

## **ALLIED AGRICULTURAL SECTORS**

Agriculture continues to be the most crucial sector of the Indian economy. With 26.8 percent contribution to the Gross Domestic Product (GDP) at current prices and providing employment to nearly 2/3rd of the work force, agriculture is so much at the center stage in the Indian economy that any situational change in this sector, positive or negative, has a multiplier effect on the entire economy. The largest industries of the country like sugar, jute, textiles, food processing, milk, etc. are dependent on agriculture for their raw materials. Besides, the agriculture sector and rural areas are the biggest markets for low priced and middle priced consumer goods, including durable use items

Agriculture continues to be the main stay of the District Faridkot and is known for the production of Cotton, Rice, Wheat, Pulses, Vegetables & fruit crops. Besides this, other agriculture allied activities includes area under horticulture and vegetable crops, dairy, floriculture, fishery and forestry. The important sectors consider include Agriculture, Horticulture, Animal husbandry, Fishery, Soil and water conservation, Poultry, dairy farming, Agriculture Marketing, Milk-fed financial institute and Social forestry. Despite all other options, dairy farming is the best choice of the farmers as subsidiary occupation.

Integration of different sectors has been established in the district through monthly workshops in Focal Points. The integrated approach helps in proper planning and execution of various agricultural and other allied activities effectively. This chapter includes allied agricultural sectors- their vision and prospects.

### **5.1 HORTICULTURE:**

The Department of Horticulture is a important wing in the development of agriculture. It was separated from the Department of Agriculture in 1979-80. At that time, the area under Fruits was only 20,000 Hectare. After the separation, it is working independently. By implementing the beneficiary's schemes, the area under Horticulture

Crops is increasing day by day. By adopting the diversification in Agriculture Policy, this department is encouraging the farmers to put more area under Horticultural Crops than cereal crops. In Punjab, the present area of fruits is 64799 hectares with a production of 1182884 metric tones. Similarly the area under Vegetables is 178412 Hectare and production is 3410315 metric tones at state level. In Faridkot District the area under Fruits is 1269.1 hectares with a production of 25470.2 metric tones. Similarly the area under Vegetables is 975 hectares with a production of 18745 metric tones at the District Level. The potential crops of the District are Fruits namely Kinnow, Malta, Ber, Guava, Vegetables viz. Potato, Cauliflower, Cucurbits, Root crops, Tomato, Cabbage, Peas.

## **5.2 ANIMAL HUSBANDRY**

With urbanization and industrialization, agriculture land is shrinking day by day. Where as demand for food is on rise with the increasing population and enhanced purchasing power of the people. Much sought food eg. milk, meat, eggs comes under the preview of departments of animal husbandry. Higher level of growth is possible in this sector if needed resources are provided to the deptt. of Animal Husbandry for Disease Control and genetic improvement.

### **A. Disease Control**

20% adult deaths among milk animals are attributed to communicable diseases and lack of diagnostic facilities at field level. These losses can be minimized by timely vaccination and making available proper treatment to the sick animals with the use of diagnostic aids in the field. The mortality in young calves which is as high as 40% is more serious problem. This can simply be brought to 5-7%, that is considered normal, by following 3-dose deworming exercises as per the recommendation.

### **B. Genetic Improvement**

Deptt. has been able to improve genetic make up of desi Cows. But there is still great scope for further improvement as we are still far behind developed countries in milk yield per lactation.

## **C. Poultry**

Similarly Poultry sector, which has very high income potential per acre of land i.e. up to 6.5 lac per Acre, has vast growth possibilities if this sector is financially assisted in shape of capital subsidy and subsidized poultry feed unredients. All these schemes mentioned in our plan under R.K.V.Y. scheme will help this sector to attain 8-9% growth and compensate low growth rate of farm sector.

## **5.3 Dairy Development**

The department was established in 1963. At the district level, it is headed by Deputy Director Dairy, Assisted by 3 Dairy Field Assistants.

### **A. Beneficiary Oriented Programme**

The Dairy Development Department has its own set of programmes which have two fold objectives, 1st is generation of larger opportunities of self-employment in the rural areas and secondly, the enhancement of milk production, the department has substantially achieved these objectives.

Under these programmes, educated unemployed rural youth will be identified at District H.Q. and trained at Station Sardulgarh District Mansa, Tarn Taran District Tarn Taran.

After the successful completion of dairy training candidates will be assisted in getting loan from the financial institutions for the purchase of milch cattle/animals for setting up commercial dairy units and provided insurance and microchip subsidy for one year on consumption of cattle shed, 25% of the total cost will be fixed at 1.5 kkh per unit.

### **B. Extension and Training Programme**

To induce and motivate farmers for adopting dairying on commercial basis the Dairy Development Department of the state has laid down a well net infrastructure of extension services. Technical know-how is provided to the farmer, milk producers by

organizing Training Courses of one day duration at block level village in which the emphasis is laid down on feeding, breeding and management of much animals. The group of trainee varies from 100-150.

The Punjab Dairy Development Board organizing Dairy Entrepreneurship Training Programme (45 days training programme) in which the emphasis is laid down on Artificial Insemination, Feeding, Breeding, Management and value addition at different dairy training centres.

### **C. Quality Control**

The Punjab state is the first in the country to frame and implement an order under Essential Commodities Act, 1955 titled, "The Punjab Regulation of compounded cattle feed, concentrate and mineral mixtures order, 1988". Under this order manufacturers of cattle- feed has to maintain the minimum standards of protein, fat and fibre etc., in their product.

To provide advisory and technical services to the farmers and manufacturers the state Dairy Development Department has established an Analytical Laboratory at Sangrur. This Laboratory is a source of guidance to dairy farmers of the state as far as feeding of milch animals is concerned. The Government Laboratory established at Sangrur is the only Laboratory of its kind in the country which serves as an Analytical Laboratory for testing of samples under the said order.

### **D. Milk and Milk Product Order 1992**

Government of India, Ministry of Agriculture Department of Animal Husbandry and Dairying issued the order under Essential Commodities Act, 1955, that any person who intends to establish a milk plant of more than handling capacity more than 10,000 litres per day, has to obtain registration certificate under this order. Director, Dairy Development has been appointed as Registering Authority for registering the milk plants with a handling capacity of 10,000 to 75,000 litres per day and above this the Government of India is the Registering Authority for issuing the registration certificate.

## **E. Farmers Meet / Seminars**

The Department organizes dairy farmers meet as well as cattle feed seminars to address the problems of farmers and cattle feed manufacturers. This step of the department makes things easier as it help in bringing dairy farmers, scientists, cattle feed manufacturers and the decision making authorities at one platform, so that they can analyze the problems and suggest ways to overcome these problems.

## **5.4 SOIL CONSERVATION**

Canals are the major source of irrigation in district Faridkot as major part of sub soil water is unfit for irrigation. This poor quality of underground water affects the soil due to accumulation of salts in the upper layer turning the natural soil into saline and alkali soil. Canal cleaning should be done in the month of January. In Faridkot district there is poor and in adequate supply of canal water which is also need to be attended to.

- 1. The under ground water conveyance system pipe lines**, which can check the water losses, significantly especially in coarse textured soils (25%) need to be encouraged through incentives to the farmers. There are about 30,000 shallow and deep tube wells out of these only less than 20% tube wells have got the U.G.P.L. system. It proposed to cover 3,000/- tube wells in 5 year for which the total cost involved is Rs. 15 crore and the farmers shall be provided with 50% on system 3445 half of the total project cost viz. Rs. 7.5 crore is required for this purpose.
- 2. Community projects for consumptive use of sweet canal and ground water** will help many farmers over a substantial area. There are sweet water pockets near the canal. Water from these pockets can be utilized by mixing with brackish water in the areas having unfit ground water. This will help in reducing the problem of salt accumulation in the fields and also prevents the self affected expansion of the area under irrigation. For consumptive use of sweet and ground water, has to be carried through pipes in the fields, which involves substantial cost. It is proposed that community projects may be constructed in which 75% incentive may be given for 50 such projects. .The total cost of those projects shall be Rs. 5 crore and the

subsidy shall be Rs. 3.75 crores helping in irrigating about 2500 hectares of area. Therefore an amount of Rs. 3.75 crores is required for these activities.

- 3. The Micro/Drip Irrigation** enhances irrigation and water use efficiency. Use of this technique saves 60-70 % irrigation water and improves the yield as well as quality of the produce. It also helps enhance fertilizer use efficiency. Use of this technique involves an average expenditure of about Rs. 5 0,000/- per hect. To make the technology popular among the farmers subsidy of the order of 75% on the total cost of the system is under consideration with the state government. It is proposed to cover 750 hectares during 5 years under Drip! Sprinkler Irrigation for various Horticulture and Non- horticulture crops. The total cost involves for this system is Rs. 3.75 crores and farmers should be given 75% subsidy on the system. Therefore, it will require Rs. 2.87 crores during the 5 year.
- 4. Use of village ponds for ground water recharge:** Village ponds can be renovated to catch maximum of rain water in the plains. The excess water can be used for the life saving irrigation. The job will include the renovation, desilting, lining and Micro lift (if needed) etc. These ponds also need to be explored for Fish culture, which involves only marginal additional cost. The unit cost of pond is Rs. 3 Lakh and **10** ponds are proposed **to be** renovated each year. The total funds required are Rs. 1.5 crores.
- 5. Farm Water Storage Tank** can be taken up on experimental basis to arrest the surplus water during rainy season and during the crop harvesting season in the tail end blocks of the canal irrigation system. The size and cost will vary according to the field conditions, farm size etc. 20 Tanks can be taken up every year with an average cost Rs. 2 lac each with 50% subsidy, the cost shall be Rs. 1.00 crores.
- 6. Laser Leveling** of the field is essential for optimum and uniform irrigation to avoid excessive water application and obtaining optimum crop yields. This is possible by using laser leveler. The trials conducted at farmers fields have revealed that 25-30% water can be saved by leveling the fields with laser leveler. It also reduces the time of irrigation per unit area there by enhancing the irrigation

application efficiency. The cost of common use laser leveler is approximately Rs. 3.25 lac and that of the tractor required to operate it is Rs. 4.75 lath. As such it is not possible for farmer to purchase this equipment. It is proposed to strengthen the Cooperative Societies (which should be provided subsidy) to function as service center and provide the service to the farmers at custom hire reasonable rates to extend the use of this technology and save water. There are 75 Cooperative Societies in the District It is proposed to provide 30 laser leveler and Tractors to Cooperative Societies during a period of 3 years.

**In case of Rice, using Tensiometers** to determine the irrigation timings can save 15-20% water. Scientists recommended tensiometers for each field (normally of 1 acre-04 ha.) For an area of above 80,000 ha. under rice in Faridkot District, about 25000/- tensiometers are required. It is proposed to take 50% money from farmers and 50% will be given through this scheme so 755 lakh per year for 50000/- permit cost of Rs. 17.50 lacs. Therefore, an amount of 11.25 lakh is required for this purpose.

### **5.5 Fisheries:**

This Department has come into existence in 1894 by enacting Punjab Fish Act-1894. Earlier the village ponds were stocked by wild fish seed collected from riverine waters. Then new ponds were excavated and brought under fish culture. New techniques were adopted to provide quality fish seed by induced breeding of Indian major carps (Rohu, Catla, Mrigla ) and Exotic carps (Common Carp , Silver carp, Grass Carp) and blue Revolution came after Green and White Revolution . Fish farmers Development Agencies (FFDA) were established in each distt of Punjab state.

As fish farming is an allied agriculture. It is very simple, easy and more profitable occupation, Everybody can do it. So the department is developing village ponds which are useless, having no water source, low lying lands by renovating –dewatering, desilting, providing proper bundhs and bore well for fish farming I; it will generate employment for unemployed youths and commodity to nation. The Department will provide quality fish seed to the fish farmers.

- The department will send progressive fish farmers to other state for training of new techniques.
- The department will help the fish farmers in analyzing the soil and water at their doors to reduce expenditure.