





# **India Water Partnership (GWP-INDIA)**

# Monthly Report September-2014

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1 IWP Report for July, 2014

#### PART-I: CORE ACTIVITY REPORT

1.1. Study for Reviewing and Examining the State Level Regulatory and Institutional Framework of State Water Policy of Maharashtra, Meghalaya and Karnataka to Operationalize the National Water Policy- 2012

India Water Partnership with the support of Indian Environment Law Offices (IELO) is reviewing and examining the state level regulatory and institutional framework of state water policy of **Maharashtra**, **Meghalaya** and **Karnataka** to operationalize the National Water Policy- 2012 (NWP-2012). In the previous months the review of State Water Policy of Maharashtra and Meghalaya was completed. During the month of August the third State, Karnataka was taken-up for the study and its salient findings on a set of thematic issues was shared in the monthly report of the previous month.

During the month September, 2014 the following thematic issues were taken up along with the sub themes. The findings given below presents the status based on research on the following thematic areas:

#### Mechanism for water pricing

The State Water Policy 2002 endeavors to fix water rates for various uses to cover at least the operation and maintenance charges of providing services. The Karnataka Urban Drinking Water and Sanitation Policy, 2003 talks about establishing "appropriate cost recovery mechanism through adequate tariff to ensure that revenues cover operations and maintenance costs, debt service plus a reasonable return on capital". The policy applies to supply of water in the urban areas and it aims at achieving 100 percent metering and volumetric pricing for the water supplied.

There is a mechanism for water pricing for water supplied to the Bangalore Metropolitan Area. The Bangalore Water Supply and Sewerage Board established under the Bangalore water supply and Sewerage Act, 1964 is empowered to levy water charges/rates/fees for the water supplied for domestic and non-domestic purposes within the Bangalore Metropolitan Area.

The Karnataka Water Supply and Drainage Board is also responsible for supplying water in urban areas other than city of Bangalore. The Board can levy and collect water rates, fees, rentals and other charges as specified by the State Government.

#### **Establishment of Water Regulatory Authority**

The state has not yet established Water Regulatory Authority.

#### Water pricing methods

The Bangalore Water Supply and Sewerage Board which is levying and collecting water charges/rates/fees for the water supplied for domestic and non-domestic purposes within the Bangalore Metropolitan Area operates on a 'no profit no loss' principle and all components of O&M cost is taken into account for evolving price for the water supplied.

The Karnataka Water Supply and Drainage Board which is levying and collecting water rates, fees, rentals and other charges as specified by the State Government/ Municipal Corporation from the consumers in areas other than Bangalore Metropolitan Area.

#### Rationalization of water pricing

#### **Urban Areas**

There is rationalization of water pricing in urban areas.

#### **Rural Areas**

The Karnataka Panchayat Raj Act, 1993 empowers the Grama Panchayat (GP) to maintain drinking water supply structures by raising resources for the same. The Grama Panchayat is responsible for collecting water charges in rural areas and operations and maintenance of water supply schemes such as Mini Water Schemes (MSW) and Piped Water Schemes (PWS). The collections of water charges differ from one GP to another. The water taxes are not based on the cost incurred on operations and maintenance; charges are based on the discretion of the GPs. The cost of O&M is much higher than the amount charged by the GP. There is no rationalization of water charges being recovered by the GPs.

#### <u>Involvement of Water Users Associations (WUAs) in the process of fixing rates of water</u>

Under the Karnataka Irrigation Act, 1965, water users societies, water users associations, water users distributary level federations, water users project level federations, water users apex level federations have been established. The water users' societies and water users associations can levy and collect water charges and service charges from the land holders.

# Are Water Users Associations (WUAs) given statutory powers to collect and retain a portion of water charges, manage the volumetric quantum of water allotted to them and to maintain the distribution system in their jurisdiction?

The water users societies and water user associations have been given statutory powers under the Karnataka Irrigation Act, 1965 to levy and collect water charges and service charges from the land holders both members and non-membersalike.

The functions of water users societies and water users associations as per Karnataka Irrigation Act, 1965 is to procure water in bulk on volumetric basis from the Irrigation Department or Krishna JalaBhagyaNigama or Karnataka Neeravari Nigam and distribute it to the land holders amongst its area of operation.

#### Allocation and uses of water

(i) Is there a mechanism for water allocation amongst different competing uses

The State water Policy 2002 specifies priorities for allocation of water amongst competing uses, though mechanism is not prescribed.

- **(ii) Is there any criteria and principles followed for allocation:** Presently, there is no mechanism for allocation of water.
- (iii) Are there principles of equity and social justice being followed for water allocation: No such mechanism exists.

#### Management of Flood & Drought

Whether there is regulatory mechanism to prevent loss of land eroded by the river, which causes permanent loss, revetments, spurs, embankments, etc.: There is no regulatory mechanism to prevent loss of land eroded by the river, which causes permanent loss, revetments, spurs, embankments, etc.

Is there an institutional setup for flood forecasting using real time data acquisition system and linked to forecasting models?: The Central Water Commission has set up four flood forecasting sites in the state which includes three inflow forecasting sites and one level forecasting site, namely, Deongaon on the river Bhima, tributary of the Krishna. The Minor Irrigation Department is implementing river bank protection works to prevent damages to river banks due to floods. There is Karnataka State Natural Disaster Monitoring Centre (KSNDMC) set up for monitoring any occurrence of flood situation.

#### Are there river basin management authorities established by the state government

The state has established the Krishna Basin Development Authority under the Karnataka Krishna Basin Development Authority Act, 1992 to develop the Krishna river basin area within the state. The state has also established Command Area Development authorities under the Karnataka Command Areas Development Act, 1980 for comprehensive development of command areas of Tungabhadra project, Munirabad, Malaprabha and Ghataprabha Projects, Belgaum, Cauvery Basin Projects, Mysore.

#### Conservation of river corridors, water bodies and wetlands

# What is the prevalent institutional structure for conservation and management of river corridors, water bodies, wetlands within the state?

The Lake Development Authority was created vide Government Order No.FEE/12/ENG/02, Bangalore, Dated. 10th July 2002. It is a registered society under the Karnataka Societies Registration Act, 1959 and a non-profit organization working solely for the regeneration and conservation of lakes. However, from 30.04.2003 the Lake Development Authority's jurisdiction has been extended over the lakes in city municipal corporations in the State as well as lakes in the city Municipalities which are the main sources for drinking water.

# 1.2 Reviewing the State Water Polices of Bihar and Gujarat in line with National Water Policy -2012 in the context of climate change

India Water Partnership with the support of Institute for Resource Management and Economic Development (IRMED) is reviewing the **State Water Polices** of **Bihar** and **Gujarat** in line with the National Water Policy, 2012 with regard to climate change. The review of Draft Water Policy of Bihar is complete in June, 2014 and the review of State Water Policy of Gujarat started from July, 2014.

During September, 2014, the study was focused on Gujarat. After the successful outcome of interactions with a number of senior officials of Government of Gujarat including the Hon'bleChief Minister and the Hon'bleGovernor in August 2014, the study team analyzed the materials/documents collected and consulted state Govt. officials to select a district for conducting field studies and to also hold interactive sessions in two gram panchayatsof the selected district. It was decided to undertake the designated survey in Surendranagar district, which is a water stressed district under the Sourashtra region of Gujarat. The district has the advantage of having one KrishiVigyan Kendra (KVK) about 50 Km, away from the town of Surendranagar located at Kandasar under ChitolaTaluka.

Accordingly, the study team of IRMED comprising of 3 members reached Surendranagar on 12th September, 2014. The team called on Shris.G.Parikh, the Deputy Executive Engineer, Irrigation Department who had been nominated by the state government to provide help and cooperation to the study team during the field study. With his active help and cooperation of Mr. Parikh, 2 Gram Panchayats were selected for holding interactive sessions. The Villages/Panchayats thus selected were (1) Jasapar under DhrangadharaTaluka and (2) Gunda under ChotilaTaluka.

On 13th September, the study team held interactive meeting in the Jasapar village of Jasapar gram panchayatDhrangdharaTaluka wherein 32 participants, mostly farmers, took part. On enquiry, it was given to understand that no one among villagers were aware of state water policy. On climate change issue also, the villagers were found to have very little knowledge, rather no knowledge; while a few could only guess by symptoms such as untimely rainfall, fall in the level of ground water etc. But, most farmers were interested to know about the coping mechanism to be adopted in the event of ensuing climate change. The team suggested the villagers to take the help of local KVK and Agriculture Officer of the district and also assured them that their concern about the issue will be duly conveyed to the concerned Agricultural Officer and the scientists of the local KrishiVigyan Kendra who are competent authorities to address these issues.

On 14th September, 2014, the study team conducted the next interactive session in Gunda village of Gunda gram panchayat under ChotilaTaluka of Surenderanagar district involving farmers, a few businessmen and service personnel. The number of participants was 29. The situation in this village was similar to the earlier one in respect of awareness about ensuing climate change and related coping strategies as also about their knowledge on state water policy.

After interactive sessions at the village level was completed, the team visited various district level offices concerned with water resources such as Agriculture, Animal Husbandry, Horticulture, Fishery, Minor irrigation, Major & Medium Irrigation, KrishiVigyan Kendra (KVK), Cotton Research Centre, etc. At the district level, awareness among officers was found to be somewhat better in respect of climate change. As regards coping measures, a few of these officers particularly from the departments of Agriculture, KrishiVigyan Kendra, Cotton Research Centre, Minor Irrigation were found to have some knowledge of the issues.

#### **Activities planned for October, 2014**

In October, 2014 the preparations would be made for organizing a workshop in consultation with the Government of Gujarat.

# 1.3. Awareness generation and water quality testing by rural women for using safe drinking water in Kommaragiri Village, Kakinada District, Andhra Pradesh

India Water Partnership with the support of All India Women's Conference (AIWC) is undertaking awareness generation activities and water quality testing by rural women of Kommaragiri village of Kakinda District, Andhra Pradesh. In the month of September, the AIWC team undertook the following two activities:

#### Follow-up Meeting on usage of Water Testing Kits

A follow up meeting on the usage of Water Testing Kits was held on 1<sup>st</sup> Sept, 2014 in the ZillaParishad High School Komaragiri. More than 100 students from senior classes and 10 teachers participated in the meeting. The Teachers and the Students were very happy that the Water Testing Kit was presented to them and intensive training was also given in the National Institute of Hydrology (NIH). The School has recently constructed two ground water bore well points and water quality testing of these bore wells has been completed. The School was advised to form 3 to 4 groups of 4 to 5 students each and encourage them to conduct the water testing in the nearby villages also.

### Awareness Meeting on protection of existing water bodies, rain harvesting and the quantity of water

An Awareness Meeting on the protection of existing water bodies, rain harvesting and the quantity of water required for certain crops grown in and around the village was conducted on **29<sup>th</sup> Sept, 2014** at Kommaragiri village. The Mandal Agricultural Officer (MAO) was invited to give the talk. The meeting was held in the Panchayat Office premises with the Village Sarpanch as the Chief Guest. The participants interacted with the speaker by asking questions as to how big should the rain water harvesting pit should be and where should the over flowing water be diverted. The Sarpanch thanked AIWC for taking interest in his village and organizing good awareness programmes. He also advised the gathering that water should be used frugally and not be wasted. He informed that the Government has sanctioned and a RO system (water treatment plant) for their village which will be commissioned soon. The AIWC informed the Panhayat representatives and the gathering that water samples from the 100 year old well, the Water Tank next to it and the new agricultural waste water drain were collected and sent to the NIH for a detailed analysis and advice on as to how to bring the well water into usage bereft of impurities. The Analysis report from NIH is awaited.

#### 1.4. Activities undertaken by Jajmau Area Water Partnership

India Water Partnership with the support of Society for Promotion of Wasteland Development (SPWD) is engaged in strengthening and nurturing the Jajmau Area Water Partnership at Kanpur city, Uttar Pradesh for prevention of pollution in Ganga River.

#### Follow-up of the previous meetings

Following meetingsin the previous months, the contact has been established with the councilors and Tannery associations. The New Government has now announced its action plan for prevention of pollution of Ganga. The implications of this new approach will be discussed with Kanpur Nagar Nigam (KNN)(**Kanpur Municipal Corporation**), district administration and State Government and a ward level meeting /City level meeting, will be organized in 1<sup>st</sup> week of November, 2014.

#### **Development of IEC Materials**

Communication (IEC) materials in the form of a brochure and a guidebook to be used as training module is under development. These will be finalized by third week of October, 2014.

#### **Association with Tannery Associations**

The agreed technical proposals for prevention of pollution by the tanneries between state government, KNN and tanneries association were debated for their financial and institutional options. Mr.Viren Lobo, Executive Director, SPWD had a meeting at Ahmedabad with Research Centre for Environmental Engineering - Technology Experts to explore options for technology solutions for the tannery pollution issue in Kanpur. It is planned to continue discussion with them and propose to bring them to Kanpur in November for direct dialogue with Tannery Associations and KNN.

#### 1.5 Executive Committee Meeting of Shivana Area Water Partnership (AWP)

The Executive Committee meeting of Shivana Area Water Partnership was held on 13<sup>th</sup> September, 2014 at Badakhedla village of Mandsaur district, Madhya Pradesh. In the meeting the members were informed that the Shivana AWP has approached their Chartered Accountant for preparing the Trust Deed for registration with the respective Department. The members present in the meeting agreed to celebrate World Food Day on 16<sup>th</sup> October, 2014 and to discuss about sowing of Rabi crops taking into the account the less rainfall received in the year. It is expected that around 50 to 70 people (especially farmers) would attend the World Food Day.

After the meeting, the office bearers of the Shivana AWP visited the stop dams constructed under people's partnership which have changed the life of the villagers of Badakhedla village which was water stressed village (due to rain water run-off) before construction of the stop dams. Now the agricultural productivity of the village has increased too many folds with availability of water due to stop dams.

#### 1.6 Formalization of Wainganga Area Water Partnership

Wainganga Area Water Partnership which is established and operating from Gondia district of Maharashtra has submitted a Memorandum of Association (MoU) to the Charity Commissioner,

Nagpur, Maharashtra for registration and ratification. The preamble and objectives cover all the key principles and objectives of Integrated Water Resources Management approach and the Dublin principle. It also covers the constitutional provisions and other relevant acts and policies of central and state Governments. Two of the seven members of the governing body are from Madhya Pradesh and five from Maharashtra. Out of that two of the Board members are ladies i.e. 30% of all members.

#### 1.7. Participation of India Water Partnership in meetings/workshops/conferences/seminars

#### 1.7.1 Participation in World Water Week-2014 at Stockholm, Sweden

Dr. VeenaKhanduri, Executive Secretary, IWP attended the Stockholm Water Week-2014 from 31<sup>st</sup> August to 5<sup>th</sup> September, 2014 along the Mr. R K Gupta, President, IWP & Chairman-cum-Managing Director, WAPCOS Ltd. and Mr. **AlokRawat**, I.A.S, Secretary, Ministry of Water Resources, River Restoration and Ganga Rejuvenation, Government of India.

Apart from World Water Week-2014 , the above delegates also attended the following meetings:

# (i) Sideline Meeting of Senior Officials of Global Water Partnership (GWP) on 31<sup>st</sup> August, 2014

On 31<sup>st</sup> August, 2014, the Executive Secretary, IWP along with Mr. AlokRawat and Mr. R K Gupta had a meeting with GWP Senior Officials, namely; Dr Ursula Schaefer-Preuss, Chair, GWP, Dr. AniaGrobicki, Executive Secretary, GWP, Dr. Fraser Macleod, Head Global Projects, GWP and Ms. Angela Klauschen, GWP Senior Network Officer, Asia & China. Purpose of the meeting was to discuss the GWP-IWP programmatic areas and initiatives led by IWP in context of core programme and GWP-South Asia supported Water & Climate Change Resilience Program (WACREP). The President, IWP briefed about the IWP initiatives for reviewing the State Water Policies of two States in line of National Water Policy-2012 in context of climate change; participation of GWP-South Asia in India Water Week-2013 & 2015; approaches of Zonal Water Partnerships and Area Water Partnerships to take-up IWRM in their respective area of operation. The GWP Chair and Executive Secretary also expressed their satisfaction about the initiative led by IWP to collaborate with multi-stakeholders and especially with Aquatech-2014 and WaterEx-2015 to participate and facilitate as knowledge partner. The GWP officials were also briefed about the planning of IWP and GWP-South Asia led initiative to organize a side event during India Water Week-2015.

Ms. Angela Klauschen and Dr. Fraser Macleod were briefed about the status of WACREP being implemented in 8 States of India. A Draft WACREP brochure and other documents prepared by IWP were also provided to the GWP team.

# (ii) GWP Side Event on the Global Dialogue on Water Security and Sustainable Growth - High Level Panel Discussion on 1<sup>st</sup> September, 2014

The Executive Secretary, IWP along with Mr. R K Gupta, President, IWP & Chairman-cum-Managing Director, WAPCOS Ltd. and Mr. AlokRawat,I.A.S, Secretary, Ministry of Water Resources, River Restoration and Ganga Rejuvenation, Government of India participated in a GWP Side Event "High Level Panel Discussion on Global Dialogue on Water Security and Sustainable Growth" organized on 1<sup>st</sup> September, 2014.

Mr. AlokRawat,I.A.S, Secretary, Ministry of Water Resources, River Restoration and Ganga Rejuvenation, Government of India was one of the panelists in the discussion. During the panel discussion, Mr. AlokRawat presented his views on the importance of water in context of India and Post 2015 Agenda as well as the initiatives taken by the Ministry of Water Resources which have been addressed in the India's new Water Policy-2012 for water security. Besides this, Mr. Rawat raised that pathways to water security varies from region to region and associated risks also inhibit growth. During the panel discussion, Executive Secretary, IWP suggested the panel to include social dimension and social vulnerability indicators in Risk Framework prepared by the Task Force.

#### PART-II: WACREP REPORT

# 2.1. Augmenting Water security and food security of small farmers in the Gundar Basin by rehabilitating or constructing water harvesting tanks

During September, 2014, India Water Partnership with the support of Dhan Foundation undertook the following three activities:

- Identified 2 tanks for rehabilitation. Participatory Technical assessment has been done. Estimate under preparation.
- Assessment of 7 farm ponds was done in Chittoor district, Andhra Pradesh.
- Internal monthly review meeting of WACREP was held by Dhan Foundation on September 9, 2014.

# 2.2 Climate Adaptive Planning, Capacity building and training programs in Bundelkhand Region of Madhya Pradesh

In continuation of the activities undertaken in August, 2014, the India Water Partnership with the support of Development Alternatives undertook the following activities in September, 2014:

# (i) Preparations for Knowledge Sharing National Workshop on Mainstreaming Climate Change Concerns in Planning Processes

Preparations were done to organize a national roundtable on "Mainstreaming Climate Change Concerns in Development Planning Processes". The workshop is scheduled to be held during October, 2014. The objective of the workshop is to share the outcomes of WACREP initiatives at national level.

#### (ii) Meetings for Finalization of Climate Adaptive Plans at District Level

Meetings were conducted with C.E.O of Datia district and technical staff of line departments, for finalization of climate adaptive plans. Appointments were taken from the C.E.O for approval of plans in District Planning Committee.

#### (iii) Development of Knowledge Products

During the reporting month, the following knowledge products have been developed which are under finalization (editing, design & layout):

- Vulnerability Assessment Report
- Adaptation Guide
- Training Modules for Panchayati Raj Institution Members
- Manual for Farmers on Sustainable Agriculture

#### **Activities scheduled for October, 2014**

Organizing a National Workshop on "Mainstreaming Climate Change Concerns in Planning Processes" to share the outcomes of WACREP initiative at national level. The workshop is tentatively scheduled to be organized on 15<sup>th</sup> October, 2014.

# 2.3. Assessment of vulnerability to climate change on water resources, commons, agriculture system and animal husbandry in Sinhar watershed in Bhinder Block in Udaipur district of Rajasthan

In continuation to the activities undertaken in August, 2014, India Water Partnership with the support of Action for Food Production (AFPRO)took-up the following activities in September, 2014:

#### Village level monthly meeting with Core group members

Village level meetings were organised in six villages namely Nagliya, Dhawadiya, KhedaFala, Rayla, Veripura and Fusriya with core group members including cluster core group members, village elders, etc. to discuss the following issues:

- About production of grasses like; Hamta, Dhaman and Karadwhich has good growth;
- Type of crops to be grown in case of deficient rainfall (There was deficient rainfall in the current year);
- Review the Progress of Physical works done in the previous months;
- Visit of demonstration plot on mix cropping of Urad, Soyabean and Maize;
- Fertilizers requirement for each crop to be sown;
- Discussion on to conduct Base line socio economic survey as sample basis in all the 10 project villages targeting 25% households; and,
- Goat rearing plan of village Veripura.

#### Physical work on selected private and common Pasture

Physical works under soil and water conservation in three villages on common pasture land of 26.2 ha were done in village Chunakawela, Raila and Kamliya. Grasses and fodder tree production seems good, approximately up to 150% from previous years.

#### **Activities under Farmers Field School:**

#### (I) Farmers' field School (FFS) Agriculture:

FFS,Agriculturehas followed thepackage of practices with proper inter culture operations and fertilizer applications. Total 480 kg urea was distributed to 24 farmers for use on the demonstration plotsand the same was applied.

#### (ii) Farmers' field School (FFS) Livestock:

Under FFS, Livestock, a training program was organized at village Veripurafor 30 participants (20 males +10 females). Dr. Vijay Mane from Animal Husbandry Department participated as resource person and provided training on goat rearing; breed improvement, feeds, treatment, economics, value chain etc.

#### (iii) Exposure visit of FFS members:

Anexposure visit comprising of 36 farmers was made toKundai village ofBhindarblock, Udaipur district. Mr.Gokul and Ms.Indra explained about data collection, water bank, goat breed improvement on 21 bigha pastureland. After the field visit, a meeting was held to share

the experiences and learning on agriculture pattern, yield, farm production, livestock management, fruit plantation etc. The farmers appreciated the water bank model and suggested to give more focus on fruit plantationat pastureland with micro irrigation facilities.

#### **Upcoming Events in October, 2014**

The following activities have been planned in October, 2014:

- Continue monitoring of on-going physical work (Stone fencing ) at private pastureland at Dhawdiya, and Kherafalavillages;
- Consolidation of physical works and distribution of the payments to the labourers;
- Village level and cluster level meetings on FFS;
- Based on the vulnerability assessment start preparing the report;
- Regular Village level and cluster level meetings with core group members for review and further planning the project activities;
- Conductinghousehold survey of 300 families;
- Data compilation of surveyedfilled-in formats on water resources status and climate change vulnerability;
- Planning for fruit plantation under FFS (Agriculture);
- Initiate the well renovation by procurement of the material by the community under FFS (Water).
- Preparation for the rabi cultivation under FFS (Agriculture)
- Data analysis for the kharif crop production on demo plots and sharing the results.

# 2.4 Identifying strategies for building resilience to the impacts of Climate Change in the Wainganga River Basin, Central India

- 1. Meetings were held in two villages for preparation of Groundwater Aquifer Management.
- 2. Case study was prepared on Groundwater Aquifer management through conjunctive use of water (Draft case study is attached as *Annex-I*.

