
13	CORP BK	22354	140231	15275	68423	526	6176	2896	54402	3657	11230
14	DENA BK	3370	24523	870	4217	76	135	1566	13665	858	6506
15	IB	6751	52238	4446	13564	62	669	1645	32607	598	5398
16	IOB	20964	159823	8631	41223	998	7823	6004	91837	5331	18940
17	SBI	346301	985293	114962	273839	29803	172426	50282	535346	151254	3682
18	SBBJ	2144	25948	2814	15573	7	1261	125	4314	802	4800
19	SYN BK	7145	36226	1790	4055	273	1336	3545	20700	1537	10135
20	UBI	34328	251931	22713	100502	439	10708	7283	118975	3893	21746
21	UT BOI	1098	10016	253	1332	9	16	427	7365	409	1303
22	VJY BK	8006	39991.91	2672	8211	2	22	3424	23446	1908	8312.91
23	IDBI Bk Ltd.	11235	82809	6872	44373	78	1571	362	3403.3	3923	33461.7
	TOTAL	**1726607**	**8692427**	**1084241**	**3605772**	**51415**	**525809**	**269189**	**3782000**	**321762**	**778845.61**
B.	**PRIVATE SECTOR BANKS**										
24	J&K BK Ltd	2321	14749	94	450	62	609	1363	11406	802	2284
25	CAPITAL BK Ltd	6690	51588	3060	34015	148	2616	1568	11941	1914	3016
26	HDFC BK Ltd	157481	944854	99092	597271	859	19838	47293	288473	10237	39272
27	ICICI Bk Ltd.	55566	277367	37642	76531	52	7159	14393	178674	3479	15003
28	Kotak Mah.Bk.	9156	49308	2263	8957	167	1764	6455	38008	271	579
29	Yes Bank	1617	36626	1081	8338	31	7698	134	8302	371	12288
30	Federal Bank Ltd.	7184	14756	6869	9102	9	447	149	4811	157	396
31	ING Vysya Bank	9201	298462	7756	268383	19	946	239	53.89	1187	29079.11
32	IndusInd Bank	67726	73604	21396	22660	9	242	46266	49203	55	1499
33	AXIS Bank	26397	471165	22509	348309	136	4187	1973	107121	1779	11548
	TOTAL	343339	2232479	201762	1374016	1492	45506	119833	697992.9	20252	114964.11
C.	**REGIONAL RURAL BANKS**										
34	Sutlej Gramin Bank	15340	23834	13606	21501	23	23	524	302	1187	2008
35	Pb. Gramin Bk.	116016	280087	97789	192677	10540	2481	287	1753	7400	83176
36	Malwa Gramin Bk.	50739	75990	47287	71275	1371	292	1154	933	927	3490
	TOTAL	182095	379911	158682	285453	11934	2796	1965	2988	9514	88674
D.	**COOPERATIVE BANKS**										
37	Citizen Urban Bank	7606	39038	158	3858	0	0	369	8896	7079	26284
38	COOP. BKS	1327887	1081507	945018	769889	271002	237880	0	0	111867	73738
	TOTAL	1335493	1120545	945176	773747	271002	237880	369	8896	118946	100022
	SCHEDULED COMMERCIAL BANKS										
	Comm.Bks (A+B)	2069946	10924906	1286003	4979788	52907	571315	389022	4479993	342014	893809.72
	RRBs (C)	182095	379911	158682	285453	11934	2796	1965	2988	9514	88674
	TOTAL (A+B+C)	2252041	11304817	1444685	5265241	64841	574111	390987	4482981	351528	982483.72
	SYSTEM										
	G. TOTAL (A+B+C+D)	**3587534**	**12425362**	**2389861**	**6038988**	**335843**	**811991**	**391356**	**4491877**	**470474**	**1082505.72**
								Source: Controlling Heads of Banks			

ANNEXURE - V

DISTRICT-WISE STATUS OF SMALL SCALE UNITS AS ON 31.3.2015

SR. NO.	DISTRICT	No. of Units	Employment	Investment (INR Lacs)	Production (In lacs)
1	AMRITSAR	10708	50670	52329.98	346060.8
2	BARNALA	1358	6872	9457.8	52029.26
3	BATHINDA	2248	19897	24519.38	132704.44
4	FARIDKOT	1885	12576	10007.1	32546.33
5	FATEHGARH SAHIB	2391	23904	51278.53	485935.32
6	FEROZEPUR	1386	5477	9413	55210
7	GURDASPUR	5551	49966	35299.77	189278.47
8	HOSHIARPUR	3297	22474	19964.67	48201.63
9	JALANDHAR	13764	141707	175031.12	459261.52
10	KAPURTHALA	3774	23084	21006.16	90171.42
11	LUDHIANA	37047	421338	592829.78	4394277.94
12	MANSA	944	6518	10841.29	57657.74
13	MOGA	2609	22453	29015.46	91602.13
14	MUKATSAR	2208	16339	10791.6	62252
15	SBS (NAWAN SHAHAR)	967	5278	4222.71	12555.63
16	PATIALA	5046	41191	73015.67	261882.94
17	ROOP NAGAR	1512	10425	12818.33	74853.13
18	SAS NAGAR	5639	46526	136754.97	117764.59
19	SANGRUR	7710	50849	55678.4	314704.36
20	TARAN TARN	472	2062	3878.89	11737.38
21	FAZILKA	1227	10646	15268	604142
22	PATHANKOT	--	--	--	--
	TOTAL	111743	990252	1353422.61	7894829.03

ANNEXURE -VI

STATEMENT SHOWING DISTRICT-WISE NUMBER OF ENTREPRENEUR MEMORANDUM (Part-II) FILED BY THE MICRO, SMALL & MEDIUM ENTERPRISES AT THE DISTRICT

State: PUNJAB, Code: 03

Distt. Code:	Name of the District:	1st April, 2009 to 31st March, 2010				1st April, 2010 to 31st March, 2011				1st April, 2011 to 31st March, 2012				1st April, 2012 to 31st March, 2013				1st April, 2013 to 31st March, 2014			
		Micro	Small		Total	Micro	Small		Total	Micro	Small		Total	Micro	Small		Total	Micro	Small	Medium	Total
01.	GURDASPUR	43	14	0	**57**	47	7	1	**55**	44	11	0	**55**	35	8	0	**43**	13	4	0	**17**
02.	AMRITSAR	123	28	0	**151**	156	23	2	**181**	208	27	1	**236**	214	33	0	**247**	111	20	0	**131**
03.	KAPURTHALA	35	5	0	**40**	61	6	0	**67**	84	10	0	**94**	61	8	0	**69**	29	5	1	**35**
04.	JALANDHAR	336	72	2	**410**	342	79	0	**421**	314	82	0	**396**	343	58	0	**401**	206	63	4	**273**
05.	HOSHIARPUR	9	1	0	**10**	13	0	0	**13**	13	0	0	**13**	13	4	0	**17**	11	7	0	**18**
06.	NAWAN-SHAHER	4	0	0	**4**	2	4	0	**6**	4	0	0	**4**	8	3	0	**11**	1	0	0	**1**
07.	RUPNAGAR [ROPAR]	5	0	0	**5**	8	2	0	**10**	6	1	0	**7**	16	21	0	**37**	11	1	0	**12**
08.	FATEHGARH SAHIB	42	30	4	**76**	59	56	0	**115**	66	44	0	**110**	45	30	3	**78**	39	19	1	**59**
09.	LUDHIANA	658	181	5	**844**	1088	417	10	**1515**	1077	365	19	**1461**	806	367	14	**1187**	810	300	9	**1119**
10.	MOGA	9	7	0	**16**	32	15	0	**47**	26	15	1	**42**	40	10	0	**50**	34	8	0	**42**
11.	FEROZEPUR	3	4	0	**7**	3	6	0	**9**	32	5	0	**37**	5	4	0	**9**	7	2	0	**9**
12.	MUKATSAR	1	0	0	**1**	8	1	0	**9**	97	2	0	**99**	15	0	0	**15**	15	5	0	**20**
13.	FARIDKOT	6	2	0	**8**	8	7	0	**15**	3	1	0	**4**	4	3	0	**7**	0	4	0	**4**
14.	BHATINDA	15	3	0	**18**	22	12	0	**34**	33	10	0	**43**	28	9	0	**37**	19	4	0	**23**
15.	MANSA	3	0	0	**3**	13	1	0	**14**	11	1	0	**12**	15	5	0	**20**	17	7	0	**24**
16.	SANGRUR	47	12		**59**	86	26	0	**112**	67	19	0	**86**	65	13	0	**78**	65	36	0	**101**
17.	PATIALA	100	12	1	**113**	94	17	3	**114**	100	27	3	**130**	65	17	2	**84**	77	26	0	**103**
18.	S. AJIT SINGH NAGAR	285	52	2	**339**	152	57	0	**209**	170	31	4	**205**	158	47	0	**205**	185	67	3	**255**
19.	TARAN TAARAN	17	0	1	**18**	20	5	0	**25**	23	4	0	**27**	19	3	1	**23**	13	1	0	**14**
20.	BARNALA	7	3	0	**10**	14	3	0	**17**	16	10	0	**26**	17	6	0	**23**	8	5	0	**13**
21.	FAZILKA*	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	2	1	0	**3**	5	4	0	**9**
22.	PATHANKOT*	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
STATE TOTAL:		**1748**	**426**	**15**	**2189**	**2228**	**744**	**16**	**2988**	**2394**	**665**	**28**	**3087**	**1974**	**650**	**20**	**2644**	**1676**	**588**	**18**	**2282**

* The data for these two districts are included in Ferozpur and Gurdaspur District respectively

SOURCE :- The Directorate of Industries & Commerce, Government of Punjab, 17 - Bays Building, Sector - 17, Chandigarh - 160 017.

Annexure -VII

DISTRICT-WISE STATUS OF LARGE AND MEDIUM ENTERPRISES-COMBINED AS ON 31-3-2014

S.No.	District	Total no. of units	Fixed investment	Working capital	Employment	Production (Rs in lacs)
		2013-14	2013-14	2013-14	2013-14	2013-14
1.	Amritsar	25	219126.65	37440.00	5875.00	478254.68
2.	Tarn Taran	6	16005.09	11519.03	609	38098.67
3.	Bathinda	17	747872.67	185637.81	6759.00	268046.57
4.	Faridkot	2	30752.25	8332.15	575.00	50367.69
5.	Moga	5	80160.49	23556.30	1812.00	26031.10
6.	Ferozepur	6	14286.17	8246.29	317.00	21268.88
7.	Kapurthala	6	264575.63	44819.82	16986.00	194369.00
8.	Gurdaspur	9	98597.46	23483.91	2709	101871.36
9.	Pathankot	4	17413.52	4744.39	423	30618.30
10.	Jalandhar	22	85884.26	25968.73	6045.00	142563.01
11.	Fateh garh sahib	21	68981.02	35791.80	4086.00	413843.18
12.	Patiala	35	160108.47	40353.56	11960.00	329384.20
13.	Mukatsar	4	48441.64	14614.34	2064	56026.92
14.	Fazilka	7	19675.54	4479.32	881	68478.44
15.	Sangrur	18	252691.73	612960.27	19756	612024.75
16.	Barnala	7	293077.68	173458.61	11804.00	463835.55
17.	Nawan shahr	9	153603.19	38863.44	4190.00	358105.43
18.	Hoshiarpur	21	306003.61	45257.68	16606.00	741958.62
19.	Ludhiana	151	1162002.35	741846.60	94434.00	3224193.44
20.	SAS Nagar	66	1357063.15	737115.87	36655.00	1194562.89
21.	Roop Nagar	4	128115.48	689631.31	2274.00	299139.88
	Grand total	**446**	**5524438.05**	**3508121.23**	**243820**	**9113042.56**

Annexure VIII

STATEMENT SHOWING INDUTRY-WISE LARGE/MEDIUM UNITS AS ON 31.3.2014

S. No.	DIGIT CODE	Name of the item	Total units	Fixed investment	Working capital	Employment	Production (Rs in lacs)
	15	Mfg. of Food products & Beverages	100	952852.06	779073.21	25291	1183714.08
1.	17	Mfg of Textile including dying/processing	130	1924908.79	735392.79	100349	3004458.03
2.	18	Mfg of hosiery & garments including embroidery	6	12260.69	6108.74	4728	12803.66
3.	19	Leather & leather products	2	1605.73	625.21	180	7652.00
4.	21	Mfg. of paper & paper precuts	16	291597.99	29322.73	7804	637779.03
5.	22	Publishing printing & reproduction of recorded media	1	3245.73	0.00	183	7746.89
6.	23	Mfg of coke, refined petroleum products & nuclear fuel, Bottling of LPG	2	11100.00	0.00	110	90171.91
7.	24	Mfg. of chemical & chemical products	25	816356.38	879031.69	12470	965023.02
8.	25	Mfg. of rubber & plastic products	14	79438.68	45644.44	10126	237124.61
9.	26	Mfg. of other non-metallic mineral products	3	70753.23	69152.02	1332	120859.57
10.	27	Mfg. of basic metal	59	189121.21	202896.45	15353	750454.36
11.	28	Mfg. of fabricated metal products except machinery & equipment	13	36382.70	20291.84	6213	728500.61
12.	29	Mfg. of machinery & equipment NEC	13	66756.67	39310.27	3884	122664.73
13.	31	Mfg. of electrical machinery & apparatus NEC	4	33283.68	4565.38	2184	37151.34
14.	32	Mfg. of radio, television, communication equipment & apparatus	2	8266.89	4005.41	490	8296.77
15.	33	Mfg. of medical, precision & optical instruments, watches & clocks	2	4109.91	542.88	456	1985.70
16.	34	Mfg.of motor vehicles, trailers & semi-trailers & parts.	35	336359.89	580422.25	27436	851583.36
17.	35	Mfg.of other transport equipment (cycle & parts)	9	177520.06	84250.19	20627	293919.25
18.	36	Mfg. of furniture, mfg. of NEC	2	1753.62	675.00	225	5232.94
19.	40	Electricity, gas, steam & hot water supply	3	493743.00	22915.47	2342	41324.22
20.	55	Hotel & restaurant service	2	9984.43	545.95	349	1100.00
21.	72	Computer & related activities NIC 1998	2	1873.31	3270.00	1672	3196.48
22.	74	Other business activities (NIC 1998 CODES 74131-33, 221,300,941-42, 950, 93 & 94)	1	1163.00	79.71	16	300.00
23.			**446**	**5524438.05**	**3508121.23**	**243820**	**9113042.56**

ANNEXURE-I

SCHEDULE – 1

LIST OF HAZARDOUS WASTES

S. No.	Processes	Hazardous Wastes
1.	Petrochemical processes and pyrolytic operations	1.1 Furnace/reactor residue and debris* 1.2 Tarry residues 1.3 Oily sludge emulsion 1.4 Organic residues 1.5 Residues from alkali wash of fuels 1.6 Still bottoms from distillation process 1.7 Spent catalyst and molecular sieves 1.8 Slop oil from wastewater 1.9 ETP sludge containing hazardous constituents
2.	Drilling operation for oil and gas production	Drill cuttings containing oil Sludge containing oil Drilling mud and other drilling wastes*
3.	Cleaning, emptying and maintenance of petroleum oil storage tanks including ships	3.1 Oil-containing cargo residue, washing water and sludge 3.2 Chemical-containing cargo residue and sludge 3.3 Sludge and filters contaminated with oil 3.4 Ballast water containing oil from ships.
4.	Petroleum refining/re-refining of used oil/recycling of waste oil	4.1 Oily sludge/emulsion 4.2 Spent catalyst 4.3 Slop oil 4.4 Organic residues from process 4.5 Chemical sludge from waste water treatment 4.6 Spent clay containing oil
5.	Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	5.1 Used/spent oil 5.2 Wastes/residues containing oil
6.	Secondary production and/or use of zinc	6.1 Sludge and filter press cake arising out of zinc sulphate production 6.2 Zinc fines/dust/ash/skimmings (dispersible form) 6.3 Other residues from processing of zinc ash/skimmings 6.4 Flue gas dust and other particulates*

S. No.	Processes	Hazardous Wastes
7.	Primary production of zinc/lead/copper and other non-ferrous metals except aluminium	7.1 Flue gas dust from roasting* 7.2 Process residues 7.2 Arsenic-bearing sludge 7.3 Metal bearing sludge and residue including jarosite 7.4 Sludge from ETP and scrubbers
8.	Secondary production of copper	8.1 Spent electrolytic solutions 8.2 Sludges and filter cakes 8.3 Flue gas dust and other particulates*
9.	Secondary production of lead	9.1 Lead slag/Lead bearing residues 9.2 Lead ash/particulate from flue gas
10.	Production and/or use of cadmium and arsenic and their compounds	10.1 Residues containing cadmium and arsenic
11.	Production of primary and secondary aluminium	11.1 Sludges from gas treatment 11.2 Cathode residues including pot lining wastes 11.3 Tar containing wastes 11.4 Flue gas dust and other particulates* 11.5 Wastes from treatment of salt slags and black drosses*
12.	Metal surface treatment, such as etching, staining, polishing, galvanising, cleaning, degreasing, plating, etc.!	12.1 Acid residues 12.2 Alkali residues 12.3 Spent bath/sludge containing sulphide, cyanide and toxic metals 12.4 Sludge from bath containing organic solvents 12.5 Phosphate sludge 12.6 Sludge from staining bath 12.7 Copper etching residues 12.8 Plating metal sludge 12.9 Chemical sludge from waste water treatment
13.	Production of iron and steel including other ferrous alloys (electric furnaces; steel rolling and finishing mills; Coke oven and by product plant)	13.1 Process dust * 13.2 Sludge from acid recovery unit 13.3 Benzol acid sludge 13.4 Decanter tank tar sludge 13.5 Tar storage tank residue
14.	Hardening of steel	14.1 Cyanide-, nitrate-, or nitrite-containing sludge 14.2 Spent hardening salt.
15.	Production of asbestos or asbestos-containing materials	15.1 Asbestos-containing residues 15.2 Discarded asbestos 15.3 Dust/particulates from exhaust gas treatment.
16.	Production of caustic soda and chlorine	16.1 Mercury bearing sludge 16.2 Residue/sludges and filter cakes* 16.3 Brine sludge containing mercury
17.	Production of acids	17.1 Residues, dusts or filter cakes* 17.2 Spent catalyst*

S. No.	Processes	Hazardous Wastes
18.	Production of nitrogenous and complex fertilizers	18.1 Spent catalyst* 18.2 Spent carbon* 18.3 Sludge/residue containing arsenic 18.4 Chromium sludge from water cooling tower 18.5 Chemical sludge from waste water treatment
19.	Production of phenol	19.1 Residue/sludge containing phenol
20.	Production and/or industrial use of solvents	20.1 Contaminated aromatic, aliphatic or napthenic solvents not fit for originally intended use 20.2 Spent solvents 20.3 Distillation residues
21.	Production and/or industrial use of paints, pigments, lacquers, varnishes, plastics and inks	21.1 Wastes and residues 21.2 Fillers residues
22.	Production of plastic raw materials	22.1 Residues of additives used in plastics manufacture like dyestuffs, stabilizers, flame retardants, etc. 22.2 Residues of plasticizers 22.3 Residues from vinyl chloride monomer production 22.4 Residues from acrylonitrile production 22.5 Non-polymerized residues
23.	Production and/or industrial use of glues, cements, adhesive and resins	23.1 Wastes/residues (not made with vegetable or animal materials) *
24.	Production of canvas and textiles	24.1 Textile chemical residues* 24.2 Chemical sludge from waste water treatment
25.	Industrial production and formulation of wood preservatives	25.1 Chemical residues 25.2 Residues from wood alkali bath
26.	Production or industrial use of synthetic dyes, dye-intermediates and pigments	26.1 Process waste sludge/residues containing acid or other toxic metals or organic complexes 26.2 Chemical sludge from waste water treatment 26.3 Dust from air filtration system
27.	Production or industrial use of materials made with organo-silicone compounds	27.1 Silicone-containing residues 27.2 Silicone oil residues
28.	Production/formulation of drugs/ pharmaceuticals	28.1 Residues and wastes* 28.2 Spent catalyst / spent carbon 28.2 Off specification products 28.3 Date-expired, discarded and off-specification drugs/ medicines 28.4 Spent mother liquor 28.5 Spent organic solvents

S. No.	Processes	Hazardous Wastes
29.	Production, use and formulation of pesticides including stock-piles	29.1 Wastes/residues containing pesticides 29.2 Chemical sludge from waste water treatment 29.3 Date-expired and off-specification pesticides
30.	Leather tanneries	30.1 Chromium bearing residue and sludge 30.2 Chemical sludge from waste water treatment
31.	Electronic Industry	31.1 Residues and wastes* 31.2 Spent etching chemicals and solvents
32.	Pulp & Paper Industry	32.1 Spent chemicals 32.2 Corrosive wastes arising from use of strong acid and bases 32.3 Sludge containing absorbable organic halides
33.	Disposal of barrels / containers used for handling of hazardous wastes / chemicals	33.1 Chemical-containing residue from decontamination and disposal 33.2 Sludge from treatment of waste water arising out of cleaning / disposal of barrels / containers 33.3 Discarded containers / barrels / liners used for hazardous wastes/chemicals
34.	Purification processes for air and water	34.1 Flue gas cleaning residue* 34.2 Toxic metal-containing residue from used-ion exchange material in water purification 34.3 Chemical sludge from waste water treatment 34.4 Chemical sludge, oil and grease skimming residues from common industrial effluent treatment plants (CETPs) and industry-specific effluent treatment plants (ETPs) 34.5 Chromium sludge from cooling water treatment
35.	Purification process for organic compounds/solvents	35.1 Filters and filter material which have organic liquids in them, e.g. mineral oil, synthetic oil and organic chlorine compounds 35.2 Spent catalyst* 35.3 Spent carbon*
36.	Waste treatment processes, e.g. incineration, distillation, separation and concentration techniques	36.1 Sludge from wet scrubbers 36.2 Ash from incineration of hazardous waste, flue gas cleaning residues 36.3 Spent acid from batteries 36.4 Distillation residues from contaminated organic solvents

*Unless proved otherwise by the occupier based on sampling and analysis carried out by a laboratory recognized under the Act not to contain any of the constituents mentioned in Schedule 2 to the extent of concentration limits specified therein.

SCHEDULE – 2

[*See* rule 3(14)(b)]

LIST OF WASTES CONSTITUENTS WITH CONCENTRATION LIMITS*

Class A

Concentration limit: ε 50 mg/kg

A1	Antimony and antimony compounds
A2	Arsenic and arsenic compounds
A3	Beryllium and beryllium compounds
A4	Cadmium and cadmium compounds
A5	Chromium (VI) compounds
A6	Mercury and mercury compounds
A7	Selenium and selenium compounds
A8	Tellurium and tellurium compounds
A9	Thallium and thallium compounds
A10	Inorganic cyanide compounds
A11	Metal carbonyls
A12	Napthalene
A13	Anthracene
A14	Phenanthrene
A15	Chrysene, benzo (a) anthracene, fluoranthene, benzo (a) pyrene, benzo (K) fluoranthene, indeno (1, 2, 3-cd) pyrene and benzo (ghi) perylene
A16	halogenated compounds of aromatic rings, e.g. polychlorinated biphenyls, polychloroterphenyls and their derivatives
A17	Halogenated aromatic compounds
A18	Benzene
A19	Organo-chlorine pesticides
A20	Organo-tin Compounds

1. Waste constituents and their concentration limits given in this list are based on BAGA (the Netherlands Environment Protection Agency) List of Hazardous Substances. In order to decide whether a specific material listed above is hazardous or not, following points be taken into consideration:

(i) If a component of the waste appears in one of the five risk classes listed above (A,B,C,D or E) and the concentration of the component is equal to or more than the limit for the relevant risks class, the material is then classified as hazardous waste.

(ii) If a chemical compound containing a hazardous constituent is present in the waste, the concentration limit does not apply to the compound, but only to the hazardous constituent itself.

(iii) If multiple hazardous constituents from the same class are present in the waste, the concentrations are added together.

(iv) If multiple hazardous constituents from different classes are present in the waste, the lowest concentration limit corresponding to the constituent(s) applies.

(v) For substances in water solution, the concentration limit for dry matter must be used. If the dry matter content is less than 0.1% by weight, the concentration limit, reduced by a factor of one thousand, applies to the solution.

Class B

Concentration limit: ε 5, 000 mg/kg

B1 Chromium (III) compounds
B2 Cobalt compounds
B3 Copper compounds
B4 Lead and lead compounds
B5 Molybdenum compounds
B6 Nickel compounds
B7 Inorganic Tin compounds
B8 Vanadium compounds
B9 Tungsten compounds
B10 Silver compounds
B11 Halogenated aliphatic compounds
B12 Organo phosphorus compounds
B13 Organic peroxides
B14 Organic nitro-and nitroso-compounds
B15 Organic azo-and azooxy compounds
B16 Nitriles
B17 Amines
B18 (Iso-and thio-) cyanates
B19 Phenol and phenolic compounds
B20 Mercaptans
B21 Asbestos
B22 Halogen-silanes

B23 Hydrazine (s)
B24 Flourine
B25 Chlorine
B26 Bromine
B27 White and red phosphorus
B28 Ferro-silicate and alloys
B29 Manganese-silicate
B30 Halogen-containing compounds which produce acidic vapours on contact with humid air or water, e.g. silicon tetrachloride, aluminium chloride, titanium tetrachloride

Class C

Concentration limit; ε 20, 000 mg/kg

C1 Ammonia and ammonium compounds
C2 Inorganic peroxides
C3 Barium compounds except barium sulphate
C4 Fluorine compounds
C5 Phosphate compounds except phosphates of aluminium, calcium and iron C6 Bromates, (hypo-bromites)
C7 Chlorates, (hypo-chlorites)
C8 Aromatic compounds other than those listed under A12 to A18 C9 Organic silicone compounds
C10 Organic sulphur compounds
C11 Iodates
C12 Nitrates, nitrites
C13 Sulphides
C14 Zinc compounds
C15 Salts of per-acids
C16 Acid amides
C17 Acid anhydrides

Class D

Concentration limit: ε 50, 000 mg/kg

D1 Total Sulphur
D2 Inorganic acids
D3 Metal hydrogen sulphates
D4 Oxides and hydroxides except those of hydrogen, carbon, silicon, iron, aluminum, titanium, manganese, magnesium, calcium

D5 Total hydrocarbons other than those listed under A12 to A18 D6 Organic oxygen compounds

D7 Organic nitrogen compounds expressed as nitrogen

D8 Nitrides

D9 Hydrides

Class E

Regardless of concentration limit; Classified as hazardous wastes at all concentrations

E1 Flammable substances

E2 Substances which generate hazardous quantities of flammable gases on contact with water or damp air.