Global Water Partnership South Asia

India Water Partnership

ANNUAL REPORT 2016-2017

INDIA WATER PARTNERSHIP

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ORGANISATION AT A GLANCE
Societies Registration Act of Government of Haryana : 2391 dated 20.11,2001 under Haryana Societies Registration Act 1860 and HR 018201300867 dated 14th August, 2013 under Haryana Societies Registration Act, 2012

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Abbreviations

ASSOCHAM	:	Associated Chambers of Commerce & Industry of India
AFPRO	:	Action for Food Production
BNVSAM	:	Bhandara Nisarg Va Sanskriti Mandal
CEEW	:	Council on Energy, Environment and Water
CEDSJ	:	Centre for Environment and Development Studies, Jaipur
C4Y	:	Centre for Youth
CPCB	:	Central Pollution Control Board
CRIDA	:	Central Research Institute for Dry land Agriculture
CWP	:	Country Water Partnership
DHAN Foundation	:	Development of Humane Action Foundation
DC/DM	:	Divisional Commissioner/District Magistrate
ESRO	:	Environment and Social Research Organization
FICCI	:	Federation of Indian Chambers of Commerce & Industry
GWP	:	Global Water Partnership
HWTS	:	Household Water Treatment & Storage
IARI	:	Indian Agricultural Research Institute
ICLEI	:	International Council for Local Environmental Initiatives
ICAR	:	Indian Council of Agricultural Research
ICID	:	International Commission on Irrigation and Drainage
IGNCA	:	Indira Gandhi National Centre for the Arts
ISEC	:	Institute for Social and Economic Change
ILCS	:	Integrated Low Cost Sanitation Scheme
IUWM	:	Integrated Urban Water Management
IFC	:	International Finance Corporation
IRMED	:	Institute for Resource Management and Economic Development
IWRM	:	Integrated Water Resources Management
IWMI	:	International Water Management Institute
IWP	:	India Water Partnership
IELO	:	Indian Environment Law Offices
IRBM	:	Integrated River Basin Management
MW	:	Megawatt
NPC	:	National Productivity Council
NGOs	:	Non-Governmental Organizations
WAPCOS	:	Water and Power Consultancy Services
MACP	:	Maharashtra Agricultural Competitiveness Project
MoWR	:	Ministry of Water Resources
NWP	:	National Water Policy
NRM	:	Natural Resource Management
NCR	:	National Capital Region
RRP	:	River Rejuvenation Partnership
SADMS	:	South Asia Drought Monitoring System
SLWM	:	Solid Liquid Waste Management
SHGs	:	Self Help Groups
SWP	:	State Water Policy
UNEP	:	United Nations Environment Programme
WRG	:	Water Resources Group
WMO	:	World Meteorological Organization
YWCA	:	Young Women's Christian Association

Contents

From the President's Desk

Mr. R K Gupta
President, IWP &
Chairman-cum-Managing Director, WAPCOS Ltd.

It is my pleasure to present the Annual Report of India Water Partnership (IWP) for the year 2016-17.

From the IWP perspective, 2016-17 was a year of retrospection of its activities taken-up in the past in view of current water challenges and to move forward as an independent voice on water management issues, outside the Government, forecasting and identifying the potential challenges on water security. For the purpose, the undersigned constituted a Committee for preparing a new Road Map for IWP. The Committee has submitted its report with recommendations.

IWP focused on policy prospective and reviewed the State Water Policy of Karnataka and Odisha in line with National Water Policy-2012 (NWP-2012) with regard to climate change. IWP also reviewed the existing State Level Regulatory & Institutional Framework on water and climate change for the States of Sikkim, Tamil Nadu and Uttar Pradesh to operationalize the NWP-2012. Report with recommendations has been sent to the respective State Governments.

We also prepared a Position Paper on "Droughts and Sugar Industries in Maharashtra – Are we learning from the History" to take-up policy decisions. The position paper recommends that a serious consideration should be made for the location of new sugar mills in the State and the regions receiving less than 1,000 mm of rainfall should not be allowed to set-up new sugar mills.

Further, to cope up with various challenges on water security in India, IWP adopted a two-pronged approach in 2016-17 to work on ground level towards Integrated Water Resources Management (IWRM) and Integrated Urban Water Management (IUWM) in the States of Bihar, Uttar Pradesh, Maharashtra, and Rajasthan through different stakeholders' participation.

IWP, in collaboration with International Water Management Institute (IWMI) and Global Water Partnership-South Asia (GWP-South Asia), organized a workshop at New Delhi in January, 2017 to receive crucial feed-back on South Asia Drought Monitoring System (SADMS) developed jointly by GWP-South Asia, IWMI & World Meteorological Organization (WMO) for South Asian countries to predict drought early warning. In the workshop, experts from Sri Lanka, Nepal, Bangladesh, Bhutan, India, and Maldives discussed the potential of collaborating with Government agencies to explore the possibility to make use of the SADMS at their country level. As an outcome of this workshop, Indian Council of Agricultural Research (ICAR) through Central Research Institute for Dryland Agriculture (CRIDA) agreed to develop a joint initiative to explore the use of SADMS in collaboration with IWMI.

During India Water Week-2016, IWP demonstrated its works by screening of films and documentaries related to water management highlighting success stories of water conservation, technological innovations and people's participation. The Minister of Water Resources, River Development & Ganga Rejuvenation, Government of India and the State Minister appreciated the IWP efforts towards raising awareness among the people on water security and possible solutions and suggested that these efforts should continue in future too.

Our engagement for mapping of Hindon river stakeholders was well recognised by Government of Uttar Pradesh and the IWP was nominated as a member of Hindon River Vision Committee constituted by Chief Secretary, Government of Uttar Pradesh.

The various activities undertaken by IWP during the reporting period are briefly presented in this report.

Message from General Secretary

Dr. Aman Sharma
General Secretary, IWP &
Executive Director,
Ganga Rejuvenation, Environment & Construction Management, WAPCOS Ltd.

India Water Partnership (IWP) in 2016-17 has taken-up the several activities with support of its network partners towards promotion of IWRM and Integrated Urban Water Management (IUWM) in different parts of India in view of the prevailing water scenario coupled with climate change.

We would like to express our sincere gratitude to GWP-South Asia for providing financial as well as valuable technical support from time-to-time to undertake these activities as per GWP mandate in a the right earnest during the reporting period.

We express our sincere gratitude to our network partners, zonal water partners and area water partners who associated with us in 2016-17 for taking up various activities in line with IWRM and IUWM on behalf of IWP in a successful manner to achieve its vision for "A Water Secure India with Participation of All Stakeholders".

Our special thanks to the State Governments of Karnataka and Odisha to facilitate India Water Partnership for reviewing their water policy in line with National Water Polciy-2012 with regard to climate change.

IWP is grateful to Water Resources Departments of Karnataka & Odisha for their cooperation and support for reviewing their existing water policies to align with National Water Policy-2012.

We also thank the Institute for Social and Economic Change (ISEC), Bangalore for collaborating with us for organising the state level workshop in ISEC campus for review of Karnataka State Water Policy-2002 and Draft Karnataka State Water Policy-2016 and providing other support as well.

We are highly obliged to Nabakrushna Choudhary Centre for Development Studies, Bhubaneswar for organising the State level workshop at their Centre as a goodwill gesture to IWP for reviewing Odisha State Water Policy-2007.

We also thank Federation of Indian Chambers of Commerce & Industry (FICCI), Exhibition India, ASSOCHAM, IARI, ICAR, ICID, WAPCOS Ltd, WMO, CGAIR, CCAFS, IWMI with whom IWP collaborated as a strategic and knowledge partner for various events organised in the reporting period.

We are also thankful to 2030 Water Resources Group (hosted by International Finance Corporation) for collaborating with us in different activities for rejuvenation of Hindon river.

We express our sincere gratitude to our Board of Governors, Regional Council Members and Advisory Committee members for their valuable guidance, insight and strategic inputs for enabling us to complete all the activities fruitfully during the reporting period.

We acknowledge the support received from communities, farmers, students, PRI members for smooth implementation of our activities across the different States of India.

Finally, we express our immense thanks to WAPCOS Ltd. for hosting India Water Partnership at its Corporate office at Gurugram, Haryana and providing technical, administrative as well as other supports.

President, IWP & CMD, WAPCOS welcoming Shri Nitin Gadkari, Hon'ble Minister, Road Transport & Highways, Shipping and Water Resources, River Development and Ganga Rejuvenation, Dr. Satya Pal Singh, Hon'ble Minister of State for Human Resources Development and Water Resources, River Development & Ganga Rejuvenation, Government of India and Shri Arjun Ram Meghwal, Hon'ble Minister of State for Parliamentary Affairs and Water Resources, River Development & Ganga Rejuvenation, Government of India.

Zonal Water Partnerships (ZWPs) in India

IWP pioneered the concept of Zonal Water Partnerships (ZWP). Both IWP and ZWP work closely with the relevant water institutions, universities, CBOs/NGOs and other stakeholders at national, state and local level. IWP with the support of ZWPs in India is addressing the water centric issues through Panchayati Raj Institutions (PRIs)/Urban Local Bodies (ULBs) which have constitutional authority in the chain of civil authority structure.

Six Zonal Water Partnerships have been established in India with the following composition of States and Union Territories:

(i) North Zone Water Partnership: The North Water Partnership comprises of the States of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Punjab, Haryana, Rajasthan, Chandigarh & Delhi;

(ii) South Zone Water Partnership: The South Zone Water Partnership consists of the States like; Andhra Pradesh, Kerala, Karnataka, Tamil Nadu & Pondicherry ;

(iii) West Zone Water Partnership: The West Zone Water Partnership comprises of States of Gujarat, Maharashtra & Goa;

(iv) Central Zone Water Partnership: Madhya Pradesh & Chhattisgarh form part of the Central Zone Water Partnership;

(v) North-East Zone Water Partnership: North-East Zone Water Partnership consists of States like Arunachal Pradesh, Assam, Meghalaya, Manipur, Nagaland, Sikkim & Tripura ; and;

(vi) East Zone Water Partnership: Bihar, Jharkhand, West Bengal & Orissa States form part of East Zone Water Partnership.

Area Water Partnerships

AWP was conceptualized to function as platforms for sub-basin level partners. While a Country Water Partnership (CWP) identifies the country's critical water stressed areas, an AWP focuses more narrowing on a specific river basin where water stress is already a problem or is anticipated within the next 25 years. Within a river basin there are many water users who affect water quality and quantity. The main task of AWP is to identify the inter-dependence of various water related institutions and stakeholders to support them in the sustainable management of their water resources. AWPs therefore need to encourage competing stakeholders to reconcile and adjust their demands in the interests of sustainable water management. The focus of AWPs is to identify and discuss local level issues, resolve conflicts and disputes, find solutions and finally present water related problems of sub basins to the higher authorities.

Following are four active Area Water Partnership in India:

- Peoples' Area Water Partnership in Odisha
- Wainganga Area Water Partnership in Maharashtra
- Shivana Area Water Partnership in Madhya Pradesh

"Water is the abject necessity for any kind of life to exist."

- Atharv Veda

Mission:

Support Action of Sustainable and Integrated Development and Management of Water Resources at National, Regional, River-basin/Sub-basin and Local Levels in India.

Vision:

A water secure India [with participation of all stakeholders]

What We Do

We Are India Water Partnership

India Water Partnership (IWP) is a non-profit organisation, accredited with the Global Water Partnership (GWP), Stockholm. Hosted by WAPCOS Ltd. (a Government of India undertaking under the Ministry of Water Resources, River Development, and Ganga Rejuvenation), IWP works towards water security in India by following the concept of Integrated Water Resources Management (IWRM). It engages in a dispassionate analysis of various water related issues and steers the policy discourse on social, economic, and ecological issues on a scientific basis. Ours is an independent voice on water management issues, outside the government, forecasting and identifying the potential challenges to be able to provide in-depth and informed inputs on policy issues. Our goals are achieved via thorough research, focused advocacy, and effective implementation on the ground with the help of our wide network of partners in multiple sectors.

India's Water Story

India has just 4% of the world's fresh water — but 16% of the global population. Water is the primary need for every single activity and form of life on earth. The rising population, infrastructural needs, lack of integrated water management, improper waste management systems, and irresponsible extraction of ground water is creating a stress on our water bodies and leading to illnesses in people dependent on such water bodies.

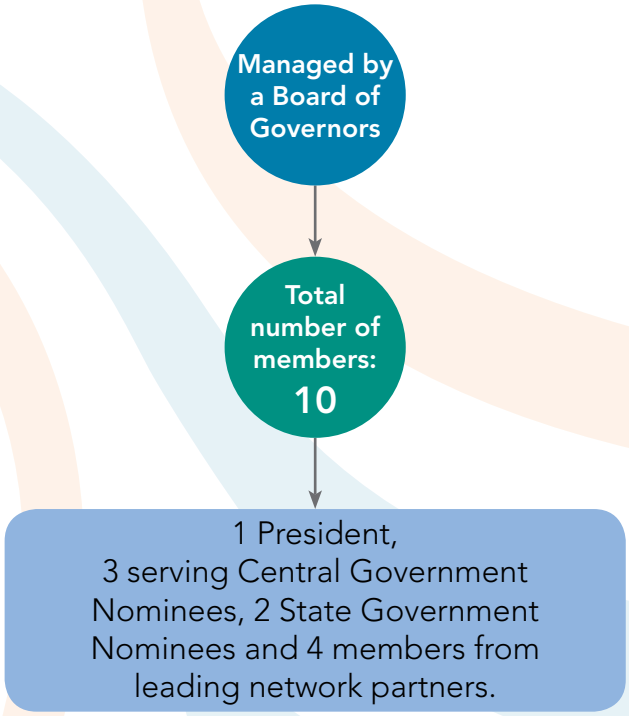
- 76 million in India are without access to safe drinking water.
- 21 per cent of country's diseases are water related.
- Over 329, 000 children under five die due to diarrhoea in India in 2015.
- Across India as a whole, it is estimated that women spend 150 million work days every year fetching and carrying water, equivalent to a national loss of income of INR 10 billion/ 160 million USD.
- The total potential area to be brought under the micro irrigation (drip and sprinkler) in India is 42.2 million hectare of land. However, only 3.9 million hectare of land or 9.2% of the potential is currently under micro irrigation.

The IWP Stepping Stones

Placed in such a context, the various initiatives of India Water Partnership (IWP) are oriented towards making water management in the country more inclusive, build capacities of communities to be able to manage their water concerns, bring safe and affordable water management technology to the people and enhance the participatory approach in five interlinked steps:

- **Users at the Centre:** Work towards making water sector service oriented with users at the centre to increase water use efficiency,
- **Work Together:** Encourage cooperation and collaboration among regions, allied disciplines and institutions to encourage integrated water resources development.
- **Create an Integrated Platform:** Consolidate the multi-disciplinary socio-economic and scientific knowledge to develop sector position on policy issues.
- **Network for Impact:** Serve as a seminal network leader, facilitate the use of available tools, and engage the various actors in negotiations to help reduce conflicts.
- **Create Linkages to Share and Learn:** Serve as the link to the international water community by acting as a focal point for GWP and other international institutions.

IWP Governance Structure



Sound System of Accountability and Transparency

IWP has consistently and stringently followed accountability and transparency in all its activities. Since its inception in the year 2001, it has assured enforcement of and compliance to a sound system of internal and external control in processes in accordance with the National and International donors.

Plantation drive by youth in Hindon River Basin *(Photo credit: India Water Partnership)*

IWP at a Glance

India Water Partnership is the Secretariat of the Hindon River Multistakeholders' River Rejuvenation Partnership owing to its vast experience and active work on Stakeholder Mapping of Hindon River Basin and bringing multi stakeholders on one platform.

IWP is **member of Core Committee**, Technical Committee and Organising Committee of India Water Week 2012, 2013, 2015, 2016, and 2017.

From **2010 until date,** IWP has reviewed state water policies of Rajasthan, Bihar, Gujarat, Karnataka, Tamil Nadu, Goa & Odisha, in line with National Water Policy-2012 with regard to Climate Change.

From **2014 until date**, IWP has reviewed the preparedness of the states in terms of regulatory and institutional framework to respond to the directives of the National Water Policy 2012 - (NWP) of Kerala, Nagaland, Maharashtra, Meghalaya, Uttarakhand, Tamil Nadu, Uttar Pradesh, Sikkim & Karnataka.

Its multi-disciplinary Partnership Expertise and Knowledge in the socio-economic development sector strengthens IWP competencies in the field of **water** and **climate change**, among other **environmental concerns.**

IWP is also a **member of Hindon River Vision Committee** constituted by Chief Secretary, Government of Uttar Pradesh

IWP in Numbers

Across India

22 states

117 network partners

Association of IWP in **6** Indian zones with Zonal Water Partnership

Association with **3** active Area Water Partnership

IWP Impact 2016

Studies concluded: **6**

Training programmes conducted: **200 training sessions**

Workshops held: **10 at national level and 2 at South Asia level**

New technologies introduced: **1 JalKalp Filter**

Reviewed State Water Policies and Regulatory & Institutional Framework to respond to Directives of National Water Policy-2012 : 14 – Bihar, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Meghalaya, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh & Uttarakhand.

A unique model of IRBM: **The Mashi River Basin Parliament**

Water themes explored: **16**

Case studies developed: **6** (5 on Wetland Management and 1 on Bio-sand filter)

People impacted: **994,216**

Green drive: **500 trees planted in Hindon Basin**

School children participating in painting competition at Government school, Garhi Harsaru Village, Gurugram *(Photo credit: Mr. Rana Goswami, India Water Partnership)*

Strategic Report

Fostering a Spirit of Change in Water Management

IWP believes that a strong, multi-stakeholder partnership creates and communicates knowledge for improved water governance. Towards this, our work is aligned with the three GWP goals. India Water Partnership as a Country Water Partnership of GWP strives to achieve these goals which help us to grow strongly, year upon year, and work effectively with our partners towards achieving its vision and mission.

The three goals form the bedrock of our work in the field of water and its multiple concerns:

GWP Goal 1

Catalyse change in polices and practice: This goal focuses on advancing effective governance, based on comprehensive and mutually supportive policies, institutions, partnerships, processes, and information sharing.

GWP Goal 2

To generate and communicate knowledge: This goal focuses on developing the capacity to share knowledge and fostering dynamic communication culture.

GWP Goal 3

Strengthening partnerships. This goal stresses on enhancing the viability and effectiveness of GWP's network by strengthening partnerships and partner organisations to catalyse change, enhancing learning, and improve.

Students present a skit on restoration of dry ponds in Hindon River Basin

GOAL 1: Catalyse Change in Polices and Practice

The year in review, 2016-17, saw us implement various projects in collaboration with our partners under Goal 1. The projects introduced new technologies such as the bio-sand filters to enable safe and affordable water in 37 villages in Bihar; state water policies of Karnataka and Odisha were reviewed with the state-specific concerns as the premise; and unique Water River Parliament is going to be formed in the Mashi River Basin; the correlation between sugarcane growing in Maharashtra and its worsening drought situation was assessed in-depth with a seminal paper being produced on the issue; 16 thematic concerns were explored in the review of the SWP framework of Uttar Pradesh, Sikkim and Tamil Nadu, while five case studies as effective advocacy tools were produced after a study of the water bodies in Maharashtra's Bhandara and Gondia districts.

Engaging youth for promoting safe drinking water in villages of Bihar

Our campaign to build awareness among the communities of selected villages in Bihar sought to **stimulate behavioural change towards safe drinking water**. With youth as the target segment, the programme was implemented along with our partner S. M. Sehgal Foundation. The programme's behaviour change components were disseminated via **multiple training programmes and workshops for capacity building** of village communities on the importance of safe drinking water. Water testing was done at the ground level to sensitise the community about the existing contaminants of the water and to win their trust. The **innovative JalKalp filter was demonstrated** to explain the mechanism and operation of the filter. The programme helped in building a perspective of communities towards hygiene and sanitation. With the awareness that was generated, **several households adopted the JalKalp filters**. Hearteningly, they reported a drop in water-borne diseases, after installing the filter in their homes. They were **also keen to bear the partial cost of filter** to mitigate the health effects of consuming non-potable drinking water.

Training on Household Water Treatment

Water samples collected from different sources for testing

Impact in Numbers: The 3Ws and 1H

The capacity building initiatives focused on stimulating behaviour change among local communities.

Who? 1,752 males and 843 females were engaged over a span of **5 months**.

Where? 37 selected villages of **two** districts of Bihar: **Samastipur and East Champaran.**

Why? Because these two districts are the most affected with arsenic and iron contamination.

How? 84 training sessions in **five months** (August to December) on water quality testing for arsenic and iron using field kits conducted.

Multiple platforms such as farmer's and governance meetings also discussed safe drinking water and related issues.

What is a bio-sand filter?

Bio-sand filter (known as JalKalp filters) is a precast concrete, which removes 98.5 per cent of the biological contaminants, iron, and turbidity from water. S. M. Sehgal Foundation (IWP partner) further redesigned it to suit Indian conditions by integrating the germicidal properties of copper to remove 100 per cent of the biological impurities and zerovalent iron technology to remove arsenic from water. The stainless steel model, being light in weight, makes it more portable on village roads and hilly locations.

Policy discussion on droughts, sugarcane and sugar industry in Pune, Maharashtra

Aligning state water policies with National Water Policy 2012 on climate change: Karnataka & Odisha state water policies with regard to Climate Change

In this context, India Water Partnership reviewed the State Water Policy (SWP) of Bihar and Gujarat in 2014; Goa and Tamil Nadu in 2015, Karnataka and Odisha in 2016. While undertaking review it was kept in mind to understand state-specific problems vis-à-vis mandate of National Water Policy-2012.

In 2016, review of Karnataka and Odisha was explored by in-depth desk research, discussions with relevant senior state officials, grass-root functionaries, NGOs, PRI members, farmers, etc. followed by state-level workshops in the two States. The findings and recommendations of the review were sent to the respective State Water Resources Department.

Impact in Numbers

Karnataka Water Policy

40 recommendations

Topics: Formulation process of water policy, decentralised water governance, climate change, drinking water to all, water and agriculture, water and forest, controlling water pollution, ground water, development and management of water resources, public awareness and a comprehensive data base.

Odisha Water Policy

58 recommendations

Topics: Water policy formulation process, decentralized water governance, climate change, drinking water to all, water and agriculture, water and forest, controlling water pollution, ground water, development and management of water resources, data base and public awareness were developed.

Maharashtra's sugarcane cropping pattern & its impact on drought

The drought conditions in Maharashtra are being aggravated by the sugar industry due to its high water consumption and its establishment in the drought-prone regions. The government, affecting agriculture, human welfare and the natural ecosystems, has neglected the distortion in priorities and policies regarding water management. These have benefitted a small section of the farming community – the sugarcane farmers, sugar factories, and distilleries.

The West Zone Water Partnership (WZWP) study, led by Gomukh Environment Trust for Sustainable Development (Gomukh Trust) under the aegis of India Water Partnership, assessed the impact of the sugarcane crop and the sugar industry in general, in Maharashtra, coupled with the drought situation in the state. The effort was to identify the co-relationship between the distortion in the cropping pattern and its impact on droughts. It recommended corrections of the distortion in favour of other agricultural producers and the environment, and not on objecting to sugarcane cultivation and sugar production *per se*.

The Bitter Truth

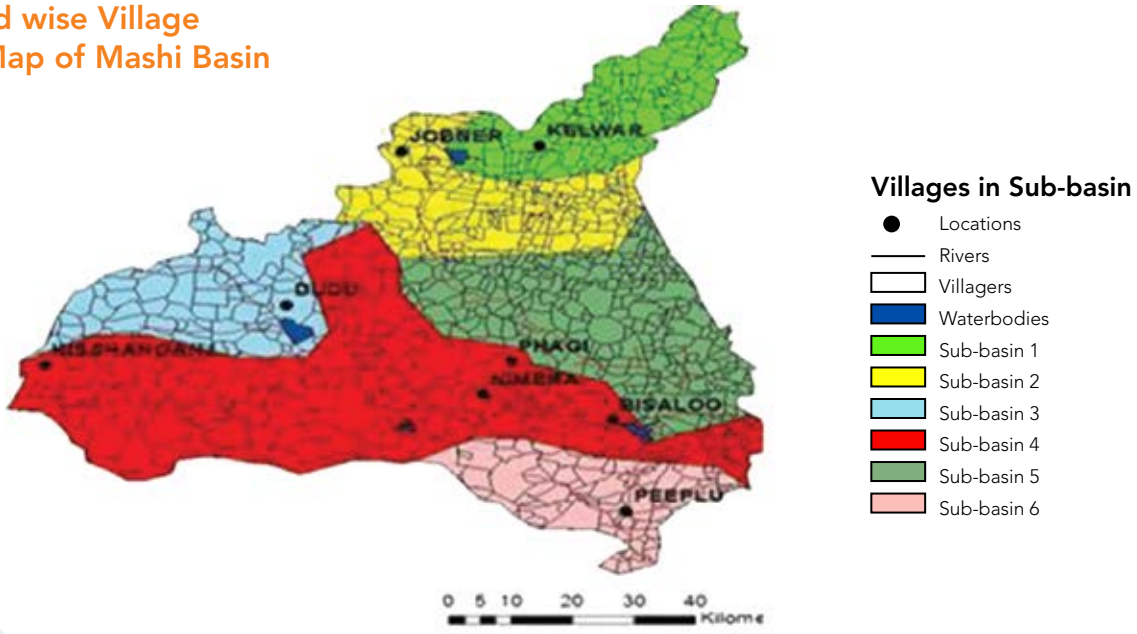
- An estimated 6% (4,26,000 ha) of land in Maharashtra is water logged, and 0.45% (35,000 ha) is affected by salinity.
- The deficit in rainfall across the state is about 35.5 per cent while in the Marathwada region, it is about 48 per cent.
- 75% of sugar mills in Maharashtra are located in drought-prone regions.
- It has been noted that despite dropping productivity, the area under sugarcane has steadily increased.
- Sugarcane has been blamed for exacerbating the drought.
- A comparison between sugar production of Uttar Pradesh and Maharasthra reveals that despite double the water requirement per kg of sugar, the recovery of sugar from sugarcane and duration of crushing in Maharashtra is greater than that in Uttar Pradesh.

IWP and Gomukh Trust have released a seminal position paper on drought policy of Maharashtra titled, "Droughts and Sugar Industry in Maharashtra – Are We Learning from History?"

Way Ahead

- **No new sugar mills must be set in rain deficient regions.**
- **Existing mills could be relocated to other regions.**
- **A change in the state's cropping pattern to reduce the heavy reliance on sugarcane, a water intensive crop, to comply with natural conditions in the region needed.**
- **Excessive use of water for sugarcane cultivation be monitored and ceased under section 47, 48 and 49 of the Maharashtra Irrigation Act, 1976.**

Water-shed wise Village Boundry Map of Mashi Basin



Setting up of Mashi River Basin Parliament for effective water management

Freshwater management (surface and groundwater) is both a global and local concern. While most countries in the world are now moving towards distributed water governance systems, in India, the stress is on water management policy and practice. Governance issues are not given enough priority. To address this gap, India Water Partnership in collaboration with its network partner Centre for Environment and Development Studies, Jaipur (CEDSJ) took up a three-year project on Participatory River Basin Management in Semi-arid Areas of Rajasthan using the IRBM approach.

Some of the **major water management** issues in the Basin include low fertility of the soil, salinity, alkalinity, poor drainage accompanied by moderate to severe erosion. **Ground water levels are falling** rapidly due to overexploitation. **Fluoride concentrations in ground water** are above the upper permissible limit for drinking water in most of the basins area.

The IWP-CEDSJ effort was to create an institutional and administrative framework encompassing interests of all its stakeholders, primarily the farmers and non-farm sector, industrialist groups and the unorganised sector members.

The outcome: "Formation of a unique Mashi River Basin Parliament (RBP). This RBP may also serve as a model for water governance in other river basins of India".

What is IRBM?

The Integrated River Basin Management (IRBM) approach is a concept that aims to conserve and utilise the natural resources within a river basin sustainably, through integrating the needs and skills of various stakeholders like farmers, industries, government departments, academics, NGOs and people and their representatives. The National Water policy 2012 has accepted IRBM formally but water management continues to be a centralised top-down approach causing more problems than solutions.

What is the Mashi River Basin Parliament?

The Mashi River Basin Parliament will comprise 80 members. It is expected to emerge as a **unique model of distributed governance in Rajasthan** and can be replicated in other parts of India. The process of forming the Parliament will integrate capacity building of concerned stakeholders, with the Parliament constitution and its procedures being formulated in the stakeholder meetings. The **rich experience of working with the Tarun Bharat Sangh** in the formation of **Arvari River Parliament**, which has been functioning for the last 20 years, will also be applied at each stage of its formation.

Johad for Water Conservation, Mashi Basin, Rajasthan

Mashi River Basin in Rajasthan is part of the larger River Basin called Banas River Basin, which is located in the middle of the Rajasthan. The River Basin area falls in three districts, namely: Jaipur, Ajmer and Tonk Districts. Mashi River originates from the Silora hills about 6 kilometers south of Kishangarh Town in Ajmer district and passes through Phulera tehsil in Jaipur district.

Assessing gaps in state water policies as per National Water Policy 2012 directives: Uttar Pradesh, Sikkim and Tamil Nadu

IWP and IELO undertook comprehensive review of Uttar Pradesh, Sikkim and Tamil Nadu to assess gaps to the directives of NWP 2012. The selection of states was undertaken to high light the divergence in their water challenges as well as existence and evolution of institutional and regulatory framework to deal with those challenges.

16 thematic areas including water pricing; adaptation to climate change; conservation of river corridors, rivers, and wetlands; management of flood and drought; scientific assessment of water resources and Database, information system, etc. were assessed.

Numerous policy and regulatory gaps in the water governance frameworks were identified. The report of these States would act as an important information tool for decision makers as well as researchers in the water policy sector.

Recommendations and Way Forward

Uttar Pradesh

- Need for revisiting State Water Policy of Uttar Pradesh in view of the objectives and principles enunciated in NWP- 2012
- Inclusion of Climate Change Adaptation strategies in water planning processes
- Development of Navigational uses of Rivers and water bodies
- Operationalising Uttar Pradesh Water Management and Regulatory Commission
- Enhancing sectoral water use efficiency
- Developing Forecasting Models for Flood Management

Sikkim

- Need for revisiting the Sikkim Water Policy, 2009 as per NWP-2012
- Setting up an independent statutory Water Regulatory Authority
- Policy Initiatives for Spring shed development to ensure water security
- Enhancing Water Use Efficiency through River Basin and Project Planning
- Development of Navigational uses of Rivers and water bodies
- Inclusion of Climate Change Adaptation strategies in water planning processes

Tamil Nadu

- Need for revisiting the Tamil Nadu Water Policy, 1994 as per NWP-2012
- Setting up an independent statutory Water Regulatory Authority
- Enhancing Water Use Efficiency through River Basin and Project Planning
- Inclusion of Climate Change Adaptation strategies in water planning processes
- Development of Navigational uses of Rivers and water bodies
- Enhancing sectoral water use efficiency
- Expanding allocation priorities

Preserving the catchment & biodiversity of water bodies in Bhandara & Gondia districts, Maharashtra, Wainganga Basin

Maharashtra's lake districts Bhandara and Gondia have a rich tradition of water management. However, the agricultural and natural resource use scenario is changing along with tremendous changes in the ground level practices by farmers and other users. Further, climate change has put more pressure on their livelihoods.

The deteriorating water quality of these water bodies has been identified as a major issue. The use of chemicals through fertilisers, pesticides, and weedicides in the catchment's agricultural lands is a threat to all aquatic life

forms. This is leading to a loss of livelihood opportunities for the dependent communities. In the above context, the India Water Partnership - Wainganga Water Partnership study of five water bodies in the intervention districts led to deeper understanding of its ecological concerns. The five water bodies selected were Gaon Talav, Bandhya Talav, Umri Talav 2, Motha Talav and the Gaon Talav.

The objective was to document and understand the effects of different use patterns and management of wetland and community livelihood. **Five comprehensive case studies were subsequently developed to serve as an effective advocacy tool along with Wetland Management Plan for 5 selected water bodies.**

The study conducted chemical saturation tests in food items, **chemicals used in farms** in wetland catchments; mapped GPS of water bodies and catchment to assess diversity and mark the GPS points on periphery of water bodies and in shallow waters; **documented agricultural practices and productivity** to collect and analayse data from all the water bodies; **trained the staff** for diversity assessment: **assessed aquatic plants** through quadrant mapping and **conducted a bird count** in the wetlands. **Fish/Pila/Crab diversity assessment** is complete. A wetland-wise list of fish species has also been prepared.

Impact in Numbers

17 youth members (women and men) trained

Documentation and analysis of data on wetland resources such as area of catchments, diversity of fish, agriculture land, forestland, floral diversity, and photographs is complete.

5 case studies developed on the Gaon Talav, Bandhya Talav, Umri Talav 2, Motha Talav, Gaon Talav of the Bhandara and Gondia districts of Maharashtra in Wainganga Basin.

Way Ahead

- **Reframe government policies** to benefit the community.
- **Desiltation of all tanks** as per the Malgujari Tank Rejuvenation Scheme is a **matter of increasing ecological concern** and must be addressed. It will decrease productivity of fish and other resources of tanks due to habitat loss.
- An **economic valuation of wetlands** will provide detailed insights for policy makers and decision makers at the local and government levels for holistic management of the water resource.
- **Case studies** developed will be **an effective advocacy tool** to urge for a holistic approach of management of water resources, especially in relation to malgujari tanks prevalent in Maharashtra.

GOAL 2: Generate and Communicate Knowledge

Projects can be successful only if the community is aware of its linkages with improving their lifestyles. With this as the premise, the two projects under Goal 2 furthered the aim of generating and communicating knowledge. IWP implemented the solid and liquid waste management project in Garhi Harsaru, Haryana to create access to adequate and safe water for daily activities while in the other project, it engaged in building capacities of multiple stakeholders on effective water demand management in the domestic and farming sector to promote effective water use practices. This seminal project engaged more than a 1000 participants in its activities.

Promoting Integrated Water Resource Management (IWRM) for Village Garhi Harsaru, Gurugram, Haryana

Garhi Harsaru village in Gurgaon, Haryana is among Delhi-NCR's water stressed peri-urban areas. The rapidly increasing rate of population (at a 73.96 % growth rate), higher densities, and urbanisation resulting in changing land-use is making it a water-stressed region. Related environmental issues such as unhygienic sanitation and inadequate solid & liquid waste management aggravate the situation. No water treatment system exists either for wastewater reused for gardening or agricultural purposes. To develop solutions to such concerns, India Water Partnership, with the support of TARU launched a pilot initiative in 2015 based on the hypothesis that 'Integrated Water Resource Management (IWRM) is one of the best approaches to ensure safe and sustainable water in the village'.

What is IWRM?

Integrated Water Resource Management is a process, which promotes the coordinated development and management of water, land and related resources to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. It considers participatory and inclusive principles with knowledge frameworks, which help the development of the action research plan. It is, thus, a solution to the water problems with improved water governance and management.

With transect walks, baseline surveys, and focus group discussions, the study delved into the needs and gaps of the region. There were around 30% households unaccounted-for-water in the water supply systems (as per primary data collected). Based on the recommendations and the issues identified, **extensive awareness campaigns/activities were undertaken. An integrated water investment plan was prepared** and supported by the development of advocacy material for sensitisation of stakeholders, initiation of **setting up/strengthening, and sensitisation of community institutions** in order to prepare them for the execution of the integrated water investment plan through training support. Under the IWRM programme in Garhi Harsaru, a **solid-liquid waste management system** (SLWM) was developed in the village for implementation.

A Community Takes Charge of Its Water Needs

A community Institution was set up with the sarpanch as the head for operation and maintenance of the solid-liquid waste management system to be able to sustain its benefits to the community.

Way Ahead

- SLWM and ground water recharging will be done.
- Project is expected to trigger general environmental sanitation as the visible surroundings become cleaner.
- Programmes are also being conducted to raise awareness for WASH practices, especially among women and youth.
- An advocacy plan will be developed for funding support to implement Integrated Water Investment Plan.
- IWP and TARU are in the process of mobilisation of resources and funds for the project.

Building multi-stakeholders' capacity on water demand management in domestic & farming sector

As part of 2016 IWP /GWP-South Asia work plan & strategy, IWP in partnership with Dhan Foundation was engaged in building capacities of stakeholders including farmers, CSOs, scholars, researchers, academicians, grassroots people, and other stakeholders on various water-related issues. Several training workshops conducted over a span of a year helped to build their capacities for effective water management in the domestic and farming sector.

Impact in Numbers:

933 + participants: Stakeholders including farmers, CSOs, scholars, researchers, academicians, & grassroots people.

434 women participants

12 training programmes/ workshops

Multiple themes including 'Development Management Programme for Freshwater Bodies', 'Water Accounting and Economic Valuation of Ecosystem', and 'Improved Fish Farming.'

Demonstrations and **site visits** such as tank silt application, dry sowing of paddy before monsoon, etc. provided hands-on experience to participants.

Hand washing Campaign in schools and a village for youth participation.

GOAL 3: Strengthening Partnerships

To quote American activist and author: "Alone we can do so little, together we can do so much." IWP sails along with its network partners in its multiple water initiatives, harnessing the strength of each partner and multiplying its impact by combining it with the IWP expertise and experience. A tremendously significant partnership marked its efforts under Goal 3: The Hindon River Rejuvenation Multi-Stakeholder Partnership. The partnership will take an integrated approach towards reviving this heritage river and ameliorating the lives of the people living on its banks, the various facets of their daily activities dependent upon and interwoven with the good health of the River Hindon.

Hindon River Yatra flagged off by Hon'ble Chief Minister of Uttar Pradesh on 27th June, 2016

Hindon River Rejuvenation: Setting up of Multi Stakeholder Partnership

Mismanagement of water resources has led to dangerously high pollution levels on the surface water and groundwater throughout the catchment area of River Hindon. IWP, along with 2030 Water Resources Group (2030 WRG) since 2015, have been involved in convening stakeholders including Govt. of Uttar Pradesh, civil society, industry, and academia among others to collate their individual efforts into a joint vision for Hindon Rejuvenation. Furthering this endeavour, IWP along with its Secretariat-WAPCOS Ltd., has taken the lead to establish a multi-stakeholder **River Rejuvenation Partnership (RRP) Secretariat at IWP Secretariat, WAPCOS Ltd, Gurugram**. The process will lay the foundations for building a multi-stakeholder approach to river basin management supported by local stakeholders and global principles of IWRM.

What the Secretariat will do

- Serve as a catalyst to incubate new projects
- Mobilise public and private funding
- Provide handholding and monitoring support to project owners as required.
- Work towards improved water resource management policies
- Build capacity on governance processes relevant for river rejuvenation in the project area.

What is the RRP?

The RRP will work on a tributary approach to river rejuvenation. It will first target the Hindon, Kali, Krishni rivers as a support to the Government of India Namami Gange project.

RRP in Action

- Envisages district action plans to amplify the impact of action taken.
- Proposes District Level Committees chaired by DC/ DM with multi-stakeholder representation.
- Seeks to bring all the viewpoints under one umbrella for Integrated Water Resource Management.

Strengthening Partnership

World Water Day 2017 Celebration

Dr Amarjit Singh, Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India delivering the Inaugural Speech

India Water Partnership (IWP), International Water Management Institute (IWMI), Indian Agricultural Research Institute (IARI) and Indian Council of Agricultural Research (ICAR) jointly celebrated the World Water Day 2017 on 27th March 2017 at Water Technology Centre, Indian Agricultural Research Institute (IARI) campus, PUSA, New Delhi, India on the theme "Wastewater". The event brought together around 150 participants from the government, civil society and research organizations. The celebration focused on raising awareness about water conservation, both quantity and quality along with highlighting the symbiosis between water and wastewater for achieving Sustainable Development Goal (SDG) on water.

The event was inaugurated by Dr Amarjit Singh, I.A.S, Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation, GoI. Dr Trilochan Mohapatra, Secretary, DARE and Director General, Indian Council of Agricultural Research (ICAR), Government of India was the Chief Guest. The other dignitaries present on the occasion were: Dr R. Kaur, Director, Water Technology Centre, Indian Agricultural Research Institute (IARI); Dr A. K. Sikka, IWMI-India Representative; Dr J. S. Sandhu, Deputy Director General (Crop Sciences) and Director, ICAR and Dr Veena Khanduri, Executive Secretary-cum-Country Coordinator, India Water Partnership.

Dr Amarjit Singh said that 80 % to 90 % waste water is discharged in rivers which may be cleaned/recycled and used; there is a need to reduce pollution at source by the industries; water has to be priced so that it is not wasted; scientists and researchers have to work more vigorously for wastewater management and re-use; depleted aquifers need to be recharged. Dr Trilochan Mohapatra said that one city (big or small) should be taken up for wastewater management and scaled up to other cities for demonstration and implementation. One must learn from the best practices implemented on the ground and spread the same across the country for their adoption in a suitable manner. He stressed the need to recycle and reuse wastewater since freshwater is declining fast. But for this to happen, he said, social mind sets need to change. He emphasised cleaning of rivers as they feed our seas. He also said that bio-remediation of wastewater is urgently required.

Knowledge Sharing, New Learnings

Spreading The Water Footprint

Year 2016 saw 10 interactive and innovative workshops and trainings conducted by IWP on water-related issues ranging from raising awareness, monitoring and evaluation, to showcasing new technologies. The workshops and trainings had multiple objectives: highlighting success stories of work done in the Hindon Basin, raising awareness on water concerns and water literacy; discussing governance issues for the Hindon Basin and collating ideas on taking the work ahead in a more concentrated and streamlined manner for more effective outcomes; training stakeholders to create focussed proposals for work on the Hindon Basin; monitoring and evaluating ongoing work for water management; reviewing state policies with reference to the pressing issue of climate change which is rapidly impacting all aspects of our life with maximum impact on our water sources; promoting the drought monitoring system for better drought preparedness; engaging youth on water sanitation and hygiene and water treatment via technologies such as the bio-sand filter, JalKalp.

Water Talk Film Festival, India Water Week 2016

Water Talk Film Festival was one of the unique events in the India Water Week 2016. **This event was attended by more than 250 national and senior international delegates at the level of Ministers and Permanent Secretaries to Government of India.** The overseas countries represented in the event were: *Israel, Nepal, Bhutan, Burundi, Zimbabwe, Philippines*, and *Sierra Leone*. In the film festival, a total number of 14 films on wastewater

Address by Mr R.K. Gupta, President IWP on Water Talk Festival during India Water Week-2016 *(Photo credit: India Water Partnership)*

management, water conservation, water pollution, climate change and drought, showing the efforts of the government, NGOs, urban local bodies, panchayats, individual organisations and individuals were screened.

Organised by India Water Partnership (IWP) in association with CMSR Foundation, WAPCOS Ltd. and International Commission on Irrigation & Drainage (ICID), the films screened highlighted success stories of water conservation, technological innovations, and people's participation. The Water Talk Film Festival was inaugurated by the Chief Guest, Ms. Uma Bharti, Hon'ble Minister of Water Resources, River Development and Ganga Rejuvenation, Government of India followed by the address by Guest of Honour, HE Ms. Dorji Choden, Hon'ble Minister, Ministry of Works and Human Settlements, Royal Government of Bhutan. A documentary film "Gang Tarang" on river Ganga produced by India Water Partnership was screened during the inaugural session. The festival effectively raised awareness on global and domestic water concerns, displayed stories of hope, and developed a platform for exchange of ideas and experiences of the various stakeholders.

Hindon Symposium on Participatory Hindon Basin Approach

The symposium and exhibition on **'Impact Driven Partnerships for Ganga Tributary Rejuvenation – Replicating and scaling up success stories from the participatory Hindon Basin approach'** showcased multi-stakeholder approaches to rejuvenate part of the Ganga River Basin based on a tributary approach, with a particular focus on the Hindon River in Uttar Pradesh. The Hindon initiative, which is building a replicable model for participatory and integrated water resources management, brought together divisional administration, local industry representatives, and civil society to identify opportunities and solutions to water challenges.

Partners underlined the importance of **mobilising global and local expertise** to address India's water and sanitation challenges. **Re-establishing the lost connection**

(Photo credit: Mr. Rana Goswami, India Water Partnership)

Mr U.P. Singh, IAS, DG, National Mission for Clean Ganga (NMCG), addressing the multi-stakeholders and partners

between people and the river and caring for it as their own was also stressed while highlighting the importance of **defining the intervening pathways, sustainable behavioural change, capacity building,** and **access to technology.**

Water Literacy and Awareness Campaign

Initiatives will yield positive results only if they are based on peoples' participation, which is further dependant on an aware community. With this as the driving objective, the rally on water literacy organised in Baghpat focused on generating awareness on ground water depletion and water pollution in the Hindon Basin. The joint initiative of India Water Partnership (IWP), Environment and Social Research Organization (ESRO), and Centre for Youth (C4Y) comprised representatives from the organizsers, community leaders and students & school authorities. A huge rally across Dola and Gungakheri village raised slogans for saving water and protecting the water resources. Street plays by students highlighted the negligent attitude of the community towards water and the depleting ground water levels. The participants interacted with the people as they marched through the village, talking to them, asking them probing questions to make them think about their actions, which were responsible for the water stress we face today. **In an innovative approach, the rallyists sang songs on water, urging the people to join in and strengthen the participatory approach.**

IWP is Secretariat of River Basin Council

In a significant development, India Water Partnership was agreed upon as the Secretariat of the Hindon River Multistakeholders' River Rejuvenation Partnership owing to its vast experience and active work on Stakeholder Mapping of Hindon River Basin. IWP also holds the status of member representing the community organisation in the State Government Committee, constituted under the leadership of Divisional Commissioner, Meerut for Hindon River Pollution Management.

Proposal Writing Workshop and Meeting on "Hindon Vision to Action - Taking it Forward"

Looking to create collective action for revival and sustenance of Hindon, a meeting on Hindon river rejuvenation was organised by India Water Partnership (IWP) in collaboration with 2030 Water Resource Group (2030 WRG) and discussed an action plan on the proposed governance for the Hindon Basin rejuvenation. It also displayed the most effective way to present a project proposal on water concerns by asking participants to develop a sample proposal, which was further improved upon. District coordinators shared their experiences on the various projects in their regions while highlighting the challenges being faced during the monthly District Committee Meetings.

Monitoring and Evaluation under Project Preparation of Wetland Management Plan

Shrinking ponds in Maharashtra's Gondia and Bhandara districts have aggravated the livelihood problems of the already marginalised fishermen community. The approximately 2000 surviving ponds are at varying degrees of degradation. Flora and fauna species in and near the ponds are on the decline due to multiple factors such as introduction of exotic species, pollution load from agricultural fields, and changes in fishing techniques. The programme sought to restore the ecological imbalance while keeping in mind the economic equation of the community.

The evaluation of the work done for 5 ponds in both the districts yielded significant findings which would help to revive and maintain the water bodies, weed out invasive species, implement remedial measures such as phytoremediation for pond health, involve women SHGs, look at the organic soil matter to help restore plants near ponds while ensuring that ecological concerns were integrated with livelihood needs and demands of the market.

Workshop on 'Karnataka State Water Policy' with reference to climate change

The National Water Policy (NWP) 2012 has emphasised the need to draft/revise the state water policies in accordance with the National Water Policy to create a unified national perspective. The state water policies of Karnataka and Orissa were under review in 2016. Forty-four stakeholders attended the workshop on Karnataka State Water Policy with special reference to climate change. Officers from all concerned departments of Govt. of Karnataka were also part of the workshop. This would help to ensure uniformity of the message across those concerned. Some significant suggestions included involving stakeholders from the village level up especially women; highlighting achievements of state water policy, accounting for ground water while formulating water balance; giving greater weightage to climate change and its impacts; periodic review and assessment of all projects, and a single point integrated database among others.

Farmers of Kareldhua village, interacting with IWP Study Team

Demonstration of Regional Workshop on South Asia Drought Monitoring System

A regional workshop on South Asia Drought Monitoring System (SADMS) demonstrated SADMS and its newly launched online portal. More than 50 international/national delegates and experts including the delegates from South Asian countries such as Sri Lanka, Nepal, Bangladesh, Bhutan, India, and Maldives participated in the workshop.

What is SADMS?

SADMS is expected to provide near-real information of drought onset and progression helping decision makers respond in time.

From Left to right: Mr. AC Tyagi, ICID; Dr. Alok Sikka, IWMI-India; Dr. Trilochan Mohapatra, ICAR; Dr. R. Kaur, IARI; Dr. Giriraj Amarnath, IWMI-Colombo. On the dais, Dr Veena Khanduri, IWP, during the inaugural session of SADMS. *(Photo Credit: Rana Goswami, India Water Partnership)*

The importance of customising the early warning and monitoring system was stressed as the early warning would help South Asia be prepared for the drought and its severe impact on agriculture production and livelihoods.

Representatives of participating countries highlighted the need for a robust and composite drought monitoring system. Case studies of the drought management in Bangladesh, Sri Lanka and India facilitated a cross-exchange of learning from the respective management systems. The workshop also discussed the implementation and adoption of SADMS tool across South Asian countries. Country representatives spoke on their country's strengths and capabilities for adoption of this tool. The outcome was the need to come together and work on a concerted effort across South Asia to mitigate droughts and develop an integrated drought-monitoring network to promote learning from the obstacles encountered and solutions adopted by countries in times of distress.

Regional participants from South Asia During Regional Workshop on South Asia Drought Monitoring System (SADMS)

(Photo credit: Mr. Rana Goswami, India Water Partnership)

- **Exhibition on Swachh Bharat Abhiyaan**

An exhibition on "Swachchta" by Indira Gandhi National Centre for the Arts (IGNCA) on Swachh Bharat festival had IWP displaying its extensive work done over the years in the field of water and sanitation with the support of its implementing partners such as Dhan Foundation, S. M. Sehgal Foundation, TARU and several others. The event explored, in-depth, the historic and cultural linkages to the ongoing sanitation drive sweeping across India.

- **Training on WASH Promotion & Household Water Treatment & Storage**

A four-day indoor and outdoor event at Samastipur, Bihar focused on WASH issues, Household Treatment, and Safe Storage. Forty participant trainees represented regional, national and international organisations that work on water and sanitation, across eight Indian states and Nepal. The JalKalp bio-sand filter technology, its operation, implementation, installation, maintenance and benefits were explained to the participants in a hands-on training session.

- **Training on Household Water Treatment & Storage (HWTS)**

A two-day seminar-cum-training programme on Household Water Treatment and Safe Storage held in Gurugram (Haryana) saw 18 participants keenly discuss and debate various water aspects such as qualities of safe drinking water, physical, chemical and biological impurities in water, sources of contamination, linkages between human health and water contamination, different ways to remove frequent contaminations, and the JalKalp water filter as a sustainable water treatment solution.

Theory and classroom exercises combined with brainstorming, case studies, demonstrations, and hands-on practice made it an extremely lively session. Creating demand, ensuring supply and services and, monitoring for improvement were identified as three goals of the implementation strategy along with capacity building for increasing its effectiveness.

IWP team interacting with community members

Consolidating Activities 2016

Knowledge Outcomes

- **Need to mobilise global and local expertise** to address India's water and sanitation challenges.
- **Re-establishing the lost connection between people and the river** and caring for it as their own identified as a critical need.
- **Need to define intervening pathways**, sustainable behavioural change, capacity building and access to technology.
- **Importance of raising awareness** among people on water conservation and promoting water literacy underscored.
- **Remedial measures** considered critical **to revive ponds** with measures suggested.
- **Stakeholder involvement from the village level up** especially women in water concerns identified as an important component.
- It was considered **important to highlight achievements of state water policy** to create interventions as per state's needs.
- Acknowledged that **ground water must be accounted for** while formulating water balance.
- **Greater weightage** to be given **to climate change and its impacts** while formulating water policies.
- **Periodic review and assessment of all projects** a must for course correction and gauging project pros and cons.
- **A single point integrated database** considered essential for easy access of data for all stakeholders.
- Need for a **robust and composite drought monitoring system**.
- **Concerted effort** across South Asia needed **to mitigate droughts** and develop an integrated drought-monitoring network.

Tangible Consolidation

- **Ten engagements** exploring different facets of water held.
- **India Water Partnership** agreed upon as **Secretariat** of Hindon River Multistakeholders' River Rejuvenation Partnership.
- New technologies such as **bio-sand filter technology introduced**.
- Trainings on use & installation of **stainless steel water filter, JalKalp** undertaken.
- **250 national & senior international delegates** attend Water Talk Festival 2016.
- **Israel, Nepal, Burundi, Zimbabwe, Philippines & Sierra Leone represented** at event.
- **14 films screened** on wastewater management, water conservation, water pollution, climate change and drought.

Voices

JalKalp Bio-sand Filter: Giving People Access to Safe and Affordable Water

District Samastipur

Subodh Ram, Village Jakhra Kalyanpur

"I bought a JalKalp water filter and have been using filtered water for the last two months. The taste of water is much better and the very common stomach problems have reduced drastically."

Shambhoo Kumar, Village Ajana

"The training showed us the qualities of safe drinking water, how water gets contaminated and why we should care about the quality of drinking water. The best part about the JalKalp filter is that there is no operational cost involved."

Brahmdeo Mahto, Village Gopalpur

"My gastric and dysentery problems were gone after I started using the JalKalp filter. With the good results that the filter has brought for my family, I talk to other villagers about the importance of safe drinking water and using the water filter to ensure good health for their families, too."

District East Champaran

Ashish Ranjan Mishra, Village Chakia

"The quality of water in my village was not very good. I had to buy bottled water, everyday, for Rs 25/- . With the JalKalp filter installed, we now save Rs 750/- every month."

Shambhoo Prasad, Village Sitakund

"Water from our 60-ft deep hand pump would turn yellowish if stored overnight. I used to suffer from gastric and other digestion related issues, frequently. I decided to install JalKalp at home. I am happy to say that now I do not have any stomach-related issues. Also, the food cooked with filtered water tastes a lot better."

Sumit Kumar, Village Trainer on Water and Related Issues

People who have been using the JalKalp filter have realised that it is a very cheap and sustainable solution to address the turbidity, biological, and iron contamination in water. In the households where water has arsenic, I suggest them to put 2 kg iron nails in a cloth bag and then place this bag in the diffuser of the filter. Iron nails, which are rusted in a few days, absorb the arsenic present in water. Many households who used to purchase bottled water but have now adopted the JalKalp water filter are very happy as they are able to save up to Rs 1000/- per month coupled with the assurance of good quality of water. Many villagers have appreciated this initiative of awareness building. The people who participated in the training have become change agents and are spreading the awareness to others in need.

Feature

Case Studies: The Stories Behind Water Bodies & Water Management

I. Case Studies of Three Tanks in Bhandara and Gondia districts of Maharashtra in Wainganga Basin

Bhandara and Gondia districts are known as the "lake districts" of Maharashtra. Thousands of traditional water bodies exist in these districts, constructed by communities in the past. These water bodies were created to ensure protective irrigation to the rice crop of the area and support the communities around it — from fish production and many plant varieties as source of food and raw material for items of day-to-day use. Along with it, many local and migratory bird species flocked its waters.

Post-independence, the state departments acquired these traditional tanks. The growth of these water bodies was adequate until there was natural food available. Over time, in the absence of adequate management, the condition of the tanks started deteriorating with a rapid fall in the fish species it harboured.

Dhiwar, the traditional fishing community, is now on the receiving end of this blow. A communication with them was initiated. On the basis of this dialogue, the work of freshwater biodiversity conservation was started by the Bhandara Nisarg Va Sanskriti Mandal (BNVSAM).

In the following pages, three case studies on the status of three tanks in the Bhandara and Gondia districts throw up critical areas of concern in the preservation and management of traditional water bodies.

(Photo Credit: Rana Goswami, India Water Partnership)

a. Bandhya Talav, Nimgaon: Struggling under habitat destruction

Story behind:

Bandhi is the local name for a piece of farm land, which is levelled and a small earthen bund of 1.5 to 2 feet is constructed around it. Around a hundred years back, there were some Baandhis on the spot of Bandhya Talav. The Kohli community's malgujar observed that this was a good place to store water rather than use it for farming. Hence, the name Bandhya Talav, converted into a tank from a Baandhi. Apart from the Bandhya Talav, Nimgaon has one tank, which is bigger than the Bandhya Talav, along with three *Bodis* (small tanks).

Bandhya Talav's Habitat Providers

Of the 74.42% of floral species, 62.5% are palatable and used for feeding of livestock. At the same time, these species also provide the habitat for local fish species and water birds. The Sedge grass species with a 20% importance value in the area plays an important role in providing a habitat for the fish and birds. It also provides fodder for livestock.

Unfortunately, the cutting of the Sedge grass has meant destruction of habitat for the dependant flora and fauna. Brick makers use the grass as fuel in the summer season. An increasing trend of petty contractors setting up brick making units in the nearby areas of this wetland have been affecting the natural resources.

Rising borewells are a matter of tremendous concern. Ground water exploitation is yet to show its impact as the talav lies at a distance of about 1000 m, but as new bore wells are being constructed just downstream of the tank, water levels will be affected drastically.

Community assessment outcomes

The community being the most affected stakeholder, with their ear to the ground, was surveyed for their point of view about the importance of the species and wetland management. They appeared concerned about the future impact of setting up industries in the wetland while looking at the need to convert alternate uses of wetland such as irrigation and fishing into economic values. The indirect and direct services provided by the wetland, they felt, need to be assessed for better decision making and management of wetland at all levels. Apart from the management and economic aspects, the community stressed the need to focus on the relationship between livestock nutrient and wetland pH for controlling contagious diseases in the wetland's aquatic life.

b. Umari Talav - 2 Sawartola: Battling indiscriminate water use and extraction

Story behind:

The history of Umari Talav - 2 goes back over 300 hundred years. Devaji Gudhewar and Narsimha Gudhevar were two brothers, also malgujars, who lived in village Umari. Apart from Umari, another 12 villages were also included in their malgujari revenue. The landlord in those times, called the mokasi by the Halbi, Gond and Mana tribes, was also a powerful figure in the village. Before the Umari Talav was built, the land was barren and dry. The *mokasi* needed water for their daily needs. So, some farmers of Bortola and Umari village and the malgujars came together and decided to build a talav in Umari. They selected the land but were opposed by the mokasi. Ultimately, the malgujars and farmers were able to convince the mokasi to allow the building of the talav. Therein lies the origin of the Umari Talav.

There are several areas of concern regarding the talav. There is no formal or informal management committee of farmers. The water is used as per individual needs in the absence of a formal water management structure. Landlord farmers who now control water use have constructed around 15 bore wells and five wells in the command area of the tank.

c. Gaon Talav, Bampewada: Water used as needed adds to woes

Story behind:

A century back, the Gaon Talav Bampewada was constructed for two primary uses: one, for agriculture and two, to meet the daily needs of the villagers. The tank is located in the middle of the farms and the village. The villagers use the talav for the needs of their cattle, washing clothes, and immersion of religious idols during festivals. Other talavs such as Nim Talav, Khagar Bodi, Bhut Bodi, Gaon Taki Bodi and Vasant Bandhara lie in the forest around the Bampewada village.

The problem lies in the fact that these farmers have irrigated water without informing or seeking permission from any of the other farmers. It was

also observed that the landlord and the patil have constructed seven bore wells and four wells in the command area in the last five years.

II. Case Study of the Kisanveer Sugar Factory, Satara: A bittersweet story

The factory has two units in the district of Satara - one in Bhuinj and one near Pratapgad. The mill crushes an estimated 15-16 lakh MT of sugarcane in a normal year, as compared to 11 lakh MT during a drought year. The average recovery rate of sugar at the mill was 11.43 per cent. The factory further produces 22 MW electricity (7 MW used internally and 15 MW sold to the Maharashtra State Electric Board), bottled drinking water, ethanol and about 1,200 tonnes of vermi-compost annually.

The Sweet...

The mill also runs emergency medical and fire-fighting services, provides accidental insurance cover to its almost 50,000 farmer members, and holds agricultural fairs and tree plantation drives for about 540 villages in the area. The factory further aims to improve the recovery rate of sugar, maximise energy conservation in different production stages and reduce dependency on external sources of water by improving utilisation of water generated in sugar production.

...And the bitter

While these measures are commendable, on the flip side, officials from the factory claimed that water conservation was not a major focus area due to the abundant nature of the resource. Further, they did not monitor amount of water consumption in the entire process.

Looking Ahead - 2017-18

More than 60 per cent of India's irrigated agriculture and 85 per cent of drinking water supplies are dependent on ground water. Climate change is expected to intensify monsoon, glacier melt, and flooding, further exacerbating India's "difficult hydrology". Placed in this context, our activities are geared towards increasing resilience of communities to water stress with an integrated water management approach.

Focus areas for 2017-18

- **Further strengthening our** governance structure for greater efficiency in processes.
- **Decisions taken at the top are effectively sought to be conveyed to the grass roots** for uniformity in approach with regard to water demand and supply in current climate change scenario.
- We are **revamping our administrative structure and initiating institutional changes** to sharpen its work and processes.
- The bottomline is to **keep each stakeholder on the same page** when initiatives are rolled out to achieve maximum traction.

Women and Water

We are seeking to bring more and more women into our water initiatives. Any policy made in the water sector without the involvement of women is only half the concern addressed as water stress affects women the most. Their understanding and involvement in water decisions will result in a holistic water policy.

IWP President discussing with partners about strategies for exploring new partnership during Annual General Body Meeting

Exploring New Partnerships, Developing Innovative Perspectives

To provide strategic inputs at the policy level, we are in the process of exploring new partnerships with the Government of India. We are seeking to further ties with the Ministry of Water Resources, River Development & Ganga Rejuvenation; Ministry of Agriculture, Ministry of Urban Development, Ministry of Environment & Forest, Ministry of Earth Sciences, and those relevant to our work in the water sector.

We are also looking to develop partnerships with significantly more numbers of renowned natioanal NGOs aligned with the IWP vision and mission.

The India Water Partnership Team

Dr Veena Khanduri,
Executive Secretary-cum-Country Coordinator, India Water Partnership (IWP)

Dr Veena Khanduri, *Executive Secretary-cum-Country Coordinator, India Water Partnership (IWP)*

Veena Khanduri has an experience of more than 26 years in research; project appraisal; preparation of strategic papers; monitoring & evaluation of water & sanitation programs; rural livelihoods; watershed programs; land reclamation programs; rural development programs focusing on land, soil & water; micro-finance for entrepreneurship; women empowerment; etc. Veena Khanduri is Executive Secretary-cum-Country Coordinator of India Water Partnership (GWP-India). She holds a doctorate degree in Environment Biology from Forest Research Institute, Dehradun.

She is member of: Core Committee, Technical Committee and Organizing Committee of India Water Week; Member of Hindon River Vision Committee formed by Government of Uttar Pradesh; Member, India-EU Partnership; Member, Water Quality Group of Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India for Water Accounting Framework; Member, Advisory Committee Council of Aquatech; Founder Member of Community of Evaluators (COE); Member of South Asian Evaluation Committee; Member, Central Advisory Board of Water-Expo; Member, Indian Water Resources Society; Member, Water Supply & Sanitation Collaboration Council (WSSCC), Member, Bureau of Indian Standards (BIS) for WRD 24.

She is author/co-author of around 20 publications focusing towards Natural Resources Management (NRM), IWRM, Poverty alleviation and Women empowerment, etc.. She has participated in more than 75 National and International Workshops/Conferences with regard to NRM, IWRM and climate change.

Mr Mangla Rai,
Senior Research Associate, IWP

Mr Mangla Rai, *Senior Research Associate, IWP*

Mr. Mangla Rai handles communication department and coordinates with various partners and stakeholders of IWP. He has 39 years of rich experience in the field of communication and development sector.

Prior to joining IWP, Mr Rai has worked with Agricultural Finance Corporation Ltd. He also served as Middle level Communication Officer in the Indian Navy from 1977-1994. His contribution had been exemplary during his entire service in the Indian Navy. He was also honored with 'Commander-in-Chief, Western Naval Command Commendation' award for his sincerity and dedication towards his work.

Mrs. Sushma Sharma,
Finance and Administrative Officer

Mrs. Sushma Sharma, *Finance and Administrative Officer*

Mrs. Sushma Sharma is Finance and administrative officer at IWP. She is responsible for supervising monthly and weekly accounts, statutory compliance checks, fund management, auditing, as well as supervising project budget applications.

She has an experience of 15 years with reputed organisations such as Genesis Conture Pvt. Ltd., Mittal Arora and Sethi, Saksham Adhesive (p) Ltd., G. T. Biopharma Pvt., S. K. Gulati Associate (CA firm), Naveen Singh & Company (CA firm) working on Tally, Finance accounting, Taxation and auditing. She is a commerce graduate and holds diploma in computer programming from YWCA.

Mr. Shourjomay Chattopadhyay,
Research Associate

Mr. Shourjomay Chattopadhyay, *Research Associate*

Mr. Shourjomay Chattopadhyay, a post graduate in Environmental Studies and Resource Management from TERI University has over three years of experience in the field of agriculture, climate change and water management. Mr. Shourjomay works on water and climate change related issues. Prior to joining IWP, he was associated with the Institute for Resource Analysis and Policy. He has worked extensively on issues related to drought management, urban water management, desalination and climate risk analysis among others. At the Council on Energy, Environment and Water, he was part of the team to develop the first bottom-up HFC emission module for India.

Ms. Anubha Aggarwal,
Research Associate

Ms. Anubha Aggarwal, *Research Associate*

Ms. Anubha Aggarwal works as Research Associate with IWP. Her research interests are Watershed Management using IWRM approach, Groundwater Management, Household Water Treatment and Storage Technologies (HWTS), and urban sanitation. Prior to joining IWP, Ms. Anubha Aggarwal was associated with Council on Energy, Environment and Water (CEEW) and worked on Residential Energy Modeling using GCAM. She has also done the research work with various reputed National and International organizations in the past.

Ms. Pooja Tiwari,
Research Associate

Ms. Pooja Tiwari, *Research Associate*

Ms. Pooja Tiwari, a Research Associate of IWP possesses M.Sc. degree in Environment Management from Guru Gobind Singh Indraprastha University, New Delhi. Her research interests are integrated watershed resource management, bio remediation for wastewater, remote sensing, and agro-biodiversity. Previously, she has interned with Institute of Social and Economic Change, Bangalore on Crop Genetic Diversity Conservation for Food Security. The other projects, she has handled include; study of water/waste water management related to industries with National Productivity Council (NPC).

In IWP, she is explicitly working for Hindon river rejuvenation project involving youth; Impact Assessment of Pilot Project on Building Resilience through Promotion of Safe Drinking Water in Samastipur District of Bihar and other projects of Global Water Partnership-South Asia.

Mr. Rana Goswami,
Expert (J.L.)

Mr. Rana Goswami, *Expert (J.L.)*

Mr. Rana Goswami is working with India Water Partnership from the past 3 years as Junior level Consultant and assisting Executive Secretary-Cum-Country Coordinator and other office staff in their day to day work. He is also assisting IWP in organizing various conferences/workshops/meetings, taking field photographs and maintenance of official files and records. Mr. Rana is also vested with the responsibility of maintaining and up-keep of IWP website.

Advisers

Dr V. Rajagopalan

Dr V. Rajagopalanan I.A.S officer, retired as Secretary, Ministry of Environment, Forests and Climate Change from Government of India has vast experience at senior policymaking levels in the field of Environment. He has held several offices in the past as Chairman CPCB, Joint Secretary MoEF, etc. His expertise domain is Environment Impact Assessment, Environment Management Regulatory Paradigm, Pollution control, Waste Management, Management of forest, climate change, Biodiversity. He also holds experience of handling Environment related International Conventions, as he was India's Lead negotiator in the Stockholm Convention on Persistent Organic Pollutants. Dr V Rajgopalan holds Ph.D. in Air pollution Modeling from University of Lucknow. He is guiding IWP as Senior Advisor for Hindon river rejuvenation.

Mr U.N. Singh

Mr U. N. Singh was Additional Director (Scientist E) in CPCB. He has expertise in pollution control in Agro Based Industries, such as Distilleries, Pulp and Paper, sugar, Dairy, Textiles, Tannery, Electroplating etc. He has extensive experience in domestic wastewater pollution control by virtue of involvement in Decentralized Sewage Treatment system. He has advanced professional training in the field of Environmental Protection Technology, UNEP NIEM Advanced training Course on Cleaner Production in Pulp and Paper Industry. He is advising IWP on water quality, waste water solutions for Hindon river rejuvenation. He is also guiding IWP in Water and Climate Change Resilience Program (WACREP) of GWP-South Asia.

Dr Joseph Viruthyal

Dr Joseph Viruthayal, PhD in Sociology from Jawaharlal University, New Delhi is monitoring and evaluation expert. He retired as Deputy General Manager of Agricultural Finance Corporation Limited. At present, he is Project Management Consultant for West Bengal Forest and Biodiversity Conservation Project through Nippon Koei India. Dr Viruthayal has more than 30 years of work experience in Integrated Watershed Management, Flood and erosion management, e-documenting, monitoring and evaluation for Maharashtra Agricultural Competitiveness Project (MACP).Dr Joseph Viruthayal is advising IWP as a Sampling Expert for mapping of Hindon river Stakeholders.

Mr S. C. Jain

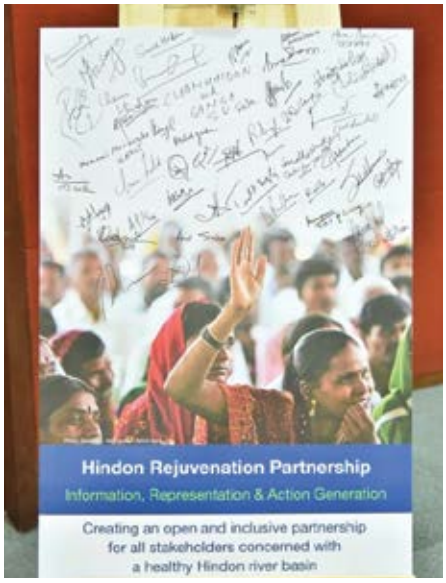
Mr S. C. Jain, a M.Tech in Applied Geology, from Sagaur University, Madhya Pradesh is a freelance Consultant. He was formerly the Program Coordinator of AFPRO (Action for Food Production). After his association with AFRO, he was inducted as Program Leader in Safe Water Network India. He is an expert in Natural Resource Management, Water & Sanitation and Food security with more than 28 years' experience in these fields. Mr. Jain was also one of the members of Drafting Committee of National Water Policy-2012, constituted by Ministry of Water Resources (MoWR) in 2011.


TARU


Training:
Biosand Filter
Project Implementation


INDIA WATER WEEK 2016


FICCI


Hindon Rejuvenation Partnership
Information, Representation & Action Generation
Creating an open and inclusive partnership
for all stakeholders concerned with
a healthy Hindon river basin

Annexure I

IWP Board of Governors

President
Mr R. K. Gupta
Chairman-cum-Managing Director, WAPCOS Ltd.
Kailash, 5th Floor, 26, Kasturba Gandhi Marg,
New Delhi - 110 001

Vice President
Mr Avinash Tyagi
Secretary General, International Commission on Irrigation & Drainage, 48 Nyaya Marg, Chanakyapuri, New Delhi - 110021

General Secretary
Dr Aman Sharma
Executive Director, (Ganga Rejuvenation, Environment & Construction Management), WAPCOS Ltd., 76-C, Institutional Area, Sector-18, Gurgaon

Joint Secretary
Ms Aditi Kapoor
Director, Alternative Futures, B-177, East of Kailash
New Delhi - 110 065

Treasurer
Ms Gargi Banerji
Director, PRAGYA, Plot 83, Sector 44, Institutional Area, Gurgaon - 122003 (Haryana)

Members
Mr Sanjay Kundu, *(*I. P. S. *Central Govt. nominee)*
Joint Secretary, Policy & Planning, Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India

Vacant position *(Central Govt. nominee)*
Nomination being sought from Ministry of Environment, Forest & Climate Change, Government of India (on completion of tenure of Adviser (NRE) from NITI Aayog, Government of India)

Dr Suresh Kumar Choudhari *(Central Govt. nominee)*
Assistant Director General (Soil & Water Management) NRM Division, ICAR, Ministry of Agriculture and Farmers Welfare, Government of India

Mr Vijay Jain *(State Govt. nominee - Haryana)*
Administrator, CADA, Irrigation & Water Resources Department, Govt. of Haryana

Mr M. L. Gupta *(State Govt. nominee - Rajasthan)*
Chief Engineer, State Water Resources Planning Department, Govt. of Rajasthan

Annexure II

State-wise List of Life Members

State	Organisation Name
Andhra Pradesh	• Society for Participatory Development • Indian Association of Aquatic Biologists • Institute of Resource Development and Social Management • Rural Integrated and Social Education Society • Sarvodaya Youth Organization
Assam	• AARANYAK
Bihar	• Institute of Environment & Eco. Development • Welfare India
Gujarat	• Self Employed Women's Association • Institute of Rural Management Anand • N.M. Sadguru Water & Development Foundation
Haryana	• Indian Environment Law Offices • PRAGYA • Xplorer Consultancy Services Pvt Ltd • S.M. Sehgal Foundation
Himachal Pradesh	• PRAKRITI
Jammu & Kashmir	• South Asian Voluntary Association of Environmentalists
Jharkhand	• HUMANITY
Karnataka	• SSJV Projects Pvt. Ltd. • National Institute of Advanced Studies • Department of Applied Mechanics and Hydraulics
Kerala	• SAMYUKTHA

State	Organisation Name
Madhya Pradesh	• Institute of Regional Analysis • Shivana Area Water Partnership • Lake Conservation Authority of Madhya Pradesh • Madhya Pradesh Institute of Social Science Research • NAVDEEP
Maharashtra	• Grass Root Action & Social Programmes • Indian Water Works Association • Dam and Development Council of India • Jain Irrigation Systems Ltd. • Yuva Gram Vikas Mandal • Pravara Institute of Research and Education in Natural and Social Sciences • Maharashtra Pani Parishad • Foundation for Agriculture and Rural Development & Environmental Security • Women's Water Forum • Friend's Forum for Purna River Basin Development • Society for Promoting Participatory Eco-system Management • Indian Social Welfare Society • Yusuf Meherally Centre • Eco Needs Foundation • Gomukh Environmental Trust for Sustainable Development • Indian Association & Aquatic Biologists • S G G S Institute of Engineering and Technology
Manipur	• Zougam Institute for Community Resources

State-wise List of Life Members

State	Organisation Name
New Delhi	• Mr. S C Jain (Individual Member) • Centre for Youth (C4Y) • Society for Promotion of Wastelands Development • Angelique International Limited • Jaguar Overseas Limited • Safe Water Networks, India • WAPCOS Ltd. • Kirloskar Brothers Ltd. • Institute for Resource Management and Economic Development • Institute for Human Development • Central Soil and Material Research Station • Power Grid Corporation of India Ltd • Society for Development Alternatives • Sulabh International Social Service Organisation • Inspire Network for Environment • All India Women's Conference • Action For Food Production • Alternative Futures • Water Aid • Institute of Economic Growth • Institute for Development Initiatives • Water Community India • Action for Disaster Resilient and Inclusive Development • ICLEI - South Asia • CMSR Foundation • Taru Leading Edge • Exhibitions India Pvt. Ltd.

State	Organisation Name
Orissa	• Society For Rural Advancement And Democratic Humanitarian Action • Association For Awareness and Welfare Activity For Down-Troddens in Society • SADHANA • Adarsha Seva Sanganthan • Moon Light Club • The CHETANA • Mahalaxmi Mahila Samiti • Narichetna Mahila Institute • India Micro-Credit Consultancy Rating and Evaluation and Training Organization • Grmaya Bikash Manch • Society for Women Action Development • Banki Anchalika Adibasi Harijan Kalyana Parisad • Arun Institute of Rural Affairs • Udyama • Association for Rural Area Social Modification, Improvement and Nestling. • Institute for Rural Development and Planning
Punjab	• Guru Arjun Dev Institute of Development Studies
Rajasthan	• Indian Institute of Rural Management • Institute of Development Studies • Centre for Environment and Development Studies • Jheel Sanrakshan Samiti
Tamil Nadu	• DHAN Foundation • Human Formation Organisation • Terra Firma • Mr. G Bhaskar (Individual Member)
Telangana	• WORLD

State-wise List of Life Members

State	Organisation Name
Uttar Pradesh	• Sharda University • Aroh Foundation • Janhit Foundation • Empowering People for Development • NEER Foundation • International Development Centre Foundation
Uttarakhand	• Indian Association of Hydrologists • Indian Water Resources Society • Pan Himalayan Grassroots Development Foundation
West Bengal	• Shatmonisha Santi Sangha • Nutanhat Development Society • Tafa Palli Milani Sangha • Kalyani Institute for Study, Planning and Action for Rural Change • Akshaynagar Pallisri Sangha

Annexure III

Annual Members

State	Organisation Name
Andhra Pradesh	• Deva Organisation Rural Development Society • Share The Vision Voluntary Organisation
Uttar Pradesh	• Shramik Bharti

Annexure IV

New Members (2016-17)

State	Organisation Name	Membership type
Andhra Pradesh	• Deva Organisation Rural Development Society	Annual
	• Share The Vision Voluntary Organisation	Annual
New Delhi	• Centre for Youth (C4Y)	Life Time
	• Exhibitions India Pvt. Ltd.	Life Time

Financials

Audit Report of GWP Funds-2016

India Water Partnership

76-C, Institutional Area, Sector-18, Gurgaon

Expenditure	Amount (In Euro)	Income	Amount (In Euro)
Goal 1 – Catalyse change in policy and practice	14,286	Fund Received from GWP-SAS Core Budget	40,000
Goal 2 – Generate and communicate knowledge	5,143		
Goal 3 – Strengthen partnerships	20,571		
Total	40,000	Total	40,000
Goal 1 – Catalyse change in policy and practice	13,856	Fund Received from GWP-SAS WACREP Budget	29,106
Goal 2 – Generate and communicate knowledge	14,164		
Goal 3 – Strengthen partnerships	1,086		
Total	29,106	Total	29,106
Rapid Country Level Analysis-India	1,700	Fund Received for Rapid Country Level Analysis (RCLA) Activity	1,700
Total	1,700	Total	1,700
Grand Total	70,806	Total	70,806

As per our report of even date
For Mega & Associates
Chartered Accountants
FRN. No. 007541N

N. Parasuraman FCA
(Partner)
M.No. 083102

For India Water Partnership

Dr. Veena Khanduri
(Executive Secretary-IWP)

India Water Partnership

76-C, Institutional Area, Sector-18, Gurgaon

Receipts & Actual Expenditure

Receipts & Expenditure Accounts From 1st January,2016 to 31st December 2016

Particulars	Budget	Actual	
	EURO	EURO	INR
Receipts :			
Opening Cash & Bank Balalnce :	-	-	-
Received From Regional Water Partnership On :			
CORE			
2nd Feb 2016	10,218	10,218	762,324
16th May 2016	12,129	12,129	909,358
27th July 2016	9,740	9,740	702,334
21st Oct. 2016	7,913	7,913	562,592
Total A	**40,000**	**40,000**	**2,936,608**
WACREF			
10th Mar 2016	11,724	11,724	856,531
26th May 2016	6,837	6,837	509,695
16th Aug 2016	5,357	5,357	391,817
24th Nov 2016	5,188	5,188	368,360
Total B	**29,106**	**29,106**	**2,126,403**
RCLA			
25th Oct. 2016	1,700	**1700**	120,551
Total C	**1,700**	**1,700**	**120,551**
Total Recipts (A+B+C)	**70,806**	**70,806**	**5,183,563**

Expenses:			
Activity Wise Expenditure	**Budget**	**Actual**	
CORE	**EURO**	**EURO**	**INR**
Goal 1 – Catalyse change in policy and practice Outcome Challange			
Outcome Challenge 1.1: Regional organizations and other relevant organisations advance regional cooperation in climate change adaptation (including disaster risk management), water food and energy security, and transboundary water management through increased data sharing, best practice exchange and alternative technology identification to enhance regional and economic development.			
Outcome Challange 1.2: National, State/Provincial, District, Local and River Basin level government integrate water food and energy security, climate resiliencerural/urban water management and environmental sustainability into development planning and decision-making processes.			
IWP will review the state water policy of another two States in line with National Water Policy -2012 in the context of climate change	5,714	5,714	420,884
IWP will review and examine existing State level regulatory and institutional framework of Tami Nadu, Uttar Pradesh & Sikkim to operationalize National Water Policy-2012	5,714	5,714	419,291
West Zone Water Partnership of IWP would make comprehensive assessment for policy changes and practical solutions to the problem of excessive plantation of sugarcane in dry and arid belt of central Maharashtra to avoid overuse of water	2,857	2,857	209,593

Outcome Challenge 1.3: Stakeholders at all levels develop gender sensitive 'No/low Regrets' investments and financing strategies for climate resilience and food security, including alternative low cost investments, investment strategies for national and local adaptation planning processes, micro-financing schemes and Public Private Partnerships.			
Outcome Challenge 1.4: Governments enhance efficiency in climate project preparation to leverage funding from traditional sources of water financing and adaptation funds			
Outcome Challenge 1.5: AWPs, CBOs, local line departments and other relevant stakeholders develop and implement innovative pro-poor and gender sensitive 'green' solutions for addressing critical local water security challenges such as water quality, groundwater depletion, agricultural water needs, rainwater harvesting constraints and energy security to enhance climate resilience of countries and communities.			
SUM GOAL 1	**14,286**	**14,286**	**1,049,768**
Goal 2 – Generate and communicate knowledge			
Outcome Challenge:: 2.1 All boundary actors targeted under Goal 1 as well as other networks (e.g. APAN), media professionals, universities and other relevant stakeholder institutions have enhanced capacity to promote no/low regrets investments.			
IWP will engage youth participation for their role in water conservation in line with new GWP youth Strategy	2,143	2,143	160,413
Wainganga AWP will assess the diversity of 5 water bodies and also document the agriculutral practices and productivitiy in catchment area of two districts near Wainganga river - IWP	857	857	64,120
South Zone Water Partneship would organize capacity building program for multiple stakeholders on effective water demand management in domestic and farming sector - IWP	2,143	2,143	158,305
SUM GOAL 2	**5,143**	**5,143**	**382,838**
Goal 3 – Strengthen partnerships			
Outcome Challenge 3.1: Regional and Country level partnerships and partners have enhanced capacity and competency in fund raising and project coordination, and practice good governance including sound financial management, stakeholder engagement and monitoring and evaluation.			
Capacities of AWP and linkages with related partner and collaborating organizations strengthened (Bhima AWP, Shivana AWP & Kshipra AWP) - IWP	2,000	2,000	146,393
IWP would convene Board of Governors Meeting and Annual General	2,857	2,857	208,631
SUM GOAL 3 - activities (excl Running Costs)	**4,857**	4,857	**355,024**
CWP running cost	9,600	9,600	702,782
Audit fees	600	600	42,563
Programme Mamagement including M & E	1,514	1,514	110,980
Other Cost (Printing, Postage, maintainance of IT equipments, website AMC etc.)	1,000	1,000	72,955
Host Institution fees	3,000	3,000	219,698
SUM GOAL 3 INCLUDING Running Costs	**20,571**	**20,571**	**1,504,002**
Total (Goal1 + Goal 2+ Goal 3)	**40,000**	**40,000**	**2,936,608**
WACREF			
Goal 1 – Catalyse change in policy and practice			
Goal 1 – Catalyse change in policy and practice			
Outcome Challenge/ Work Package 1			
No Acitivity	-	-	-
Total Outcome Challenge/ Work Package 1	-	-	-

Outcome Challenge/ Work Package 2			
Activity 2A : CCA programme for Agency Staff/FO Leaders/Farmers in irrigated agriculture	-	-	-
Activity 2B : Assessment of environmental flow in hydropower development and its implications in a selected river basin	-	-	-
Activity 2C (IWP) : Climate Resilience Development - To prepare Capacity Building Module for imparting training to the stakeholders of Mashi Basin based on inputs received from the GIS suryey mapping, water resource mapping and water balance modelling undertaken during 2015	13856	13,856	1,011,129.00
Activity 2D : Assessing & compilation of indigenous knowledge and practices in water resource management	-	-	-
Activity 2E : To conduct a case study on the feasibility of Rain Water Harvesting in urban areas in Q2, 2016	-	-	-
Activity 2F : To conduct a study on Affect of Climate Change on Water and Food Security in Selected Coastal Deltas and its possible economic impact in Q3, 2016.	-	-	-
Total Outcome Challenge/ Work Package 2	13,856	13,856	1,011,129
Outcome Challenge/ Work Package 3			
Activity 3A : Assessment of water focused climate adaptation action/s in 101 LAPAs & its integration into local planning process in selected districts	-	-	-
Activity 3B : Study of earthquake impact on the water resources status in selected earthquake hit area	-	-	-
Activity 3C : Support community based water source protection projects	-	-	-
Total Outcome Challenge/ Work Package 3	-	-	-
Outcome Challenge/ Work Package 4			-
Activity 4 : Workable proposal for drought mitigation and management in Indus and Kharan Basins will be prepared and got funded by potential donors.	-	-	-
Total Outcome Challenge/ Work Package 4	-	-	-
Outcome Challenge/ Work Package 5			-
Activity 5A : Technology Options for CCA Including Coservation Activities	-	-	-
Activity 5B : PWP in collaboration with Area Water Partnerships and GWP Partners will establish demonstration sites showcasing latest rainwater harvesting techniques and modern irrigation technologies in Indus Basin, Cholistan and Tharparkar.	-	-	-
Total Outcome Challenge/ Work Package 5	-	-	-
SUM GOAL 1	13,856	13,856	1,011,129
Goal 2 – Generate & communicate knowledge			
Outcome Challenge/ Work Package 6			
Activity 6A : IWRM sensitization workshop for communities	-	-	-
Activity 6B : IWRM sensitization workshop for educational institutions	-	-	-
Activity 6C : In collaboration with its partner government and development sectors, PWP will organize capacity development workshops in climate change adaptation and proposals formulation for implementation in climate change impacted areas.	-	-	-
Total Outcome Challenge/ Work Package 6	-	-	-
Outcome Challenge/ Work Package 7			
Activity 7A : Drinking Water CBO Programmes	-	-	-
Activity 7B : Schools IWRM/ Water Messenger prog-CCA area	-	-	-

Activity 7C : Community Based Knowledge Products / Media Activities Posters, Flyers, Road Shows (1), Strreet Drama for youth/school (2) or media events/tours (1)	-	-	-
Activity 7D (IWP) : To prepare community owned water investment plan based on the action research findings emerged from 2015 activity	14,164	14,164	1,035,927
Total Outcome Challenge/ Work Package 7	14,164	14,164	1,035,927
SUM GOAL 2	14,164	14,164	1,035,927
Goal 2 – Strenghthen Partnerships			
Outcome Challenge/ Work Package 8			
Activity 8A (IWP) : Monitoring & Evaluation	1,086	1,086	79,347
Activity 8B (RO): PM to attend RC Meeting	-	-	-
Activity 8C (RO): PM to attend Regional Days Meeting	-	-	-
Activity 8D (RO): PM to attend Other Meetings	-	-	-
Total Outcome Challenge/ Work Package 8	1,086	1,086	79,347
Running Costs Secretariat (Region and Country):			
Staff costs Secretariat	-	-	-
Office Running Costs - RO	-	-	-
CWP Running Cost	-	-	-
Audit fees	-	-	-
Financial costs	-	-	-
Bank Interest (reported as negative expenditures)	-	-	-
Other costs	-	-	-
Host Institution fees	-	-	-
SUM Running Costs	-	-	-
SUM GOAL 3 INCLUDING Running Costs	1,086	1,086	79,347
Total (Goal 1, Goal 2, Goal 3)	29,106	29,106	2,126,403

RCLA			
Activity - Rapid Country Level Analysis	1,700	1,700	120,551
SUM RCLA	1,700	1,700	120,551
Total (RCLA)	1,700	1,700	120,551

As per our report of even date
For Mega & Associates
Chartered Accountants
FRN. No. 007541N

N. Parasuraman FCA
(Partner)
M.No. 083102

For India Water Partnership

Dr. Veena Khanduri
(Executive Secretary-IWP)

Audit Report of IWP Institutional Funds (2016-17)

INDIA WATER PARTNERSHIP

(Regn No.-HR0182013-00867)
76-C, Sector-18, Gurgaon- 122015

Statement of affairs as on 31st March, 2017

Particulars		Current year (Rs.)	Previous year (Rs.)
SOURCES OF FUNDS			
CORPUS FUND			
Life Membership fees			
Opening Balance	834,567.00		
Add: Received during the year	30,000.00	864,567.00	834,567.00
General Reserve			
Opening Balance	2,776,689.58		428405.44
Add: Surplus/(Deficit) transferred from Income & Expenditure Account	604230.11		2348284.14
		3,380,919.69	2,776,689.58
CURRENT LIABILITY			
Audit Fees Payable		11500.00	11,450.00
Expenses payable		9990.00	3,021.00
TOTAL		**4,266,976.69**	**3,625,727.58**
APPLICATION OF FUNDS			
CURRENT ASSETS			
Cash in Hand		2,189.00	26,086.00
Cash at Bank in current accounts		1049798.87	1,345,546.86
Cash at Bank in Fixed Deposits		3027738.12	1,972,707.20
Interest Accrued on above		166319.42	55,030.92
Tax depositions recoverable		20931.28	26,356.60
Advances paid			200,000.00
TOTAL		**4,266,976.69**	**3,625,727.58**

As per our report of even Date attached

For Parasuraman & Associates
Chartered Accountants
FRN No.025407N

N PARASURAMAN F.C.A
Memb. No. 083102

Veena Khanduri
(Executive Secretary)

R.K. GUPTA
(President)

Place: New Delhi
Dt:

PARASURAMAN & ASSOCIATES CHARTERED ACCOUNTANTS FRN 025407N NEW DELHI

INDIA WATER PARTNERSHIP

76-C, Sector-18, Gurgaon- 122015

Receipts & Payments Account for the year ended on 31st March, 2017

Particulars		Current year (Rs.)	Previous year (Rs.)
RECEIPTS			
Opening balances			
i) Bank balances in current accounts	1,345,546.86		
ii) Bank balances in Fixed Deposit	1,972,707.20		
iii)Interest accrued	55,030.92		
iii)Cash in hand	26,086.00	3,399,370.98	1,222,676.06
Grants received		4,220,923.79	5,537,700.00
Annual membership		6,200.00	8,200.00
Wacrep receipts		1,269,871.90	3,077,371.76
TDS refund		26,356.60	
Interest received		216,995.20	112,478.87
Other Donations		36,680.00	135,363.00
Life membership received		30,000.00	30,000.00
Advance Paid return		200,000.00	
TOTAL		**9,406,398.47**	**10,123,789.69**
EXPENDITURE			
WACREP Expenses		1,271,796.42	3,092,379.28
GWP Project Expense		2,615,403.58	2,918,001.57
Other project expenses		1,180,593.00	486,216.00
Other Expenses		48,510.00	1,029.00
Audit Fees-Current Year		11,450.00	10,236.00
Advances paid			200,000.00
Office & Administrative Expenses		18,898.00	10,732.64
TDS paid		10,680.86	5,824.22
Travel Expenses-WRG		3,021.00	
Closing balances			
i) Bank accounts	1,049,798.87		1,345,546.86
ii) Fixed Deposits	3,027,738.12		1,972,707.20
iii)interest accrued on FD	166,319.62		55,030.92
ii) Cash-in-Hand	2,189.00	4,246,045.61	26,086.00
TOTAL		**9,406,398.47**	**10,123,789.69**

As per our report of even Date attached

For Parasuraman & Associates
Chartered Accountants
FRN No.025407N

N PARASURAMAN F.C.A
Memb. No. 083102

Veena Khanduri
(Executive Secretary)

R.K. GUPTA
(President)

Place: New Delhi
Date :

PARASU RAMAN & ASSOCIATES CHARTERED ACCOUNTANTS FRN-025407N NEW DELHI

INDIA WATER PARTNERSHIP
(Regn No.-HR0182013-00867)
76-C, Sector-18, Gurgaon- 122015
Income & Expenditure Account for the year ended on 31st March,2017

Particulars	Current year(Rs.)	Previous year(Rs.)
INCOME		
Grant fromWRG	1284000.00	1926000.00
Grant for WACREP	1269871.90	3077371.76
Grant from GWP	2936923.79	3261700.00
Other Grants		350000.00
Annual Membership Fees	6200.00	8200.00
Interest from banks	227245.42	112478.87
Other Donations	36680.00	135363.00
TOTAL	**5,760,921.11**	**8,871,113.63**
EXPENDITURE		
WACREP Expenses	1271796.42	3092379.28
GWP Project Expense	2635329.61	2918001.57
Other project expenses	1180593.00	486216.00
Other Expenses		1029.00
Audit fees	11500.00	11450.00
Office & Administrative Expenses	57471.97	13753.64
Surplus/(Deficit) for year transferred to General Fund	604230.11	2348284.14
TOTAL	**5,760,921.11**	**8,871,113.63**

As per our report of even Date attached

For Parasuraman & Associates
Chartered Accountants
FRN No.025407N

N PARASURAMAN F.C.A
Memb. No. 083102

Veena Khanduri
(Executive Secretary)

R.K. GUPTA
(President)

Place: New Delhi
Dt:

PARASU RAMAN & ASSOCIATES CHARTERED ACCOUNTANTS FRN 025407N NEW DELHI

IWP Policy Briefs, Policy Reviews, Papers, Newslines, Guidelines/Training Materials

Policy Briefs

- Water Secretary and Climate Change Adaptation: The Management Perspective in India
- Water, Energy and Food Nexus in Gururam, Haryana (India)
- Building Resilience for Water Resources in India
- Water and Climate Resilience Programme(WECREP) South Asia- India

Books

- Water Management in Central India
- Planning for Water Resources Development in Wainganga River Basin
- AWP Jajmau

Policy Reviews

- Review of Draft Gujarat State Water Policy in Line with National Water Policy 2012 with regards to Climate Change
- Review of Draft Gujarat State Water Policy in Line with National Water Policy 2012 with regards to Climate Change
- Review of State Water Policy of Goa in Line with National Water Policy 2012 with regards to Climate Change
- Review of State Water Policy of Tamil Nadu in Line with National Water Policy 2012 with regards to Climate Change
- Review of Karnataka Water Policy (2002) and Draft Karnataka State Water Policy (2016) in Line with National Water Policy 2012 with regards to Climate Change
- Review on Odisha State Water Policy (2007) in Line with National Water Policy 2012 with regards to Climate Change

Papers

- Position Paper on Understanding and Implementation of National Water Policy of India- 2012
- Position Paper on Rapid Country Analysis of India Water Partnership conducted by Global Water Partnership
- Position Paper on Droughts and Sugarcane Industries in Maharashtra
- White Paper on Transforming the Najafgarh Basin

Guidelines/ Training Materials/ Manuals

- Capacity Building Manual on IWRM
- Manual on Jalkalp Water Filter
- Improving Water Use Efficiency through Better Crop Management
- Capacity Building Information Booklet on Climate Change & Water Security

Newslines

- Peoples' Area Water Partnership
- Formation of an Area Water Partnership to Rejuvenate Shivana River
- Drought Mitigation Measures in Context of Climate Change for Securing Agricultural Livelihoods in Uttar Pradesh (INDIA)
- Process of Formation of Jajmau Area Water Partnership in Kanpur (Uttar Pradesh) – Problems and Solutions
- Process Planning of Preparation of Integrated Water Resources Development and Management Plan (IWRD & MP) in Wainganga Sub Basin, Maharashtra
- Integrated Domestic Water Management (IDWM) in Semi-Arid Areas of Bundelkhand Region
- Rajasthan Adopts Integrated Water Resource management (IWRM) in its New Water Policy – Need For Capacity Building Of Stakeholders
- Water Sanitation and Health in selected Villages of Nadia District (West Bengal)
- Providing Solutions for Safe Drinking Water and Sanitation Through IWRM Approach
- Farmers Adaptation to Water Scarcity: A Case Study from the Wainganga Basin, Maharashtra, India

INDIA WATER PARTNERSHIP (IWP)

Secretariat - WAPCOS Ltd.

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