

## **Development of Agriculture sector**

### **4.1. Introduction**

The total geographical area of this distt. is 216,000 ha. The net area sown in the district is 2, 02,000 hectare. There are about 42321 operational holdings out of which about 9584 are the ones with operational area of less than 2 ha. The average farm operational holding in Mansa is larger i.e. 4.43 ha as compare to 4.03 ha in Punjab. There are 15800 Tractors, 252 Combines 4765 Threshers in this district. The average rainfall of this distt is 6.7 mm. The average rainy days are about—33. - The rainfall is very low in normal years. It rains about 128 mm but in some years even up to 222 mm have been recorded .The total rainfall received from May to September is about 208 mm which is the 94 % of the total rain in year 2008-09 .The soils of distt. Mansa are sandy loam to loamy sand with sand dunes at few places and having both salinity and alkalinity problems in some areas.

### **4.2 Land use Pattern**

Mansa is a major cotton growing district and produces about 1/6<sup>th</sup> of the total cotton production in the state. The economic condition of the farmers in this district in general , have deteriorated due to stagnation of productivity of major crops and slows or little growth of other sub sectors like fruits, vegetables, livestock etc .To increase productivity of various crops in this district, the possibility of achieving growth rate of 4%/ annum in the agriculture sector in the district with existing schemes it is a very difficult task for which the problems and constraints of the sector have to be addressed with new Innovative schemes.

Wheat and Cotton are the two major crops out of which wheat occupies about 45% of gross cropped area whereas cotton shares about 28 %. Rice crop has come up again during 2-3 years due to the attack of Boll worms and Mealy Bug on Cotton crop. Rice's share is about 16% of the in the gross cropped area. The area under pulses and oilseeds had declined due to the increase in area under wheat and cotton and hence it contributes only 2% of the gross cropped area. The area under fruits and vegetables are also decreasing day by day because the underground water is not fit for vegetable and fruit crops and the irrigation facility is not sufficient.

### **4.3 Soil Health**

The soil of this district is are sandy loam to loamy sand with sand dunes at few places and having both salinity and alkalinity problems in some area. Out of total 54% soils are low in availability of Nitrogen and 30 % are medium where as 16 % are rich in availability of Nitrogen. Regarding the Phosphors 31% soils are low in availability of Phosphors & 51% are medium whereas 18% are high in availability of Phosphors. The soils of block Mansa and Bhikhi are very fertile rich in organic carbon ,nitrogen and phosphorus and hence this belt is best suited for paddy as well as for high yielding Bt cotton varieties where as soils of block Jhunir and Sardulgarh are sandy to loamy sands and are medium inorganic carbon ,nitrogen and phosphorus hence this belt is suited for cotton crop and pulses . The area of Budhlada block is greater than other blocks and it comprises both types of soils which are high to medium in organic carbon, nitrogen and phosphorus so this belt is suited for paddy as well as for cotton as shown in Annexure 4.1 & 4.2 & figure 4.1 & 4.2

#### **4.4. Water Resources & Management**

The under ground water of this districts is brackish and is not fit for general irrigation. Out of total, 28% under ground water is totally unfit for irrigation where as 40 % is marginally fit. This poor quality water affects the upper layer of the soil due to accumulation of salts. Canals are the major source of irrigation and tube well irrigation is just in 15 % of net irrigated. Underground water of Block Mansa & Bhikhi is for better as compare to the other blocks as shown in annexure 4.3 & figure 4.3.

#### **4.5 Major Crops & Varieties**

During kharif cotton & paddy are the main crops where as moong and gauara are also sown in some areas. Rabi wheat, is the major crop where as barley & oil seed are sown in very small area .The Block wise area, production and yield under different crops are shown in figure 4.4 to 4.6. As per the data the maximum yield is recoded in Mansa & Bhikhi where as minimum is in Jhunir & Sardulgarh because the soils of Mansa & Bhikhi are fertile with good quality under ground water. The variety wise detail of different crops is shown in table. 4.1

**Table 4.1—Detail of varieties of major agriculture crops**

Sr.No.	Name of crop	Varieties
--------	--------------	-----------

1	Cotton	Shri Rams-6488 &6588,Rashi-134,317&314, Ankur-651 &2534,2226,Jassi, Myhco-6301&6304, Jk-1947,Manak, Nikki, Kohenoor, M R C7017, R C H-605, NCS-138,950 &913 &Few non recommended varieties <b>Desi cotton</b> —Ld 327, RG-8 & Moti Hybrid
2	Paddy	PAU-201, PR-114,116&118, Hybrid-6129,257,6606&6444, Basmati- Pusa 1121,Pussa basmati-1,Basmati-386, Basmati-370
3	Moong	SML-32, MI-267 & local
4	Guara	Local & un non varieties
5	Groung nut	SG-99
6	Wheat	PBW-343,502,550,373,&509 HD-2329. & few un recommended
7	Oil Seed (Mustard)	PBR-91,PBR-96, Local,RLM-619
8	Gram	Local, PBG- 1,C-235
8	Barley	Pl 419, PL 426,Local

#### 4.6 Input Management—

The major inputs that are used in agriculture are seed, pesticides and fertilizer. These inputs are made available to the farmer through authorized dealers. In this district about 335 seed dealers, 367 pesticide dealers and 328 fertilizer dealers are operating under the supervision of agriculture enforcement wing. To ensure the quality of the inputs special campaign are launched to draw samples prior to the season so that the tested inputs may be made available to the farmers. However its quality and supply is reviewed in monthly meetings with district administrations. The fertilizers are to costly and the farmers are advised to use optimum dose of fertilizers. The block wise consumption and requirements are mentioned in annexure 4.6 & 4.7. Consumption of Nutrients is higher in Bhikhi & Mansa and lower in Sardulgarh, Jhunir and Budhlada .Two soil testing labs are operating in this district to test fertility status of fertilizer and the quality of the water. The samples are collected form all the GPs to test the status and the farmers are guided to apply fertilizers as per the laboratory report. As per the data maximum number. of unsafe samples are recorded in Budhlada and minimum in Bhikhi. Regarding the

permissible sample maximum percentage is recorded in Bhikhi & the minimum in Jhunir & Sardulgarh. The progress of labs are mentioned in annexure.4.8

#### **4.7. Farm Mechanization—**

In this district agriculture sector has fully mechanized which changed the living standard of the farmer as the mechanization not only saved the time of different operation it has also played very effective role in increased in production through timely operations. Tractors, Combines, seed drills, threshers, harvester are the major machinery/ implements which has played important role in green revolution. The block wise detail is mention in annexure.4.9. As per the data Block Mansa & Bhikhi have higher numbers of tractors as compared to the other blocks because these blocks are fertile and hence they are fully mechanized.