

Process Planning for Preparation of Integrated Water Resources Development and Management Plan (IWRD&MP) in Wainganga Sub Basin, Maharashtra

Background

Wainganga is the largest sub-basin of Godavari river which occupies an area of 13663 Sq. km with 160 watersheds. Wainganga basin is unique due to its physical and social features. It is a region with the highest forest cover in the State of Maharashtra, affected by Naxalism and suffers from a developmental backlog despite the availability of natural resources.



Fig. 1 : Wainganga River Basin

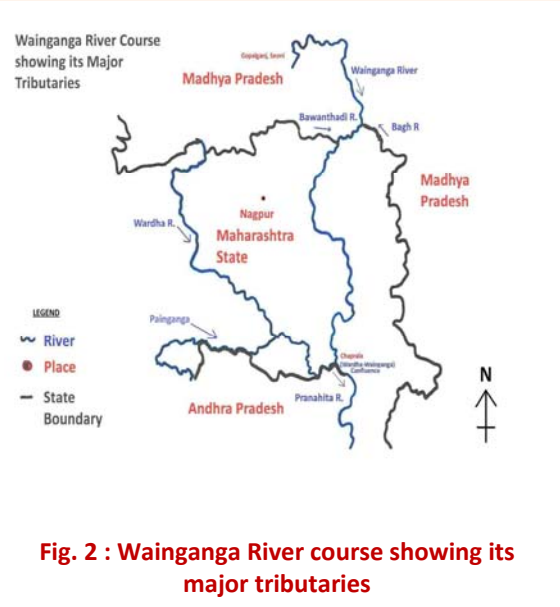


Fig. 2 : Wainganga River course showing its major tributaries

Need for an Integrated Water Resources Development and Management Plan (IWRD&MP)

Flooding in the Wainganga sub basin has been a major problem in the past. As agriculture is not grooming-up in the area, the farmers' suicides had been on rise in Vidarbha region. Agriculture and economy needs a boost through Integrated River Basin Management Plan. Untreated waste water from Nagpur city is released in Wainganga from its tributaries, like Kanhan, etc. resulting pollution of surface water and groundwater. Presently, the status of ground water, quality of ground water, conjunctive use, etc., is sketchy and insufficient. Absence of technology for reducing transmission and distribution losses and technology leak detection and evaporation losses. The basin faces problems from naxalities operating in the dense deciduous forests, especially in the Gadchiroli district. This makes the issue of social and economic development more complex. Most of the basin receives a rainfall of about 150 cm during the monsoon months. Despite this fact, there are very few water conservation structures on the mainstream of the river, and hence there are only few irrigation schemes. Attention needs to be given in developing water conservation structures and putting together water user groups and ensure reliable and efficient water delivery. Despite the fact that the region houses some of the most ancient tribes and deciduous forests in India, tourism has not developed considerably. The Wainganga Basin and its tributaries are home to numerous fish species, some of which may be endemic to the area. A tributary of river Wainganga 'Kathani' represented 38 fish species, during a sample survey. Absence of agricultural allied activities like oil processing units (from Soya beans, cotton seed), power looms and mills (processing cotton), vegetable processing units, etc., have resulted in stagnated economic growth of the region. This needs to be revived through integrated and visionary planning.

Process Planning for Preparation of IWRD&MP

To address the above issues, preparation and implementation of IWRD&MP in Waingangā Sub Basin, Maharashtra is therefore felt necessary.

Keeping in mind Goal-1 of GWP-SAS and IWP work plan 2010 i.e, “To apply and implement IWRM principles and practices to support national development priorities”, India Water Partnership supported its West Zone Water Partnership Coordinating Agency, Gomukh Environment Trust for Sustainable Development (Gomukh Trust), Pune to initiate the planning process for developing IWRD&MP for the Wainganga River Basin through Negotiated People’s Participation approach. In 2010 January, the planning consultation started with Stakeholders meeting initially and later on in the month of June, 2010, Gomukh Trust was formally engaged by Department of Water Resources, Government of Maharashtra for preparing IWRD&MP.

Here the negotiated people’s participation approach has been defined as “A future where communities (whether living in upper watersheds, in forests, on river banks, in rural or urban areas, estuaries or in flood-plains) are aware that they themselves have to act and respond locally to the multifarious impacts of the water crisis, and build up their own institutional structures and management practices which can be up-scaled from the micro-catchments to the river basins, and which are socially, politically, economically and technically within their control.”

During planning process, Gomukh Trust organized two rounds of consultation workshops of the stakeholders comprising of local tribals, fishermen, farmers, BPL people, women, representatives from the industry, urban areas, Govt. agencies, etc. The main objectives of the workshops were ; a) Initiating the process planning with inputs from all stakeholders which can form a base for developing the IWRD&MP; b) Formation of sub-groups for collecting base data on key subjects related to Integrated Water Resource Management ; c) Assigning responsibilities to the individual sub-groups to arrive at a set of proposals or investment projects which would constitute the Master Plan ; and d) to arrive at a system of exchanging information between the stakeholders and the sectoral government agencies like Irrigation, Agriculture, Forestry, Fisheries, Hydro-power, Urban Water supply, Pollution Control Board, etc. Proceedings of the two workshops and an Inception Report have been submitted to India Water Partnership and Water Resources Department of Maharashtra.



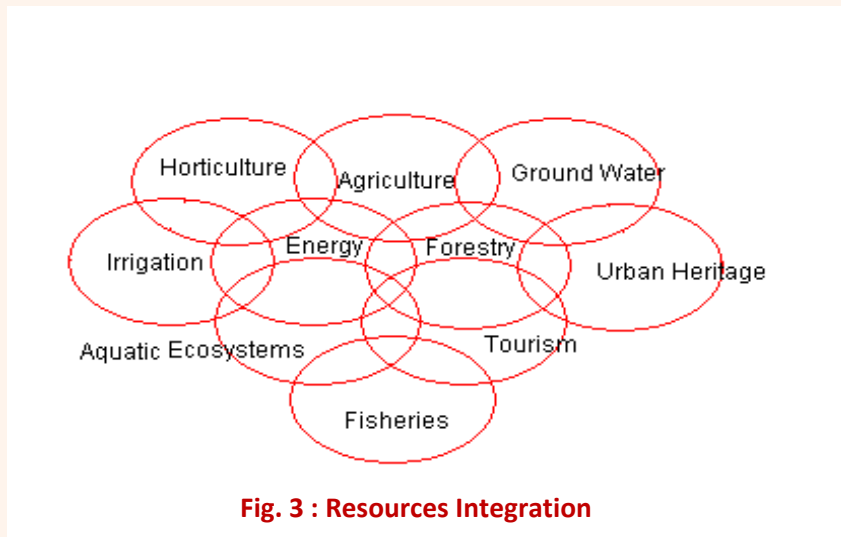
Photo-1 : First consultation workshop of Stakeholders



Photo-2 : Second consultation workshop of Stakeholders

Composition of the Plan

The Plan after preparation would comprise of (i) Assessment of Project Area (Pre-Plan) & SWOT analysis ; (ii) Land Use Planning, Development & Management (Geology, Soils, Land Use Pattern, Development & Management of Galper lands, Diversion of agricultural land to non-agricultural activities, Land acquisition, resettlement & rehabilitation); (iii) Water Resources Development (Goe-hydrology, Groundwater availability, Hydrometeorology ; Surface water availability; Tribunal awards, Prevention of water losses and evaporation control) ; (iv) Water Resources Management (Irrigation Management Plan, Domestic and Industrial Water Supply – Urban & rural, Use of modern tools & water saving techniques, Ground water management/conjunctive irrigation, Watershed development& management, Recycling, re-use and multiple use of water, Water quality, Drought mitigation, Traditional water devices for water management, Inter-basin divergence, Water balance); (v) Disaster Management (Flood, Earthquake, Drought); (vi) Water for energy; (vii) Tourism; (viii) Fisheries, etc.



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Promoting IWRM in South Asia and striving for good governance, equity, access, adequacy, quality, productivity and sustainability in the water sector

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