

CHAPTER - 12

WATER RESOURCES

12.1 Water is the most important natural resource. Its development and management plays a vital role in various sectors. Integrated water management is vital for poverty reduction, environmental sustenance and sustainable economic development. The State suffers from a disproportionately poor availability of water when compared to its potential large users, people, animals and agriculture. The severity of this can be best realized by the following table:

Table 12.1

Parameter	Share of State in Nation (in %)
Area	10.41
Population	5.49
Livestock	18.70
Cultivable area	13.88
Surface water	1.16
Ground water	1.70

12.2 The situation has worsened over time due to a rapid increase in use-related parameters. The population growth rate of the state is among the highest in the country. Demand for water from hitherto insubstantial uses such as industry, tourism and recreation, as well as sanitation and environmental purposes has been growing rapidly. Nearly a-third of the State is arid and another 30 percent semi-arid, which implies that nearly two-thirds of the state suffers from recurrent water scarcity. Monsoon rain is also lesser in Rajasthan due to parallel alignment of Aravalli hills with monsoon. Heavy and rather indiscriminate reliance on ground-water extraction, possibly to compensate for the paucity of surface water, has led to declining ground water availability and falling water tables in large areas.

12.3 The State is faced with peculiar topographical extremities-hostile desert, rough Aravalli ranges, practically no perennial rivers, tribal/hilly area and recurring famine conditions due to scanty rainfall. There are 15 defined river basins in the State. The available surface water in the State is 21.7 BCM which is mainly confined to south and south-eastern parts of the State. There is a large area in western part of the State which does not have any defined drainage basin. Thus the water resources in the state are not only scarce but have highly uneven distribution. Out of the total available surface water, 16.05 BCM water is economically utilizable and the State has harnessed 11.55 BCM till date.

12.4 The ground water also plays an important role especially in agriculture and drinking water supply. The situation of ground water exploitation is also not satisfactory as in areas where surface water is used for irrigation purpose. There is a tendency of not using ground

water for agriculture which creates problem of water level rise and even water logging. On the contrary, in large areas of the State, ground water is being over exploited and the water level is depleting at alarming rate in most of the area except in canal command area. The steady decline in the number of blocks with safe levels of exploitation of ground-water and the corresponding increase in critical and over-exploited categories clearly indicate over-dependence on ground water among all the 249 blocks.

Table 12.2 Ground Water Status of Blocks

Category	(No. of Blocks)					
	1984	1988	1998	2001	2004	2008
Over-Exploited (>100%)	12	44	41	86	140	168
Critical (90 to 100%)	11	18	26	80	50	28
Semi Critical (70 to 90%)	10	42	34	21	14	20
Safe (<70%)	203	122	135	49	32	32

12.5 The above background leads to the following priorities and activities for water resources development and management:

- Development of all utilizable water resources to the maximum possible extent, including surface water - local and imported - groundwater and waste water, for optimal economic development and social well-being.
- Assuring an integrated and multi-disciplinary approach to planning, evaluation, approval and implementation of irrigation and drainage projects, including river basin management.
- Optimum utilization of water resources to maximize production in all user sectors.
- Providing flood protection and drainage facilities, as well as assuring minimal supplies during drought periods.
- Ensuring proper functioning of existing structures, conveyance systems and other assets through adequate maintenance and operation.
- Minimizing adverse impacts of water resources development on the natural environment and on population affected by project implementation works.
- Promoting beneficiaries' participation in all aspects of water planning and management, with particular emphasis on Water User Associations intended to manage and maintain irrigation systems, both physically and financially.

- Advancing the technological and scientific level of all the staff in the water sector through intensification of applied research, technology transfer, training and education.
- Facilitating private initiative in development, operation and management of water projects.

12.6 The State Government has laid emphasis on harnessing of maximum water resources by investing funds during all Plan periods. Irrigation potential has increased from 4.00 lakh hectare (before 1951) to 37.13 lakh hectares up to March, 2010 with the construction of 118 major and medium and 3305 minor irrigation works up to March, 2010. Work on 3 major irrigation projects i.e. RWSRP, Gang Canal Modernization and Narmada, 4 medium irrigation projects i.e. Takli, Piplad, Lhasi & Gagrin and 41 minor irrigation works are in progress. Works of 5 minor irrigation projects is likely to be completed during 2010-11.

Eleventh Plan and Annual Plan Outlays:

12.7 Against an outlay of ₹ 7302.05 crore proposed for the XI Five Year Plan for water resources, an expenditure of ₹ 2497.89 crore has been incurred during 2007-10. An expenditure of ₹ 704.35 crore is likely to be incurred during 2010-11. An outlay of ₹ 972.95 crore is proposed for Irrigation & Flood Control Sector for the Annual Plan 2011-12 as per details given below:

Table No. 12.3

(₹ in crore)

S. No.	Category	XI Plan Outlay	Likely Exp. 2010-11	Proposed Outlay 2011-12
1.	Irrigation (Including IGNP)	5509.86		
i.	Multi-purpose Projects	131.30	0.20	0.40
ii.	Major Projects	4319.28	357.83	483.40
iii.	Gang Canal (Modernization)	87.63	10.00	20.00
iv.	Medium Projects	845.00	55.00	94.00
v.	Water Management Services	126.65	10.27	12.07
2.	Minor Irrigation	1266.70	181.50	257.01
3.	Command Area Development	488.04	87.55	104.07
4.	Flood Control Works	36.50	2.00	2.00
5.	Colonization	0.95	0.00	0.00
	Total	7302.05	704.35	972.95

12.8 Project-wise details are as follows:

Multi-purpose/Major Irrigation Projects:

LOTIC Works:

12.9 The LOTIC works are shareable between MP and Rajasthan States on matching basis. A provision of ₹ 40.00 lakhs is proposed for the year 2011-12.

Narmada Project (AIBP):

12.10 Narmada Canal Project was taken up to utilize 0.5 MAF of Narmada water allocated to Rajasthan from Sardar Sarovar Project, under construction in Gujarat. The share of water is being delivered at Rajasthan-Gujarat border through 458 km. long Narmada Main Canal (NMC). The water of river Narmada reached in Rajasthan in the month of March, 08. The canal system in Rajasthan would provide irrigation in 2.46 lakh hectare by adopting sprinklers irrigation system, which is mandatory in this project. This project would provide drinking water facility to 1336 villages & 3 towns.

12.11 The original cost of the project as approved by the Planning Commission in the year 1992 is ₹ 1541.36 crore. This cost includes ₹ 222.57 crore as share for providing drinking water to the command area and outside the command area. The revised estimated cost of the project is ₹ 2481.49 crore as approved by the Planning Commission in 2010 with the direction to complete the project by 2012-13. An expenditure of ₹ 1514.84 crore has been incurred up to March, 2010. An expenditure of ₹ 150 crore is likely to be incurred during 2010-11. A provision of ₹ 220 crore is proposed for the Annual Plan 2011-12. The project is likely to be completed by March, 2013.

12.12 The canal system would provide irrigation facility in 2.46 lakh hectare area on completion. Out of which CCA in 1.75 lakh hectare has been created up to March, 2010 and CCA in 0.30 lakh hectare is likely to be created during 2010-11. A target of creation of additional irrigation potential of 0.30 lakh hectare has been proposed for the year 2011-12.

Bisalpur Project:

12.13 Bisalpur project is irrigation cum drinking water supply project. The dam has already been constructed across river Banas near village Bisalpur in district Tonk to store 38.70 TMC water. At 75 percent dependability, 33.15 TMC water is available at Bisalpur dam site. After accounting evaporation & other losses, the net usable water available is 24.2 TMC. Out of which 16.2 TMC has been allocated for drinking water to Jaipur, Ajmer, Beawar, Kishangarh, Nasirabad & other en-route villages and 8 TMC has been allocated to provide irrigation facility in an area of 81.8 thousand hectare land of Tonk district.

12.14 Dam along with intake structure for water supply to Ajmer and Jaipur districts has already been completed. Construction works of 51.64 kms long Right Main Canal and 18.65 kms long Left Main Canal have been completed. The works of distribution system on both the canals are in progress. Out of 510 kms length of distribution system of RMC, construction of 506 kms has been completed by December, 2010. Work of entire length of 123 kms of LMC has been completed by December, 2010. Remodeling work of distributaries of Tordi Sagar South Canal has been completed in 6 kms length.

12.15 Total 68 villages land and property shall be affected due to submergence of the dam out of which 25 villages are fully submerged and 43 villages are partially submerged. Compensation of the land and properties of villages submerged has been paid except a few disputed cases. For oustees rehabilitation and resettlement, against the development of 112 Nos. rehabilitation colonies, 104 colonies have been completely developed and development work of 8 colonies are under progress.

12.16 Out of the ultimate CCA of 81800 hectare, CCA in 81500 hectare has been opened up to December, 2010.

Rajasthan Water Sector Restructuring Project (EAP):

12.17 This major project was conceived for the improvement of selected surface irrigation system and performance efficiency through the involvement of Water User's Associations (WUA). The revised cost of the project is ₹ 740 crore and it was started in 2002-03. Under the project, 89 projects are to be rehabilitated covering an area of 619.95 thousand hectare, which are in distress. An expenditure of ₹ 684.54 crore has been incurred up to March, 2010. An expenditure of ₹ 55 crore is likely to be incurred during Annual Plan 2010-11. A provision of ₹ 100 crore is proposed for the project for the year 2011-12.

Indira Gandhi Nahar Project:

12.18 The Indira Gandhi Nahar Project is one of the most gigantic projects in the world aiming to de-desertify and transform desert waste land into agriculturally productive area. For the convenience of the administrative control & construction, the project has been divided in two stages. The 204 km long feeder and main canal up to 189 km along with its distribution system falls under Stage-I. Indira Gandhi Main Canal downstream 189 km to tail along with distribution system falls in Stage-II. The total cost of Stage-II as sanctioned by the Central Water Commission in 1996 and the Planning Commission in 1998 is ₹ 3399 crore, out of which cost of canal works is ₹ 2267 crore. By the end of March, 2010, an expenditure of ₹ 3181.76 crore has been incurred on Stage-II. Revised estimate of Stage-II prepared on rates of the year 2010 has been submitted to the Central Water Commission. The total cost of revised project including laying of pressure pipeline for sprinkler irrigation works in lift schemes has been estimated as ₹ 6921 32 crore.

12.19 This estimate has been cleared by TAC of CWC. Total CCA of the project as per estimates approved by the Central Water Commission in the year 1996 is 19.63 lakh hectare, out of 5.53 lakh hectare is of Stage-I and 14.10 lakh hectare of Stage-II. In view of the water availability for irrigation in the project, it has been decided to complete ongoing works on priority by completion of which, 16.17 lakh hectare CCA will be available for irrigation. This area includes 5.46 lakh hectare in Stage-I and 10.71 lakh hectare in Stage-II. Up to March, 2010, 5.46 lakh hectare

in Stage-I and 10.45 lakh hectare in Stage-II is opened. The length of the distribution system is 9413 km. (3454 km in Stage-I and 5959 km in Stage-II), out of which 8114 km (3270 in Stage-I+4844 km in Stage-II) has been constructed up to March, 2010.

12.20 During the year 2010-11, likely expenditure is ₹ 143.03 crore and work of construction of 3 km canals and opening of 25,000 hectare CCA are under progress. During 2011-12, an amount of ₹152.10 crore has been proposed for the project. It is proposed to open 4500 hectares CCA in the year 2011-12.

Modernization of Gang Canal (AIBP):

12.21 The Gang Canal project is under operation since 1927 to provide irrigation in Ganganagar district. The canal system has deteriorated over the years. Therefore, the modernization project was prepared for the lining of Bikaner Canal in the Punjab and canal system in Rajasthan portion. The project was started in 2000-01. Revised cost of the project is ₹ 621.42 crore, out of which an expenditure of ₹ 497.10 crore has been incurred up to March, 2010. An expenditure of ₹ 10 crore is likely to be incurred in the year 2010-11. A Provision of ₹ 20 crore is proposed for the year 2011-12. The project is likely to be completed in 2012-13.

12.22 This project will create additional irrigation potential of 96.51 thousand hectares on completion. Additional irrigation potential of 87.95 thousand hectare has been created up to March, 2010. Likely achievement during 2010-11 is 800 hectare. The target for CCA creation for the year 2011-12 is 3000 hectare.

Yamuna Water Project:

12.23 Two separate major projects have been prepared for utilization of 3198 cusec Yamuna water allocated to Rajasthan by the Upper Yamuna River Board namely (i) Yamuna Water Project for Bharatpur district and (ii) Yamuna Water Project for Jhunjhunu and Churu districts. An expenditure of ₹ 30 lakh is likely to be incurred on these projects during 2010-11 and the same amount of ₹ 30 lakh has been proposed for the Annual Plan 2011-12.

Parwan Irrigation Project:

12.24 Parwan Major Irrigation cum Drinking Water Project is being constructed in Jhalawar District on Parwan River near village Akawad for providing irrigation to 138239 hectare land of Kota, Baran, Jhalawar districts. The total cost of this project is ₹ 1114 crore. Likely expenditure on the project in 2010-11 is ₹ 50 lakh. A provision of ₹ 100 lakh is proposed for the year 2011-12.

Kalisindh Irrigation Project:

12.25 Kalisindh Major Irrigation Project is proposed to be constructed in Jhalawar district on Kalisindh river near Bhanwarasa. The hydrology of

the project has been cleared by the CWC. The total cost of the project is ₹ 416.76 crore. Only token provision has been kept in 2011-12 for the project.

Dholpur Lift Irrigation Project:

12.26 Dholpur Major Irrigation Project is proposed to be constructed in Dholpur district to irrigate 34665 hectare land. The hydrology of the project has been cleared by the CWC. The total cost of the project is ₹ 90 crore. Only token provision has been proposed in 2011-12 for the project.

Medium Irrigation Projects:

Gardada Medium Irrigation Project:

12.27 Gardada Medium Irrigation Project is under construction on river Mangli Dungari & Ganesh Nallah, a tributary of river Chambal. The dam site is located near village Polaspura in district Bundi. The project would provide irrigation in an area of 9 thousand hectare. The work on this project was started in the year 2003.

12.28 The estimated cost of the project is ₹147.04 crore, out of which an expenditure of ₹123.30 crore has been incurred up to March, 2010. An expenditure of ₹ 2.50 crore is likely to be incurred during 2010-11. A provision of ₹ 2 crore is proposed for the project for the year 2011-12. Additional irrigation potential of 950 hectare has been created up to March, 2010. The dam breached in August 2010 due to heavy rainfall.

Takli Medium Irrigation Project:

12.29 Takli Irrigation cum Drinking Water Supply Project is under construction on river Takli, a tributary of Amjar as well as Kalisindh Rivers. The dam site is located near village Dhankya in Kota district.

12.30 The project would provide irrigation facility in an area of 7,386 hectare and drinking water facility to 4 villages and 2 town of Ramganjmandi Tehsil of Kota district. The revised estimated cost of the project is ₹ 124.46 crore. An expenditure of ₹ 13.70 crore has been incurred on the project up to March, 2010. Likely expenditure on the project during 2010-11 is ₹ 6.78 crore. Only token provision is kept for the year 2011-12 as remaining work of the project will be completed under Thirteenth Finance Commission's Grant.

Piplad Medium Irrigation Project:

12.31 Piplad Medium Irrigation Project is under construction on river Piplad, a tributary of Ahu River. The dam site is located near village Sulia Chowki in tehsil Bhawanimandi in Jhalawar District.

12.32 The project would provide irrigation in an area of 4,688 hectares in 19 villages of Pachpahar Tehsil. The estimated cost of the project is ₹ 65.18 crore. An expenditure of ₹ 30.87 crore has been incurred up to

March, 2010. Likely expenditure on the project during 2010-11 is ₹ 11.78 crore. Only token provision has been kept in 2011-12 as the remaining work of the project will be completed under the Thirteenth Finance Commission's Grant.

Gagrin Medium Irrigation Project:

12.33 Gagrin Medium Irrigation project is under construction on river Ahu, a tributary of Kalisindh river. The dam site is located near village Kalapipal of Jhalawar district.

12.34 The project would provide irrigation in an area of 7243 hectare. The estimate cost of the project is ₹ 80.12 crore and likely to be completed in 2011-12. An expenditure of ₹ 37.37 crore has been incurred on the project up to March, 2010. Likely expenditure on the project during 2010-11 is ₹ 6.19 crore. Only token provision has been kept in 2011-12 as the remaining work of the project will be completed under the Thirteenth Finance Commission's Grant.

Lhasi Medium Irrigation Project:

12.35 Lhasi Medium Irrigation Project envisages construction of earthen dam on river Lhasi near village Khajuria Tehsil Chhipabarod of Baran district.

12.36 The project would provide irrigation in an area of 5,755 hectare. The revised estimated cost of the project is ₹ 106.95 crore and likely to be completed in 2012-13. An expenditure of ₹ 41.22 crore has been incurred on the project up to March, 2010. Likely expenditure on the project in 2010-11 is ₹ 7.66 crore. Only token provision has been kept in 2011-12 as the remaining work of the project will be completed under the Thirteenth Finance Commission's Grant.

Manoharthana Medium Irrigation Project:

12.37 Manoharthana Medium Irrigation cum Drinking Water Project is proposed to be constructed in Jhalawar district on Parwan river near village Manoharthana for providing irrigation to 9,800 hectares land of Jhalawar district. The estimated cost of the project is ₹ 93.10 crore. Likely expenditure on the project in 2010-11 is ₹ 18.18 lacs. A provision of ₹ 50 lakh is proposed for the year 2011-12.

Hatiyadeh Medium Irrigation Project:

12.38 Hatiyadeh Medium Irrigation Project envisages construction of earthen dam on Hatiyadeh Nalla near village Karwari Khurd, tehsil Kishanganj of Baran district for providing irrigation to 6885 hectare land of Baran district. The estimated cost of the project is ₹ 70.66 crore. The construction work of the project is yet to be started. Only token provision is proposed for the Annual Plan 2011-12.

Rajgrh Medium Irrigation Project:

12.39 Rajgarh Medium Irrigation cum Drinking Water Project is proposed to be constructed in Jhalawar district on the confluence point of Ahu and Kanthari rivers near village Rajgarh. It would provide irrigation to 8634 hectares land of Jhalawar District. The estimated cost of the project is ₹ 98.40 crore. The construction work of the project is yet to be started. Only token provision is proposed for the Annual Plan 2011-12.

Andheri Medium Irrigation Project:

12.40 Andheri Medium Irrigation Project envisages construction of earthen dam on river Andheri near village Mundkiya, tehsil Chhipabaroad of Baran district for providing irrigation to 7700 hectare land of Baran district. The estimated cost of the project is ₹ 87.53 crore. The construction work of the project is yet to be started. Only token provision is proposed for the Annual Plan 2011-12.

Minor Irrigation Projects:

12.41 The minor irrigation projects have low cost and are completed in short gestation period. Such works create potential in arid and semi-arid region of the State, where scope of surface water is limited and the scope of exploitation of ground water is very limited. There are 41 ongoing Minor Irrigation Projects on which an expenditure of ₹ 125 crore is likely to be incurred and 3000 hectare irrigation potential to be created in 2010-11. A provision of ₹ 75 crore is proposed for creation of irrigation potential of 3000 hectare in 2011-12.

Water Harvesting Structures:

12.42 For conservation of the scarce rainy water and augmentation of traditional resources of water in the State. 2684 water harvesting structures costing ₹ 250.15 crore has been sanctioned till now; 2388 works have been completed. An expenditure of ₹15.00 crore is likely to be incurred on Water Harvesting Structures in 2010-11. A provision of ₹ 5.00 crore is proposed for these works in the Annual Plan 2011-12.

Grant of Thirteenth Finance Commission

12.43 A provision of ₹ 75.00 crore has been proposed for irrigation projects under the Grant of Thirteenth Finance Commission. Out of this amount ₹ 60.00 crore is proposed for the medium irrigation projects and ₹ 15.00 crore for minor irrigation projects. Project-wise details of proposed outlays are as follows:-

Table No. 12.4

S.No.	Name of Project	Proposed Outlay for 2011-12
A	Medium Irrigation Projects	
1	Takli Project	25.00
2	Piplad Project	15.00

S.No.	Name of Project	Proposed Outlay for 2011-12
3	Gagrin Project	10.00
4	Lhasi Project	10.00
B	Minor Irrigation Projects	15.00
	Total	75.00

GROUND WATER DEPARTMENT

12.44 Construction of office building for the department at Bikaner has been taken up. Total cost of the project including cost of land is ₹ 204.19 lakh. An expenditure of ₹123.43 lakh is likely to be incurred up to 2010-11. Balance amount of ₹ 80.76 lakh is proposed for the project in 2011-12.

COMMAND AREA DEVELOPMENT

Command Area Development & Water Utilization Department

12.45 The Command Area Development Programmes aims to bridge the gap between irrigation potential created and its early utilization. This is achieved through the efficient soil, agriculture and water management. Two Command Area Development Authorities of Chambal & IGNP were set up in 1974. The main objectives of CAD Programmes are as follows

- Efficient utilization of water, minimizing of water losses through lining of canals, increasing canal capacity, installation of control structures, dissemination of improvement techniques.
- Minimizing gains from water use through On Farm Development Works, constructing improved and wider road network, improved agriculture techniques brought about by adaptive research and its dissemination through agriculture extension.
- Equitable distribution of water through warabandi and greater control over canal system as a whole.
- Involvement of farmers in management of irrigation system through Participatory Irrigation Management by their active involvement.

IGNP, Bikaner:

12.46 Construction of lined water courses, agriculture extension, adaptive research, soil survey, anti water logging and land reclamation works are taken under Command Area Development. OFD works are funded under CSS on the matching basis.

12.47 Against the provision of ₹ 12.94 crore in 2010-11, likely expenditure is ₹ 20.42 crore. A provision of ₹ 10.28 crore is proposed for the Annual Plan 2011-12.

12.48 The OFD works in IGNP have been completed. Sanction of Gang Canal Project is awaited. A target of construction of lines water courses in 13500 hectare area in command area of Gang Canal Project is will be

taken up in the year 2011-12 for which a provision of ₹ 17.80 crore is proposed. The farmers are also being benefited through agriculture extension, adaptive trials, soil survey, water logging and land reclamation, abadi planning, subsidy on diggi & sprinkler etc in IGNP command area.

CAD Chambal, Kota:

12.49 The Chambal Valley Development Scheme is a joint venture of MP & Rajasthan States. Water of the Chambal River has been harnessed for the scheme in three phases i.e:

- Construction of Gandhi Sagar Dam, Kota Barrage, Chambal Right Main Canal and Chambal Left Main Canal.
- Construction of Rana Pratap Sagar Dam between Gandhi Sagar & Kota Barrage.
- Construction of Jawahar Sagar Dam.

12.50 Chambal Right Main Canal off-takes from right side of the Kota barrage and run 124 km in Rajasthan and 248 km in MP. The Right Main Canal is irrigated by 7 branches, 27 distributaries and minors. It irrigates land of Kota and Baran districts. Chambal Left Main Canal off takes from the left side of the Kota Barrage and its length is 2.59 km which further bifurcates in two branches, Bundi Branch Canal and Kapren Branch Canal. Three branches, 27 distributaries and 180 minors of the LMC irrigates 1.02 lakh hectare land of Kota and Bundi districts.

12.51 OFD works in 1,09,406 hectare have been completed up to March, 2010. Likely expenditure of under the project during 2010-11 is ₹ 25 crore. OFD works in 9000 hectare area will be executed in 2011-12. A provision of ₹ 25.60 crore is proposed for the project in 2011-12.

CAD Bisalpur:

12.52 Bisalpur Drinking Water cum Irrigation Project has been included under the Centrally Sponsored Schemes in 2006. Estimated cost of the project is ₹129.34 crore. Execution period of the project is 4 years and against the OFD works in 81,800 hectare area. OFD works in 3041 hectare area have been completed up to March, 2010 and in 16000 hectare is likely to be completed during 2010-11. It is proposed to construct OFD works in 14000 hectare during 2011-12 for which a provision of ₹ 14.91 crore is proposed.

Sidhmukh Nohar Irrigation Project:

12.53 Sidhmukh Nohar Irrigation Project (SNIP) is included under CSS by the Central Government. The total area of this project is 1,14,379 hectare. 99 villages of Hanumangarh and 14 villages of Churu district will be benefited by this project.

12.54 CADA started the construction of lined water courses in this project area in the year 2004-05 and up to March, 2010, work were completed in 79323 hectare. Lined water courses in 20000 hectare are likely to be constructed during the year 2010-11. Lined water courses in 14,700 hectare will be constructed in 2011-12 for which a provision of ₹ 19.30 crore is proposed.

Amar Singh Sub Branch Project:

12.55 Amar Singh Sub Branch Project (ASSB) is included under CSS by the Central Government. The total area of this project is 50,702 hectare. CADA started the construction of lined water courses in this project area in the year 2005-06 and up to March, 2010, works were completed in 17,235 hectare. Lined water courses in 1460 hectare are likely to be constructed during the year 2010-11.

12.56 For construction of lined water courses in 11500 hectare, a provision of ₹ 15.08 crore is proposed for the year 2011-12.