

1.1.62 Against an expenditure of Rs.39.00 lac during the 11th Five Year Plan, an outlay of Rs.1.00 crore has been provided in 12th Five Year Plan. Against an expenditure of Rs.9.03 lac during 2011-12, an outlay of Rs.20.00 lac is provided in the Annual Plan 2012-13.

1.2 SOIL AND WATER CONSERVATION

Outlay – Rs. 83.95 crore

1.2.1 Out of the total geographical area of 50.36 lac hectares of the State, about 13 lac hectares (26%) is under various forms of degradation due to soil erosion in northern Punjab, water logging and salinization of soils in south-western Punjab. Approximately 70% area constituting the central Punjab faces ground water depletion. 112 out of 141 blocks have already been categorized as over-exploited or dark blocks. The present challenges are:

- (1) To control soil erosion in Kandi area and siltation of rivers & water bodies;
- (2) To increase productivity of rainfed areas through integrated watershed management, rainwater harvesting and ground water recharge;
- (3) Management & conservation of on-farm water to increase the water use efficiency;
- (4) Reclamation of degraded soils;
- (5) To propagate on-farm water conservation by replacing low-efficiency kutchra field irrigation channels with high efficiency underground pipeline system.
- (6) To create public awareness regarding the natural resource degradation and its management.

1.2.2 It is projected that by 2023 in central Punjab the water table depth will be below 70 feet in 59% area, below 100 feet in 34% area and below 130 feet in 7% area. Correspondingly in each district the percent area below 70 feet depth will be 100% in Moga and Sangrur, 80% in Patiala, 70% in Ludhiana, 60% in Kapurthala and Jalandhar.

1.2.3 Against an expenditure of Rs.47.83 crore during the 11th Five Year Plan, an outlay of Rs.266.35 crore has been provided in 12th Five Year Plan. Against an expenditure of Rs.4.03 crore during 2011-12, an outlay of Rs.83.95 crore is provided in the Annual Plan 2012-13. The physical target is 36800 ha.

Ongoing Schemes

Centrally Sponsored Schemes

SWC-01/1 Macro Management Work Plan for Soil Conservation (90:10)(CSS)

Outlay – Rs.1.00 crore

1.2.4 The objective of the scheme is to encourage irrigation through use of drip irrigation and treatment of catchment area of Ghaggar river and implementation of other new programmes. The physical target for 2012-13 is 8000 ha. The main components of the scheme are:-

- (1) **National Watershed Development Programme for Rainfed Areas (NWDPA)**: To enhance the productivity of rainfed degraded soils, the soil and water conservation works are to be carried out in 26 selected sub-water sheds covering 31,286 ha in the kandi area during 12th Five Year Plan.
- (2) **Treatment of catchments area of flood prone river Ghaggar and river valley project (FPR-RVP)**: Soil erosion control works in the catchments area of river Ghaggar in 5000 ha of Mohali and Ropar districts to be carried out during 12th Five Year Plan.

1.2.5 Against an expenditure of Rs.16.57 crore as 90% Government of India's share and Rs.1.84 crore as 10% state share during the 11th Plan, an outlay of Rs.45.00 crore as 90% Government of India share and Rs.5.00 crore as 10% state share has been provided in the 12th Five Year Plan. An outlay of Rs.9.00 crore as 90% Government of India's share and Rs.1.00 crore as 10% state share is provided in the Annual Plan 2012-13 to cover physical target of 8000 ha.

SWC-02/2 National Mission on Micro Irrigation (80:20)(CSS)

Outlay – Rs.5.00 crore

1.2.6 The objective of the scheme is to promote the drip and sprinkler irrigation by providing subsidy at the rate of 50% on horticulture and non horticulture crops. The main feature of the programme is that out of the total cost of the micro irrigation system, 40% will be borne by the central government, 10% by the state government and the remaining 50% will be borne by the beneficiary either through his/her own resources or soft loan from financial institutions. Assistance to farmers will be given for covering a maximum area of 5 ha per beneficiary family. Administrative cost under the scheme will be met entirely by the central government. The focus will be on horticultural crops being covered under the National Horticulture Mission. Assistance will be available to the farmers growing all horticultural crops like fruit, vegetables including potato, onion and other root and tuber crops, spices,

medicinal and aromatic plants, all plantation crops excluding tea, coffee, rubber and oil palm etc.

1.2.7 Against an expenditure of Rs.42.34 crore as 80% Government of India's share and Rs.6.99 crore as 20% state share during the 11th Plan, an outlay of Rs.100.00 crore as 80% Government of India share and Rs.25.00 crore as 20% state share has been provided in the 12th Five Year Plan. Against an expenditure of Rs.14.62 crore as 80% Government of India's share during 2011-12, an outlay of Rs.20.00 crore as 80% Government of India's share and Rs.5.00 crore as 20% state share is provided in the Annual Plan 2012-13 to cover physical target 6000 ha.

SWC-03/9 Assistance to farmers in Under Ground Pipe System (UGPS) for Promotion of on-Farm Water Conservation(ACA-2010-11).

Outlay - Rs.15.00 crore

1.2.8 At present, ground water level is depleting @ 50-100 cm in approximately 90% area of the state and 103 blocks out of total 141 blocks have already been declared over-exploited. Punjab has more than 12 lakh tubewells which irrigate about 3 million hectares of land. The water application efficiency through surface irrigation is about 30 to 35% and approximately 1 million ha water is lost in evapo-transpiration in the open conveyance channels which are by & large unlined. Apart from it, approximately 10 thousand hectares of land is wasted under kutchha channels. To sustain & conserve water resources, there is an immediate need to propagate on-farm water conservation by replacing low-efficiency kutchha field irrigation channels with high-efficiency Underground Pipeline System (UGPS) which can not only save 15-25% of water, power & labour but also 1% of productive land. There is a persistent demand among farmers for subsidy on Underground Pipeline System (UGPS) in all districts of the state. Therefore, a new scheme was launched for providing subsidy on UGPS during the Annual Plan 2009-10.

1.2.9 Under this scheme 50% subsidy will be provided to the individual farmers on laying of RCC Underground Pipe Line System (UGPS) on the agricultural fields owned by them in all districts of the state. One time ACA of Rs.15.00 crore was provided for this scheme in the Annual Plan 2010-11 however the scheme could not be implemented during that year. An outlay of Rs.75.00 crore has been provided in 12th Five Year Plan. Against an expenditure of Rs.5.44 lac during 2011-12, an outlay of Rs.15.00 crore is provided in the Annual Plan 2012-13 to cover area of 6800 ha.

**SWC-04/2 (ii) Project for Promotion of Micro Irrigation in Punjab (RIDF-XVI)
(NABARD) (95:5)**

Outlay – Rs.10.00 crore

1.2.10 Subsidy @ 50% of the cost is available under 'SWC-2 Centrally Sponsored Scheme on Micro Irrigation' w.e.f. 2006-07. A NABARD-RIDF-XIII Project was sanctioned for Rs.20.00 crore in the year 2007-08 which provided additional 25% subsidy upto the year 2009-10. This RIDF-XIII project is likely to be completed during 2012-13 as entire NABARD share has been sanctioned. However, there is still pending demand of additional subsidy in most of the districts. In order to keep the continuity of benefit of 75% subsidy on micro irrigation for farmers, a new 3 year project for promotion of micro irrigation under RIDF-XVI has been sanctioned by NABARD during 2010-11 at a total project cost of Rs.23.87 crore out of which 95% NABARD share is Rs.22.68 crore and 5% state share is Rs.1.19 crore. The area uncovered under RIDF-XIII during year 2009-10 and beyond shall be taken up under this new project to provide additional 25% subsidy on micro irrigation as per the limits of the prevalent GoI guidelines. Subsidy @ 90% of the cost, subject to GoI cost limits shall also be provided for demonstrations of 0.4 hac each at the farms of PAU/Government & progressive farmers. Subsidy @ 50% of the cost, subject to a limit of Rs.1 lac, shall also be provided to the farmers opting for micro irrigation in canal command areas of south-western districts and tubewell irrigated areas of other districts.

1.2.11 Against an expenditure of Rs 4.48 crore during the 11th Five Year Plan, an outlay of Rs.20.00 crore has been provided in 12th Five Year Plan. An outlay of Rs.10.00 crore is provided in the Annual Plan 2012-13.

**SWC-05/2 (i) Project for Promotion of Micro Irrigation in Punjab (RIDF-XIII)
(NABARD) (95:5)**

Outlay – Rs.85.00 lac

1.2.12 A 3-year NABARD-RIDF-XIII project was sanctioned for Rs.20.00 crore (95% NABARD loan: Rs.19.00 crore, 5% state share: Rs.1.00 crore) in the Year 2007-08 to provide additional 25% subsidy on micro irrigation (drip & sprinklers), additional 15% subsidy on demonstrations of micro irrigation and subsidy @ 50% of the cost, subject to a limit of Rs.1 lac, on farm water storage tanks for a 3 year period. The above assistance has been provided by the state government over & above the subsidy available under the centrally sponsored scheme to promote micro irrigation in the State. Assistance to farmers is available for covering a

maximum area of 5 ha per beneficiary family in all districts for all categories of farmers subject to GoI unit cost limits.

1.2.13 The project is likely to be completed during 2012-13. Against an expenditure of Rs.19.32 crore during the 11th Five Year Plan an outlay of Rs.85.00 lac has been provided in 12th Five Year Plan as well as Annual Plan 2012-13 to cover the pending liability.

SWC-06/5 Soil and Water Conservation on Watershed basis in Kandi non project Areas

Outlay – Rs.1.50 crore

1.2.14 The scheme is mainly meant for undertaking soil and water conservation works in Kandi tract of the state. The proposed watershed development activities include drainage line treatment, water resource development like water harvesting, perennial flow tapping, lift irrigation, rainwater harvesting for natural ground water recharging, field run-off control structures etc. Besides, land would be developed in the command area for micro level irrigation projects of soil conservation, low dams of irrigation department and command area of Kandi canal and tubewells, so that water is efficiently used for getting maximum benefits. All the works under this scheme shall be community works and the water harvesting structures will be operated and maintained by the user groups. 100% cost of these community projects would be borne under the scheme. The scheme shall be implemented in the Kandi area of the State falling in the districts of Ropar, Nawanshahar, Hoshiarpur, Gurdaspur and SAS Nagar.

1.2.15 Against an expenditure of Rs 6.00 crore during the 11th Five Year Plan, an outlay of Rs.7.50 crore has been provided in 12th Five Year Plan. Against an expenditure of Rs.1.50 crore during 2011-12, same outlay is provided in the Annual Plan 2012-13. The physical target is 1000 ha.

SWC-07/6 Provision for Machinery Division at the Headquarter

Outlay – Rs.50.00 lac

1.2.16 This scheme is for operation of the machinery like bulldozers, excavator-cum-loader, tractors and laser levelers located in machinery division located at headquarter which caters to the machinery requirements in the field for undertaking various soil conservation works.

1.2.17 Against an expenditure of Rs.1.63 crore during the 11th Five Year Plan, an outlay of Rs.2.50 crore has been provided in 12th Five Year Plan. Against an expenditure of Rs.40.00 lac during 2011-12, an outlay of Rs.50.00 lac is provided in the Annual Plan 2012-13.

SWC-08/7 Scheme for Rain Water Harvesting in the State

Outlay – Rs.2.00 crore

1.2.18 Scheme for rain water harvesting is being implemented since 2008-09 in the state to accelerate ground water recharge for the replenishment of depleting water level in the state.

1.2.19 Against an expenditure of Rs.7.50 crore during the 11th Five Year Plan, an outlay of Rs.10.00 crore has been provided in 12th Five Year Plan. Against an expenditure of Rs.2.00 crore during 2011-12, same outlay is provided in the Annual Plan 2012-13 to cover area of 1000 ha.

SWC-09/10 Scheme for Strengthening of State Land Use Board (SLUB)

Outlay - Rs.10.00 lac

1.2.20 Punjab State Land Use Board (SLUB) has been constituted and notified by the state government under the chairmanship of Hon'ble Chief Minister Punjab mainly to prepare inventory for better land use & carry out studies & seminars. Till 2000-01, this programme was a part of the Centrally Sponsored “Macro Management Work Plan for Soil Conservation” as a sub-scheme "State Land Use Board" financed by GoI. However, the GoI discontinued financing for State Land Use Board (SLUB) w.e.f. July, 2009. In order to keep the Punjab State Land Use Board (SLUB) functional and for meeting its operational expenses, the scheme was included in the Annual Plan 2010-11.

1.2.21 Against an expenditure of Rs.2.43 lac during the 11th Five Year Plan, an outlay of Rs.50.00 lac has been provided in 12th Five Year Plan. An outlay of Rs.10.00 lac is provided in the Annual Plan 2012-13.

New Scheme

State Funded Scheme

SWC-10 Project for judicious use of available water and harvesting of rain water for enhancing irrigation potential in Punjab State (NABARD-RIDF-XVII)(95:5)

Outlay-Rs.48.00 crore

1.2.22 A new 3-year “Project for judicious use of available water and harvesting of rainwater for enhancing irrigation potential in Punjab state” has been approved by NABARD during 2011-12 under RIDF-17 for Rs.120.00 crore in the ratio of 95:5. The NABARD share would be Rs.114.00 crore and the state share would be Rs.6.00 crore. Under the project 95% assistance would be provided for Community Underground Pipeline System(UGPS) Projects in

10 districts and 100% assistance would be provided on Rainwater Harvesting Structures in Kandi area.

1.2.23 An outlay of Rs.120.00 crore has been provided in 12th Five Year Plan and an outlay of Rs.48.00 crore is provided in the Annual Plan 2012-13 to cover area of 13000 ha.

Ongoing Schemes

Centrally Sponsored Scheme (100%)

SWC-03/2 Scheme for Special Problematic and Degraded Land in the State under Technology Development, Extension & Training (TDET)

Outlay – Rs.2.00 crore

1.2.24 Under this scheme, projects for reclamation of special problematic areas and degraded soils would be taken up by the Government of India under its Technology, Development, Extension and Training (TDET) programme.

1.2.25 Under the scheme, 100% GoI assistance is provided on the soil & water conservation works on the government/community lands. For private lands of farmers 60% GoI assistance is provided and the balance 40% is contributed by the beneficiaries. The major activities covered under these projects include drainage, flood water harvesting, bench terracing, land leveling, masonry drop structures, field bounding, plantation, sand scrapping, desilting of ponds, precision leveling and demonstration of high value crops etc.

1.2.26 Against an expenditure of Rs.3.73 crore during the 11th Five Year Plan, an outlay of Rs.10.00 crore has been provided in 12th Five Year Plan. Against an expenditure of Rs.1.36 crore during 2011-12, an outlay of Rs.2.00 crore is provided in the Annual Plan 2012-13.

1.3 ANIMAL HUSBANDRY

Outlay-Rs.92.06 crore

1.3.1 Livestock is an important sub-sector of agriculture in Punjab. Diversification of state agriculture through allied activities comprising animal husbandry, commercial dairying & fisheries has acquired added significance in the reduction of income disparities between rural and urban population. Livestock keeping along with marketing services, manufacture of livestock products, inputs and other subsidiary and supporting industries offer a great scope for gainful employment to the expanding labour force, small and marginal farmers and agricultural labour and thus helps to raise the standard of living of rural population especially of weaker sections of the society. Regional Disease Laboratory at Jalandhar caters to the need of seven Northern States. The Department has a vast network of veterinary institutions (Hospital and