

UTTAR PRADESH WATER SECTOR RESTRUCTURING PROJECT INDIA

Uttar Pradesh is situated in northern part of India having a population of 166 Million when area of 241 Th. Sq. Kms. which makes it one of the highest density ranking state. This state though having the most fertile Indo-Gangetic plains and rivers like Ganga, Yamuna, Ghaghra, Gomti, Betwa, Ken, Rapti etc. which caters major surface irrigation even then the increasing population keeps it in tug of war for filling the demand and supply gaps.

The major source of income for its population is mainly agriculture. The main crops grown are rice, wheat, maize, pearl-millet, sorghum, pulses and oil seeds, but due to smaller average land holdings the production is not upto the mark as well as the mechanization of agriculture is also affected.

Sugarcane and potato are the main cash crops. There are number of sugar mills situated in the state and utilizing most of the sugarcane grown for manufacturer of sugar and other by-products.

Sarda Sahayak System of Ghaghra- Gomti basin is a major surface irrigation project. A pilot project as U.P. Water Sector Restructuring Project is being implemented in Sai-Gomti sub-basin of Ghaghra-Gomti basin covering five districts namely Barabanki, Raebareli, Sultanpur, Pratapgarh and Jaunpur..

UP Water Sector Restructuring Project (UPWSRP) is being implemented with following objectives:

1. To set up an enabling institutional and policy framework for water sector reform in the State for integrated water resources management to implement the provisions of State Water Policy.
2. To initiate irrigation and drainage sub-sector reforms in the State to increase and sustain water and agricultural productivity.

The project is to be implemented in four phases spanning from 12 to 15 years and is estimated to cost about 1300 m US\$ (Approx Rs. 6000 crore). The project is to be implemented in Ghagra-Gomti Basin covering about 3600 Th.Ha. of irrigated command area of Sarda Sahayak Projects. The first phase, total cost MUS\$ 171 is of five years and is being implemented in 323 Th. Ha. Culturable Command Area (CCA). Due Date of completion 30-10-2007. The time period of project has been extended upto 31.10.2008 by World Bank and extension of one more year has been recommended by Govt. of India and formal extension is awaited from World Bank.

Components of the Project (Phase-1) are as below :

- A Creation of Apex Water Institutions & Strengthening Multi-Sectoral Water Resources and Environment Management Capability.**
- B Irrigation Department Reform & Capacity Building.**
- C Piloting Reform Options For Irrigation & Drainage Operations.**
- D Piloting Reforms Options In Water Resource Management**
- E Feasibility Study for UPWSRP-II Phase**
- F Project Coordination & Monitoring**

Physical achievements (Phase-1) are as below:

A- Creation of Apex Water Institutions and Strengthening Socially and Environmentally Sustainable Multi-Sectoral Water Resources Planning, Allocation and Management Capacity

- State Water Resources Agency (SWaRA) – Functional.
- “Water Resources Management and Regulatory Commissioner Organization” has been created and Draft SWaMAREC act enacted and Participatory Irrigation Management also approved by the state cabinet.
- State Water Resources Data Analysis Center (SWaRDAC) - Functional.

- Jaunpur Branch Sub-Basin Development and Management Board (JBSDMB) created and being deployed for water management in basin.
- UPWaMReC Act enacted.
- Environmental Guidelines/Checklists/OK Cards are in place and being utilized.
- Environmental situations are improving due rehabilitation works.
- Environmental Monitoring is being done by Water User Associations.

B. Irrigation Department Reform & Capacity Building

- Data center is established and MIS is functional.
- Wide Area Network (WAN) enhanced from 148 sites last year to 188 sites at present. Local Area Network (LAN) sites are functional.
- Computers installed upto all divisional offices of Irrigation department.
- Application system development for Payroll, Assembly Questions and Litigation Modules have been completed. Remaining modules are in progress.
- Faster and effective communication due to MIS development.
- Capacity building of 4569 ID Officials through short term and 12 Officials through long term trainings completed.
- Basic computer training of 1895 ID officials completed through international consultant.
- 70 ID officials trained by FAO of UN in canal management using RAP-MASSCOTE technique.
- Training strategy /plan for UPID developed through IIM Lucknow.
- Final Report for Institutional Strengthening & Restructuring of IDUP finalized. A sub-committee of Chief Engineers constituted to prepare recommendations.

C-Piloting Reform Options for Irrigation and Drainage Operations (PROIDO)

- 4679 Water User Associations (WUAs) at outlet level and their representative WUAs in all 421 minors are functional.
- These community based organizations are using their command maps and other canal feature drawings for appropriate planning.
- These community based organizations created at outlet as well as minor level are now owning the system which is resulting in better utilization of water.
- These organizations have drawn and got approved water distribution schedules for all the 421 minors and carrying out O & M activities & initiated constructing field channel.
- These organizations are participating in rehabilitation works through co-ordination committees and providing inputs using maps, designs and specifications provided by the project.
- These organizations are also handling their Bank accounts and Cash books themselves.
- Draft PIM Act has been approved by the state cabinet.
- 1306 Women Self Help Groups are being strengthened.
- Women folk are being mobilized towards self reliance through WSHGs.
- Socio-Economic condition of the rural house holds is improving.
- Haidergarh Sugar Mills introducing improved package of practices for sugarcane cultivation with drip system of irrigation to the project area farmers under a MoU between PACT and the Mill..

- Improved package of practices for Green Gram, Paddy, Pigeon-pea, Mustard, Wheat, Banana, Papaya, Green-fodder and Vermi-compost are being demonstrated on each minor upto outlet level.
- These demonstrations have shown visible advantage over traditional practices in terms of soil conditioning, crop rotation, yield and conjunctive use of surface and ground water.
- The farmers are getting convinced with the practices demonstrated and are adopting gradually.
- Capacity building of farmers are being carried out through Trainings, Field Days and Exposure Visits.
- Higher yields and augmented income due to adoption of improved package of agricultural practices demonstrated.
- Farmers are utilizing the demonstration produce as quality seed through barter process.

D-Piloting Reform Options in Water Resources Management (PRoWaRM)

- Fish culture initiated in 48 water bodies
- 15 No. (260 Ha) wetlands identified for aquaculture.
- Selection of 35 ha additional water area is underway.
- In-situ training of 240 NGO functionaries and 275 farmers has been completed.
- Farmers in the project area are adopting the improved aquaculture utilizing available wetlands.
- Rain water harvesting structures are under construction.
- 03 check dams have been constructed.

- 02 check dams and 01 pond are under construction.
- Agreement signed for 8 nos. check dams.
- Rain water is being conserved through improved conservation practices.
- Monitoring of ground water levels and water quality is being carried out regularly through 500 digital and 384 manual Piezometers.
- 49191 Ground Water User Groups (average 4 ha. area) have been formed in the command area of 421 minors for effective conjunctive use of surface and ground water.

F- Project Coordination & Monitoring

- Monitoring and Evaluation works are being carried out through modern techniques.

Financial Progress :

63.9 MUS\$ has been spent till September 2008.

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