About India Water Foundation

India Water Foundation (Special Consultative Status With UN-ECOSOC, *Observer Status Governing Body of United Nations Environment Assembly (*UNEA), *Observer status* UNFCCC, *Observer status with* UNCCD, CTCN *membership for Southern Asia, Member* IUCN, *Member* GPML*) is a non-profit civil society, & think tank, is engaged in enhancing public awareness in Asia and the Pacific region regarding the vital role water and environment play in human lives, their impact on health, economic growth, livelihoods of the people and calamities that wreak havoc due to non-judicious harnessing of these natural resources. Generation of this awareness is facilitated through seminars, conferences, outreach and personal contact programs etc. As water is an essential component of power generation and food production, therefore is also engaged in ensuring environmental security, water security, energy security and food security which are essential for sustainable development.*

INDIA Water FOUNDATION

Save Water - Save Environment

IWF's Thought Leadership

India Water Foundation has pioneered the application of approaches like Sustainable Integrated Water Management (SIWM), Water-Energy-Food Nexus approach, Ecosystem-based Adaptation (EbA) approach for Climate Change, and Public-Private Partnership (PPP) along with Administration-Business-Civil Society (ABC) synergy approach to help realize the targets of the Sustainable Development Goals (SDGs) and major objectives of the Paris Agreement of Climate Change, with water being at the core.

Vision

IWF envisions attainment of the 17 SDGs with specific emphasis on **SDG-1** on About Ending Poverty, **SDG-2** about Food Security, **SDG-6** about Water & Sanitation, **SDG-7** about Energy, **SDG-12** on Responsible Production and Consumption and **SDG-13** about combating Climate Change, **SDG-17** standing for Partnership for the goals along with targets and the objectives of the Paris Agreement on Climate Change, with water at the core, within the stipulated period. It also nurtures its vision to visualize Asia-Pacific region in general and India in particular, as a water-surplus region sans environmental hazards by integrating SIWM, Nexus approach, EbA approach and PPP along with ABC approach as key components of sustainable development goals into national policy at local, provincial, national and regional levels by harnessing water-energy-climate-food nexus approach, assimilation and dissemination of wit and wisdom from local to global level and *vice versa*, promotion of inter-sectoral convergence in water, energy and environment sectors, capacity-building of all stakeholders in water, energy and environment sectors, equal emphasis on Soft and Hard Solutions to water and environment related problems, enveloping the model of circular economy and to change the mind-set of the stakeholders by sensitizing, incentivizing and galvanizing the people about water-energy-environment related issues.

Mission

The mission of IWF is to work amongst the people at the grassroots level, especially amongst the marginalized and weaker sections, women, tribal's and the poorest communities in India and the Asia-Pacific region, in cooperation with local, state and national governments, and with other like-minded civil society organizations (CSOs), to help them develop water, sanitation, hygiene and climate change adaptation services that are not temporary, but lasting forever. The IWF identifies the roadblocks to sustainable development and helps overcome them. It helps the people to make the change from short-term gains to long-lasting services that could transform their lives and their futures.

Environment-Plus Model: INREM

The IWF's Environment-Plus Model visualizes a holistic approach of integration of sustainable development into national policy at national, regional and global level. Sustainable development is a new paradigm for economic growth, social equality and environmental sustainability. Integrated Natural Resource and Environment Management (INREM) is the challenge to bring

the countries together in a South-South Cooperation (SSC) mode in order to address capacity gaps and to find an operational model for exchanging knowledge, expertise and other forms of capacity building approaches. The capacity for addressing the environmental aspects of natural resource management training initiatives for most senior managers tends to focus on the social and economic aspects with minimum consideration of the environmental aspects. Since water is a key component of sustainable development and all ecosystems are inextricably linked with water. This Model is based on various concepts promoted and being implemented by the IWF. Key elements of this approach inter alia include: capacity-building of sector and Actor through sensitization, incentivization and galvanization; Water-environment-energy-food nexus approach, establishment of a nodal agency as a hub for knowledge sharing and networking in water and environment sectors, assimilation and dissemination of water and environment related knowledge, inter-sectoral approach, equal emphasis on soft approach along with hard approach; and from sectoral to collective approach in water and environment sectors. The INREM is supplemented by SWIM, Nexus and EbA approaches.

IWF Objectives

The objectives of India Water Foundation *inter alia* include: Developing public awareness and understanding of SDGs and agreement on Climate Change, with specific emphasis on water, sanitation, agricultural, environmental and energy related issues catering to community and societal needs for managing and preserving water, environmental and energy resources and protection from natural and man-made hazards; dissemination of information related to SDGs, especially water, energy and environmental programs to promote better understanding of water, energy and environment amongst the people;

Rainwater harvesting, recharging and water conservation; energy conservation, preservation and efficient use; Assessment and evaluation of industrial and agricultural water use efficiencies; Assessments of Impacts of climate change on water, energy and agriculture; Water quality and water use issues; Integrated watershed development and management; Locating Dependable Ground water supplies; Planning for clean and dependable sources of water and energy; River basin management and improvement of people`s livelihood; Promoting water-energy-food nexus approach as key to sustainable development; Providing a holistic view of critical issues pertaining to water, environment, sanitation and energy through research; Putting ideas and knowledge into practice through innovative action research that helps people make better use of natural resources and increases their awareness of what's needed; Advocating and sharing expertise, experience and insights with all those who can make change happen; and influencing policies and practices that affect those people whose lives and futures are threatened by unsafe water, environmental degradation, sanitation and hygiene.

India Water Foundation has been espousing the cause of establishing **India Water Hub** as a nodal agency for synergizing the efforts of various agencies and facilitating convergence on water-related issues between the Centre and the states in view of the fact that water is a state subject under the Constitution. It has also emphasized that the proposed Hub would serve as the harbinger of new mechanism and synergy in managing water resources for sustainable development, apart from utilizing the local, regional and national water resources judiciously. In

this regard the IWF addressed numerous communications to then Prime Minister, Union Minister of Water Resources on several occasions during 2010-2012. However, these initiatives have proved instrumental in propelling the Union Water Resources Ministry to host India Water Week in April every year. IWF is continuing its efforts in this regard.

Partnership, Accreditation and Rapport of IWF

India Water Foundation is empanelled as National Key Resource Centre (KRC) under Ministry of Jal Shakti, Department of Drinking Water & Sanitation, GOI and Key Resource Hub of Networking, NCSTC, Ministry of Science and Technology, GOI and has partnership, rapport and accreditation with many national and internationally reputed organisations, NGOs and CSOs etc especially with UN/International Organisations

- Special Consultative Status with UN-ECOSOC
- Observer Status Governing Body of United Nations Environment Assembly (UNEA),
- Observer status with UNFCCC
- Observer status with UNCCD
- CTCN membership for Southern Asia
- Member with International Union for Conservation of Nature (IUCN)
- Member with Global Partnership on Marine Litter (GPML)
- Direct Member with ICID
- Member of the General Body of CAPART (Council for Advancement of People's Action and Rural Technology) under the chairmanship of Hon'ble Minister of Rural Development Govt. of India
- Member with Global Compact Network India
- Member with the World Water Council

Detailed Account of Activities of India Water Foundation Entailing International Scope

Accommodating more than one-fourth of the world's population, the South Asian region has access to just over 9 percent of global water resources. Burgeoning population along with intensified agricultural practices and irrigation; multiplying energy demand from greater industrial activity and economic growth; urbanization; complex environmental consequences of climate change, deteriorating river ecology, and deteriorating water quality in the regions' surface and groundwater resources etc., continue to unfold new challenges for the region's already scarce water resources.

The current trajectories based on 'sectoral or silo approach' have failed to attain the goal of sustainable development in the region for want of capacity building of the stakeholders, convergence, cooperation and coordination between actor and the sector. Hence the need was felt for the active presence of a civil society that could synergize scattered efforts in a collective way to ensure water security, food security and energy security to facilitate sustainable development in the South Asian region to start with and then in the entire region of Asia and the Pacific.

It was in this backdrop that India Water Foundation (IWF) was established as a non-profit civil society in 2008 with its headquarters at New Delhi (India). It has since then been engaged in generating heightened public awareness about water and environment related issues in national

and sub-regional level in Asia , regarding the vital role water and environment play in human lives, their impact on health, economic growth, livelihoods of the people and calamities that wreak havoc due to non-judicious harnessing of these natural resources. Generation of this awareness is facilitated through seminars, conferences, outreach and personal contact programs etc. As water is an essential component of power generation and food production, therefore, India Water Foundation is also engaged in ensuring environmental security, water security, energy security and food security which are essential for sustainable development. Over the years, IWF has imbibed new innovative concepts and best practices in water, energy and environment sectors and now it is committed to get targets of the SDGs and objectives of Paris Agreement on Climate Change into the national and regional policies and programmes for the better, bright and sustainable future of humankind.

In the year 2018-19, we initiated 'Eco-Routes Dialogue' for Eco Intelligent Rural Rejuvenation Field Capacity Enhancement for States of Uttar Pradesh and Uttarakhand, by NCSTC Division, Department of S&T, Ministry of Science and Technology, Government of India in the 'Aspirational Districts' of Uttar Pradesh and Uttarakhand. This dialogue had its focus on raising the competence and capacity building of the community, fostering a spirit of entrepreneurship and earning a sustainable and respectful live for themselves. The Program was much appreciated at all levels and was concluded with a tangible outcome and impact.

The activities undertaken by the India Water Foundation over all these years can be classified under the following main categories: (a) Catalyst for Policy Initiatives (b) As Regional Hub on Water; (c) Water and Human Development (d) Trans-boundary Water Cooperation; (e) Water and Agriculture; (f) Water and Health; (g) Water and Climate Change; (h) Water and Industry; and (i) Campaign for Right to Water.

These are briefly described.

(a) Catalyst for Policy Initiatives

India Water Foundation has played preeminent role in stimulating policy dialogue in water sector through its presentations, media writings and interaction through communications addressed to provincial and national governments as well as regional and international agencies. An International Conference on Water Use Efficiency in Industrial Sector organized by IWF on 9 November 2011 at Jaipur (Rajasthan, India) spurred the provincial government to frame water laws for the first time.

The occasion also led the Central Government to announce to frame industrial water policy. Inputs by India Water Foundation have spurred provincial government of Meghalaya in India to adopt water-energy-food nexus approach as an integral part of sustainable development. The IWF is engaged in making sustained endeavors available within its limited resources to get the nexus approach incorporated into policy as an integral part of sustainable development in India as well as the neighboring countries of South and South-West Asia in a synergy mode with the cooperation of like-minded CSOs.

(b) As Regional Hub on Water

The IWF has been working as a sort of Regional Water Hub in order to strengthen regional cooperation on water sharing and to help resolve water security issues in the region of South and South-West Asia. It has made efforts to develop close synergy with water related national agencies of each member country of the region. Through collaboration with like-minded civil society organizations and UN agencies, the IWF has made endeavours to serve as a repository on water-related knowledge to facilitate implementation of such programmes like judicious implementation of anti flood measures, development of entrepreneurship skills and improvement in people's livelihoods more effectively through convergence, coordination and cooperation with national/international agencies and respective governments.

Keeping in view the fact that negotiations on trans-boundary water are state-controlled and single-track processes have failed to understand the diversity of claims on water and the potential for benefit of sharing of Trans-boundary Rivers, the IWF has made efforts in developing the mechanism of Track-II diplomacy by involving CSOs and building grassroots coalitions around shared objectives, especially in Bangladesh, Nepal and Bhutan to begin with.

We at IWF are firmly convinced that water and climate change related issues defy geographic boundaries and pernicious consequences of water-induced and climate-induced calamities affect us all. Hence, solution lies in our collective endeavours by sharing best available practices, wit and wisdom in water and climate sectors for the benefit of entire human kind. Accordingly, we at IWF have been engaged in assimilating best practices in water sector from the publications of the UNEP, PUB-Singapore, UNDP, World Bank, UN Water.org, SIWI, IWA, Global Water Partnership, IWA, UNESCO-IHE and other international organizations. After collation and compilation of this information and data on water, short notes are prepared by a team of experts for the appropriate dissemination of this knowledge in water sector.

This dissemination is facilitated through regular postings in Social Media, especially in blogs, Face-book, and Twitter. Besides, the President of the IWF has contributed more than 350 articles in prominent magazines and journals. Apart from these, the IWF has sent more than 7,500 communications to various government departments, international organizations and like-minded civil societies in other countries to share information on water related issues. Besides, the IWF publishes a monthly online magazine *Focus Global Reporter* covering issues related to water, climate change, inclusive growth, ecosystem, sustainable development and other related issues.

This process of dissemination of knowledge in water sector has been able to galvanize support for Right to Safe Drinking Water, focus attention on water rights of women and other marginalized sections, capacity building of all stakeholders, increasing emphasis on holistic approach to water related issues based on Integrated Water Resource Management (IWRM) and water-energy-food nexus approach etc., in India and other countries of South and South-West Asia.

(c) Water and Human Development

Water is the key to sustainable human development because it entails all aspects of human life, especially in fostering socio-economic development and human well-being. Water scarcity impinges upon humans to achieve their full potential in terms of good health, education and livelihood. The IWF has made efforts through presentations at various national and regional seminars/conferences and via collaboration with other civil society and UN agencies in changing perception of the people from treating water as a commodity to treat it as a basic need and exercise it as a right.

India Water Foundation in collaboration with UN-ESCAP's New Delhi office for South and South-West Asia and MHHDC (Pakistan) hosted a Special Session on "Regional Cooperation, Human Development and Water" at New Delhi, India on 29 November 2013.

The IWF has extended its collaborative efforts to the UN-ESCAP's New Delhi office for South and South-West Asia on water related issues.

(d) Trans-boundary Water Cooperation

Dr Arvind Kumar, President India Water Foundation highlights "the role of civil society in facilitating in inter and intra-governmental convergence in water, energy and climate-mitigation- adaptation sectors in Meghalaya with emphasis on this region's potential in synergizing trans-boundary basin management cooperation in the Himalayan region of South Asia.

At "Seventh meeting of the Task Force on water and Climate and Fifth Workshop on Adaptation to Climate Change in Trans-boundary Basins, was held at Geneva, Switzerland on 13-15 October 2014, organized by UNECE Water Convention, AGWA, WMO, the INBO, GIZ, GEF, and IUCN under the leadership of the govt. of The Netherlands and Switzerland.

India Water Foundation has made efforts to elicit support for cooperative approach to trans-boundary water resources' management. This has found articulation in IWF's presentation on Managing Water Resources, Food Security and Climate Change in South Asia" at the 6th South Asia Economic Summit (SAES) meeting on the theme of "Towards a Stronger, Dynamic and Inclusive South Asia", hosted by Sri Lanka on 2-4 September 2013. The consensus emerging from this meeting emphasized on the increased trans-boundary cooperation in managing water resources.

The IWF presentation at the International Seminar on "From Rio+20 to Real Results: Strengthening of Regional Cooperation in North and Central Asia in order to Improve the Efficiency of Water Resources Management", held at Almaty (Kazakhstan) on 18-20 November 2013 proved instrumental in developing the consensus on the need for increased cooperation between South Asian and North & Central Asian countries in sharing experiences in managing water related issues.

The presentation made by IWF at the "Policy Dialogue on Economic and Transport Development in border areas in Eastern South Asia", organized by the Government of Meghalaya (India), UN-ESCAP and ADB on 4-5 December 2013, witnessed consensus emerging in favour of increased among India, Bangladesh, Bhutan and Nepal in managing natural resources, including water, specifically in respective border areas.

We at India Water Foundation are of the firm view that water-related problems in India cannot be tackled without people's participation. Acute shortage of drinking water, fast depletion of underground water resources, growing problems of pollution of ground and surface water, particularly the rivers and faster pace of drying up of traditional natural resources of water like lakes, streams, rivulets, ponds, *baoris* and wells etc., have added to the problems of water. The water problem is assuming added dimensions in the wake of fast shrinking of water resources and mounting pressure of population in the urban areas in India.

(e) Water and Agriculture

Agriculture is the largest consumer of water and as such judicious use of water resources and using recycled waste water for irrigation can help in saving water to be used in domestic and industry sectors. Imbued with this motive, the IWF has made presentations at various national and regional seminars/conferences to mobilize support for water conservation in agriculture.

On 14 February 2010, India Water Foundation, in collaboration with Ministry of Water Resources, Government of India, Deva Sanskrit Vishwavidayalaya, Haridwar, and allied organizations, hosted One-Day international conference on Innovative Ancient Techniques in Resolving the Current Crisis of Soil, Water and Environment at New Delhi (India).

India Water Foundation was invited to the “National Seminar on Increasing Water Efficiency in Agriculture Sector” organized by the CII in New Delhi on 19 February 2010.

The IWF participation in the Regional Workshop on Safe Use of Wastewater in Agriculture held on 16-18 May 2012 under the aegis of ICID at New Delhi proved instrumental in establishing close rapport with various participating agencies in managing wastewater for agriculture.

Presentation made by the IWF on “Water Use Efficiency for Resilient Agriculture in India” at the international organized at Jalgaon (Maharashtra, India) on 28-31 May 2013 formed part of the emerging consensus that emphasized on the urgency of ensuring water use efficiency in agriculture sector.

In the wake of adverse impact of the vagaries of climate change and shrinking water resources, and emphasis of SDG- on ending poverty and SDG-2 on ending hunger, IWF has emphasized on the necessity for climate smart agriculture to ensure food security to realize the twin objectives of ending hunger and alleviating poverty. Accordingly, IWF made a presentation on climate smart agriculture on the occasion of 66th ICID Foundation Day CWC Auditorium, New Delhi on June 24, 2015.

While defining climate smart agriculture (CSA) along with its linkages with policy-making and climate change related mitigation and adaptation, the presentation deals with the achievements of the first Green Revolution in India along with it negative impacts. While briefly appraising effects of climate change on agriculture in India and examining as to why there is need for climate smart agriculture, IWF presentation also focused on as to how India can lead on the science and practice of climate smart agriculture. While evoking enthusiastic response from the audience present at the conference, IWF presentation has elicited encouraging comments as well.

(f) Water and Climate Change

We at India water Foundation regard water as not merely a sector, but a connector that provides solutions because water community makes available holistic solutions that can support strategies to tackle effectively climate change and facilitate hassle-free adaptation. Water connects policy areas, economic sectors and societies and as such it is a tool for cooperation and for building trust.

Water and climate change are intimately inter-connected and influence each other in a big way. The IWF has made presentations at various national and regional seminars/conferences to emphasize the need for adopting holistic approach to management of water resources, with specific emphasis on water-energy-food nexus approach to ward off adverse impact of climate change.

India Water Foundation presented a Paper at the National Workshop on Climate Change and Its Impact on Water Resources-Adaptation Issues, organized by Global Hydrological Solutions at the Punjab University, Chandigarh, on 23-24 November 2010.

First International Environment Forum for Basin Organizations' was held from 26 to 28 November 2014 at the United Nations Office in Nairobi, Kenya. The forum is organized by UNEP in partnership with many relevant stakeholders. The high-level segment of the First International Environment Forum for Basin Organizations opened on Friday morning. Ephraim Kamuntu, Minister of Water and Environment, Uganda, delivered opening remarks, placing the Forum in the context of the ongoing post-2015 development agenda negotiations and calling basin organizations "key building blocks for environmental governance."

Dr. Arvind Kumar, India Water Foundation, described challenges around basin management including lack of political will and the limited exchange of scientific information at the 'First International Environment Forum for Basin Organizations' at the United Nations Office in Nairobi, Kenya

http://www.iisd.ca/basin/if/2014/28nov.html

The IWF presented a paper on "Environmental Challenges and National Security: An Indian Perspective", at the international seminar on Disaster and Environmental Management: A Global Perspective. The emerging consensus favoured the need for inter and intra-regional cooperation in dealing with water-induced and climate-induced disasters.

The IWF made a PPT Presentation on "Climate Change and its Impact on Water Sector in India", at the Third Asia-Pacific Climate Change Adaptation Forum held on 18-20 March 2013 at Incheon, South Korea.

Consistent persuasions by India Water Foundation with various departments and ministries of Government of India during 2011-2012 to adopt water-energy-good nexus approach to mitigate the adverse impact of climate change proved instrumental in spurring the government to make this nexus approach as the main theme of India Water Week 2013 held at New Delhi. The IWF presentation on "Water-Energy-Food Nexus Approach for Sustainable Development", evoked enthusiastic response.

The PPT Presentation on Water-Energy-Food Nexus Approach by the IWF at Shillong (Meghalaya, India) on 5 June 2013 elicited positive response from civil society participants from Bangladesh, Bhutan and Nepal and the emerging trends demonstrated the urgency of cooperation on nexus approach.

The IWF participated in the “High Level Regional Dialogue on Understanding Complexity, Resilience: Strengthening Responses to Climate Variability in South Asia”, organized by International Alert and SANSaC at Kathmandu, Nepal on 8 July 2013. Stakeholders from different sectors and countries in the South Asian region participated to explore the regional linkages and complexities of the issues.

Chairman IWF participated in the talk on "Reference group discussion and validation of the regional scoping study of sustainable intensification of agriculture in SAARC region" on 27th December 2016 in SAC, Dhaka, Bangladesh organized by SAARC Agriculture Centre (Sac), Dhaka under the directives of SAARC Secretariat.

(g) Water and Health

Water is a vital component of human health. Consumption of contaminated water can result in many types of water-borne diseases which can be fatal. Keeping in view the close inter-connectedness between water and health, the IWF has made presentations at various national and regional seminars/conferences to emphasize the need for keeping water resources free from contamination, with specific emphasis on contamination of water resources taking place due to adverse impact of climate change.

The IWF made a presentation at World Water Day celebrations on 20 March 2010 at Nairobi (Kenya) jointly hosted by UNEP, UN-Habitat, UN-SGAB, and the Government of Kenya. The presentation made by the IWF dwelt on the theme of challenges and solution, especially water quality, with specific reference to India and the prospects of a regional Water Hub to tackle water related problems in South and South-West Asia.

The IWF hosted Regional Workshop on Water Quality Monitoring in the Asia-Pacific Region in collaboration with UNEP-GEMS Water at New Delhi On 5-8 November 2012. Water experts from about 22 countries of the Asia-Pacific region, regional and International organizations representatives from New Delhi-based UN agencies, water experts from over ten ministries of Government of India as well as some state governments participated in it.

The salutary impact of this regional workshop was the forging of bilateral synergy between various institutions in water quality monitoring mechanism, exchange of data on water quality, and networking at national and international levels.

(h) Water and Industry.

Industry is the second largest consumer of water after agriculture. Judicious use of water in industry and recycling of industrial waste water for reuse can help in water conservation and to meet the growing demand for water for domestic use. Spurred by this motive, the IWF has made presentations at various national and regional seminars/conferences to emphasize the need for judicious use of water resources and water conservation, with specific emphasis on recycling industrial waste water for re-use in irrigation and industry.

India Water Foundation organized an International Conference on Water Use Efficiency in Industrial Sector on 9 November 2011 at Jaipur (Rajasthan) in collaboration with RIICO, Govt. of Rajasthan (Jaipur, India). This Conference proved a game-changer in water sector in Rajasthan because in the immediate aftermath of the conference, the government of Rajasthan enacted the State Water Law for the first time and concurrently the Department of Industries of the state government announced allocation of additional plots to industrial units in the state to install water treatment plants for recycling of industrial waste water for reuse.

The IWF was represented in the panel discussion on "Strengthening Local Ecosystems and Stakeholder Engagement to drive Municipal Water Utility Reforms", organized by IUKAN (India) at New Delhi on 13 February 2014. The IWF has become 'Industry-Outreach-Partner' with IUKAN to enable exchange of knowledge and engagement of all stakeholders in water distribution and waste water management.

(i) Water and Sanitation

India Water Foundation a National Key resource Centre Ministry of Drinking Water & Sanitation GOI was tasked by the ministry to conduct 12 training workshops in FY 2015-16 and 8 in 2016-17 on “Application and Uses of Hydro-geo-morphological Maps for Groundwater Prospection (HGMs)” in Himachal Pradesh, Jammu & Kashmir, Rajasthan, Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand, Meghalaya, Assam, Tripura, West Bengal, Punjab, Uttarakhand, Sikkim, Telangana, Haryana, Gujarat, Odisha & Maharashtra which were completed on schedule and one national workshop in Delhi inviting participants from the staff and member of State Water and Sanitation Mission (SWSM), Panchayati Raj Institution (PRIs), Public Health Engineering Department (PHED), and Communication and Capacity Development unit (CCDU), NGOs, Community Based Organization, Master trainers, officials from central ministries, national and international organisations etc on “Application and Uses of Hydro-geo-morphological Maps for Groundwater Prospection & Linkages” which was also conducted successfully as per schedule. In the inaugural session of the National Workshop of Dr. Harsh Vardhan Hon’ble Minister of Science & Technology & Earth Sciences GOI was the Chief Guest, Shri Chaudhary Birender Singh Hon’ble Minister of drinking Water & Sanitation, Rural Development and Panchayati Raj GOI Chaired and Preside over the session and Prof. Ashutosh Sharma Hon’ble Secretary Ministry of Science & Technology GOI was the Guest of Honour.

In the valedictory session Shri Nihal Chand Meghwal Hon’ble Minister of State for Panchayati Raj GOI was the Chief Guest and Ms. Stuti Kacker Hon´ble Former Secretary, Department of Disability Affairs, Ministry of Social Justice & Empowerment, Govt. of India and at present Chairperson National Commission for Protection of Child Rights was the Guest of Honour.

(j) Emphasis on Ecosystem-based Adaptation for Climate Change

We at IWF are espousing Ecosystem-based adaptation (EbA) approach to mitigate climate change related adverse impact. EbA entails the use of biodiversity and ecosystem services as part of an overall adaptation strategy. EBA uses sustainable management, conservation and restoration of ecosystems, taking into account anticipated climate change impact trends, to reduce the vulnerability and improve the resilience of ecosystems and people to climate change impacts.

There is growing recognition of the role ecosystems can play in helping people adapt to climate change. The concepts of EBA, working with nature, building with nature and green infrastructure, while having different scopes, follow the same rationale: healthy ecosystems and the multiple services they provide are part of our life insurance and are essential in any strategy for avoiding dangerous climate change, which ensures a carefully planned network of biodiversity-rich areas, is an essential pillar of green infrastructure that can also enhance resilience to natural disasters, such as floods, landslides or storm surges. This natural capital is now becoming even more valuable in the face of challenges that climate change presents.

In this regard, IWF made a presentation on "How Ecosystem Based Adaptation and their linkages transform Sustainable Water use in Urban Areas for Human Well-being", at SIWI World Water Week 2015, August 23-28, 2015 Stockholm, which was highly appreciated and evoked very positive response.

(k) Hydro- Geo-morphological Mapping for Water Prospection

The experts of IWF conducted 20 training programmes. 12 training workshops in FY 2015-16 and 8 in 2016-17 on "Application and Uses of Hydro-geo-morphological Maps for Groundwater Prospection (HGMs)" in Himachal Pradesh, Jammu & Kashmir, Rajasthan, Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand, Meghalaya, Assam, Tripura, West Bengal, Punjab, Uttarakhand, Sikkim, Telangana, Haryana, Gujarat, Odisha & Maharashtra. In the aftermath of the completion of the training program in 12 states, IWF conducted a two-day national Training workshop on "Application and Uses of Hydro-Geo-morphological Maps (HGMs) for Groundwater Prospection" at New Delhi on 28-29 March 2016, with participation from six Central Ministries, GOI, State Governments and National and Regional agencies.

The overall outcome of this training programme was very salutary in terms from enthusiastic response from the participants from the states and their keen interest in harnessing satellite imagery for water prospection. It also proved instrumental in fostering synergy between the states, where this training program was conducted, and Central agencies in water sector and state authorities insisted on conducting such programs with increased frequency. After having successfully conducted this training program in 12 states, India Water Foundation covered 8 more states in 2016-17.

(l) Eco-WaSH Project

India Water Foundation concluded a project **on "Integrated approach for empowering local communities for ecology, water body conservation, sanitation and hygiene through awareness enhancing campaigns and Use of environment friendly technologies"** in Meerut South Block supported by NCSTC, Department of Science & Technology, Ministry of Science and Technology, Government of India. The villages of Meerut South Block under this project are Gagol, Fafunda, Chansara, Narhara, Mahiuddinpur, Bhudbaral, Gumi Jurranpur, Jurranpur, Mahrauli, Uplehda, Khedabalrampur, Bajot and Jalalpur. In our proposal we had to choose 10 villages out of these proposed villages, but later during our survey we found that for sustainable integrated approach to empower the local community and to get tangible outcomes all 13 villages which are in red zone should come under the identified project area to carry out the project work mentioned in the proposal.

(m) Campaign for Right to Water

India Water Foundation has been engaged in a sustained campaign for Right to Water. Through writing articles on the subject which have been published in leading journals and emphasizing in various seminars/symposia, India Water Foundation has been campaigning for making Right to Water as a Fundamental Right. In view of the fact that the UN General Assembly in the last week of July 2010 has adopted the Resolution regarding access to clean water as basic human right, the Government of India will have to take initiative in this regard by declaring right to water as a Fundamental Right.

India Water Foundation was represented by its President Dr Arvind Kumar as a Specialist speaker to a consultation on perspectives of different stakeholders on water rights and social exclusion on 19th January, 2009 at New Delhi.

India Water Foundation was invited to a National Conference organized by the Union Ministry of Water Resources in New Delhi in March 2009, where its President Dr Arvind Kumar read a paper on Right to Water. While asserting that water is the most vital component essential for human life and all other forms life on earth, Dr Arvind Kumar said that access to safe water is a basic human necessity.

As such, each individual should have easy access to water in quantity and quality sufficient to life and basic economic activities. Apart from its health and environmental value, water has acquired cultural significance as well.

Supply of clean and drinkable water is globally a shared legacy, a public trust and a basic human requirement.

India Water Foundation was represented by its President, Dr Arvind Kumar, as a 'Special Speaker' to a consultation on perspectives of different stakeholders on water rights and social exclusion organized by NACDOR in New Delhi on 19 January 2010.

Sustained campaign by the IWF regarding Right to Water has made many political parties in India to incorporate water and environment related issues in the election manifestos during the 2009 General Election as well as in the current ongoing 2014 General Election.

(n) Eco Routes Projects

Under the NCSTC department, Ministry of Science and Technology GOI, India Water Foundation was granted a project on **Eco Routes: Eco and WASH dialogues for Eco intelligent rural rejuvenation field capacity enhancement"** in Uttarakhand and Uttar Pradesh. Under this project we have seven districts – **Haridwar, Bahraich, Balrampur, Chitrakoot, Fatehpur, Shrawasti, Siddharthnagar,** we have to conduct seven consultations during the period of one year 2019-20 in seven districts respectively.

Through this project our objective is to create ***young champions at the Field level*** who can commit themselves to the cause of environment, ecology and undertake the advocacy and awareness campaign in their field area on a Sustainable basis. **At District level our main purpose is to educate the Educator** so that the knowledge is disseminated at the block and village Level as well.

Accolades and Awards

India Water Foundation was honoured with the Water Digest Water Awards **"BEST NGO WATER & SANITATION" 2018-19** in New Delhi supported by Ministry of Water resources, River Development & Ganga Rejuvenation, GOI and UNESCO. It was presented by the Hon'ble Chief Guest Shri Nitin Gadkari, Minister of Water Resources, RD & GR, MoWR GOI and other dignitaries. Also in 2017-18 Water Digest Water Award under the Category **"BEST WATER NGO - WATER EDUCATION"** on the eve of the World Water Day 2018.

Future Prospects

IWF's efforts to help get goals and targets of the SDGs and objectives of Paris Agreement on Climate Change, with water being at the core, integrated into the national policies of the countries of the Asia-Pacific Region in general and India in particular require increased encouragement and support by other organizations and UN Agencies, including UNEP, ESCAP. The IWF has been able to elicit cooperation of some civil society organizations in Sri Lanka, Nepal, Bangladesh and the UN-ESCAP's Sub-regional Office for South and South-West Asia. However, keeping in view the magnitude of the challenges confronting the region in water and climate sectors, the IWF needs additional support and encouragement in fulfilling its yeoman mission in the larger interest of humankind.

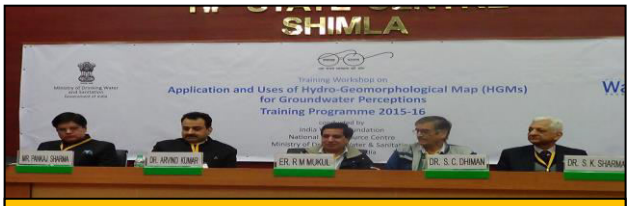
Signing agreement with Government of Sikkim, in the presence of Hon'ble Chief Minister Sh. Pawan Kumar Chamling. In Sikkim cooperating with government in the field of water resources, Environment, Sustainable Development, recently launched "Sikkim Comprehensive Water Resources Plan" at Gangtok.

Dr. Arvind Kumar elected as the Governor, World Water Council, Marseille, France 2019-2021

MoU between India Water Foundation and Product and Process Development Centre (PPDC), Ministry of MSME, Government of India

Some Activities

Training Workshop on "Application and Uses of Hydro- Geo-morphological Maps (HGMs) for Groundwater Prospection" 2015-16



HIMACHAL PRADESH

JAMMU & KASHMIR

RAJASTHAN

MADHYA PRADESH

UTTAR PRADESH

CHHATISGARH

BIHAR

JHARKHAND

MEGHALAYA

ASSAM

TRIPURA

WEST BENGAL.

Training Workshop on "Application and Uses of Hydro- Geo-morphological Maps (HGMs) for Groundwater Prospection" 2016-17

PUNJAB

UTTARAKHAND

SIKKIM

TELANGANA

HARYANA

GUJARAT

ODISHA

MAHARASHTRA

Some activities of the Project on "Integrated approach for empowering local communities for ecology, water body conservation, sanitation and hygiene through awareness enhancing campaigns and Use of environment friendly technologies" in Meerut South Block

ECO ROUTES: Eco and Wash Dialogues for Eco Intelligent Rural Rejuvenation Field Capacity Enhancement in the 7 Aspirational Districts for the States of Uttar Pradesh, Uttarakhand
(A project supported by NCSTC, Ministry of Science and Technology, GOI)

CHITRAKOOT, UTTAR PRADESH

FATEHPUR, UTTAR PRADESH

HARIDWAR, UTTARAKHAND

SHRAVASTI, UTTAR PRADESH

BALRAMPUR, UTTAR PRADESH

SIDDHARTHANAGAR, UTTAR PRADESH

BAHRAICH, UTTAR PRADESH

CHITRAKOOT, UTTAR PRADESH

SIDDHARTHANAGAR, UTTAR PRADESH

FATEHPUR, UTTAR PRADESH

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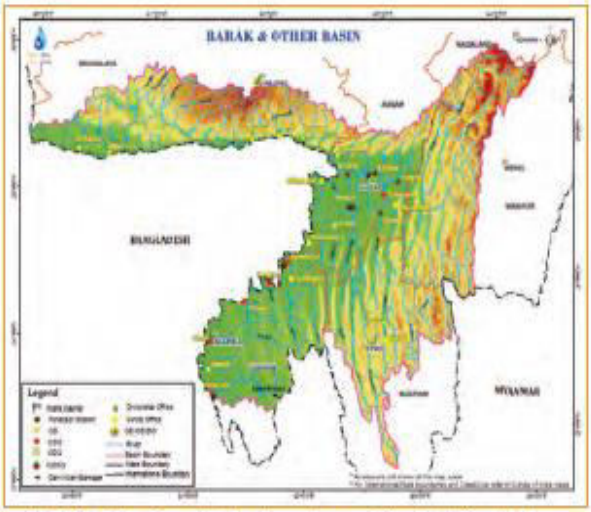
Asia

India

Meghalaya: Sustainable Basin Management



In the North-East region of India, the Meghalaya Basins Development Authority (MBDA) is implementing the Integrated Basin Development and Livelihoods Promotion Program (IBDLP) launched in April 2012.

The IBDLP program, based on four pillars (Knowledge Acquisition, Natural Resource Management, Entrepreneurship Development and Good Governance) is being implemented through 20 missions.

Every mission is designed to leverage the comparative advantage that Meghalaya has in that sector and to generate livelihood opportunities for every household and to accelerate growth.

These actions are supplemented by convergence and capacity building programs. Convergence, between departments dealing with water, energy, agriculture and food, land and forests, etc., has been facilitated to prepare a Status Report based on the mapping of agricultural land, wasteland and forestland and on the collection of data on rainfall in different geographic areas and on gauging the river flow per hour.

The collected data help in ascertaining the quantum of water availability and water quality, which enables the authorities to cater to the respective water needs of different sectors like agriculture, drinking water, sanitation, forestry, industries etc.

Harnessing of technology for water conservation and power generation through dams and multi-purpose reservoirs has enabled Meghalaya to use both water and energy in a sustainable manner to ensure water security, energy security and food security and resilience to climate change.

Increased economic growth rate, environmental resilience and sustained pace of overall development in Meghalaya are direct outcomes of judicious basin management.

Dr Arvind Kumar
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Meghalaya:SustainableBasinManagement
http://www.riob.org/pub/INBO-25/files/assets/basic-html/index.html#27

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Nehru Place, New Delhi-110019, India
www.indiawaterfoundation.org

Some Activities





Dr Arvind Kumar, PhD in Defense Studies, is President & Founder of India Water Foundation, a non-profit organization engaged in generating a heightened public awareness at national and sub-regional level in the Asia-Pacific region, about SDGs and Paris Agreement on Climate Change, with water being at the core, with specific emphasis on water and its impact on human health, economic growth and environmental sustainability. Having provided new impetus to the water movement in South Asia by Inter-Sectoral Convergence, trans-boundary water cooperation via Water-Energy Nexus for Trans-boundary Basin Management, he is now striving for realization of the SDGs.

He has been elected as Governor at the World Water Council, he is member of the 'National Wetlands Committee' MoEFCC GOI, Member Technical Advisory Committee for India's Third National Communication and Biennial Update Reports to UNFCCC. Member of the Meghalaya State Water Resources Council, and State Council for Climate Change and Sustainable Development headed by the Hon'ble Chief Minister, Meghalaya. Has published over 400 plus articles on socio-economic, environmental related issues in journals/Magazines. An Editor with Focus Global Reporter magazines published from New Delhi, He is the lead author of a publication of SAC Dhaka titled *"SAARC Outlook on Water-Energy-Food Nexus in SAARC Region"* published in December 2015. He has been conferred with "Achievers Award" for his exemplary contribution and commitment for protecting environment.