Government of India
Ministry of Water Resources, River Development & Ganga Rejuvenation
(National Water Mission)
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Subject	: Scoping Meeting with empanelled NGO's
Venue	: Dr Ambedkar International Centre, 15, Janpath, New Delhi
Date	:20/11/2018
Time	:3:00 PM to 5:30PM

Proceedings

National Water Mission organized a scoping meeting with NWM empanelled Non-Government Organizations with an objective to exchange information and ideas on water management and water sustainability in vulnerable areas and to encourage participation of NGO's in various activities related to achieving the five identified goals of NWM.

Dr. C.V. Dharma Rao, Advisor, National Water Mission (NWM) welcomed the dignitaries, representatives from lead and field agencies and stakeholder participants from other organizations. Dr. Rao in his welcome address appraised the objective of NWM and briefly highlighted the progress made by NWM in achieving each of the identified goals. With reference to Goal 1, i.e., Comprehensive water data base in public domain and assessment if the impact of climate changes on water resources he informed that for the water database in public domain, NWM has a web portal with both data of surface water and ground water. For surface water, apart from the data from Water Resources Information System (India WRIS), GIS based data and hydrological data including, discharge, silt and water quality parameters as recorded by the CWC Hydro- Meteorological Stations are also made available in public domain. Similarly, the ground water level and water quality data of Central Ground Water Board (CGWB) is made available on this portal. An aquifer Atlas and Litho-log details of 6 states is also made available in public domain in our portal. Management Information System (MIS) is also being developed and a real time online water management system is being considered for Narmada basin on a pilot basis. He added that for the impact of climate change on water resources, we are conducting several RD studies covering Luni, Mahanadi, Mahi, Sabarmati, Subarnarekha, Sutlej and Tapi River basins by various premier research institutes like IIT and NIIT. These RD studies are funded under the Indian National Committee on Climate Change. Referring to the recently released Inter-governmental Panel on Climate Change (IPCC)'s report he alerted that the report is a 'wake -up call' on 1.5°C global warming as the report states that agricultural economies such as India would suffer the most due to the ramifications of global warming—including water stress, floods and droughts and reduced food production—effectively exposing an already vulnerable population to further poverty, food and livelihood insecurity. He emphasized that the Climate change adaptation is no longer an option, but a necessity and that NWM has a challenging work in hand to effectively address this goal.

He informed that Promotion of citizen and state actions for water conservation, augmentation and preservation is Goal 2 and under this goal NWM has conducted training and capacity building

programmes through WALMIs and other reputed training institutes. NWM is documenting and disseminating existing good practices and literature on water conservation and developing films on region wise best practices. He said that encouraging participation of NGOs is one of the important strategies under this goal for implementing various activities related to water resources management and further informed that NWM has engaged Tata School of Social Sciences (TISS), Mumbai to empanel creditworthy NGO's across the country.

Under goal 3 of focussed attention on vulnerable areas including overexploited areas he informed that State's having over-exploited blocks have been requested to prepare State wise implementation plans for rain water harvesting and artificial recharge of ground water. The Asian Development Bank has undertaken Operational Research to Support Mainstreaming of Integrated Flood Management under Climate Change in flood prone areas of Burhi-Gandak and Bramhani-Baitarni river basins. To promote water Purification and Desalination, installation of desalination plants based on the innovative technology developed by CSIR-Central Salt and Marine Chemicals Research Institute, Gujarat is underway in the Coastal States of Gujarat, Tamil Nadu and Andhra Pradesh where ground water has became brackish/saline due to over-exploitation. He also informed that NWM is interacting with WWF (one of our lead NGO's) for working towards Conservation and preservation of wetlands. To further address the issue of overexploited blocks 7 regional workshops across India have been planned. The first workshop will be held in Jhansi. He informed that Arghyam foundation, Bangalore, which launched the India Water Portal as a knowledge sharing initiative, is on board with us and we are soon signing a formal MOU to work together in over-exploited blocks. He informed that goal 4 of NWM is increasing water use efficiency by 20% and proposal is being revived for setting up the National Bureau of Water Use Efficiency (NBWUE). For improving the water use efficiency in irrigation sector, twenty six Base Line studies in 6 states have been undertaken by NERILWALAM, Assam, WALMTARI, Hyderabad and WALMI. Similarly, for enhancing industrial water use efficiency in India, he informed that we have taken up scoping studies through TERI by undertaking comprehensive water audit/ benchmarking in two industrial sectors i.e. Thermal power plants & textile industries in phase 1 and soon be taking up in other Industries. The first phase studies reveal that in one the thermal plants in NTPC, Vindhyachal water use efficiency actually improved productivity. Similarly, for developing standards in respect of improving water use efficiency in domestic appliances, NWM in collaboration with Bureau of Indian Standard (BIS) is working on efficiency labeling standards for house hold appliances like Washing Machine etc., He informed that NWM is also trying to empanel Institutions/Firms/Individual with an objective to facilitate the industry's endeavor to achieve water use efficiency through comprehensive water audits in Industrial sector.

Goal 5 is Promotion of basin level integrated water resources management and to achieve this goal and NWM is supporting every State and UT Governments to formulate a State Specific Action Plan (SSAP) on Water at Basin level for sustainable development and management of its water resources. NWM developed a common template for Water budgeting to be filled in by the State governments as a part of their State specific Action Plan for water sector. NWM conducted National inception workshops to build capacities of the State Govt's in formulating the State Specific action plans in Kolkata, Nagaland, Pune Bhubaneswar, Hyderabad and Gangtok.

2. **Shri Nitishwar Kumar, Joint Secretary MoWR and Mission Director NWM** welcomed the dignitaries and participants and addressed the gathering. He said that the purpose of the meeting is to try to prepare a road map for water management at grassroots level. He stated that though every citizen understands the dimension of the problem of water, but is not aware about the solution to solve the problem. He added that as NGO's regularly interact with people at grassroots level they have a better understanding of their culture in the geographical context. NWM is ready to share the knowledge and offer its support to the extent possible. NWM is looking for active, healthy and long-term association with NGOs to understand and address the problem of water at community level and improving the living of the people.

3. **Prof. Shalini Bharat, Director TISS** deliberated on the role of public participation on water conservation and added that water management work can be effectively carried through hard work and great presence of the shortlisted NGOs on the ground. She apprised that the TISS shortlisted the NGO in association with NWM through a rigorous process and the exercise that took almost two years. She further added that the NGO's have been put through a great deal of testing and the very best of NGOs have only been selected. She said subject of water is emotive issue and water has not only been used for sustaining life but also as a part of our cultural heritage thus we all are required to participate in conserving, preserving and augmenting water. She said that public engagement and participation is necessary for water conservation and this can be done not only at community and society level but also at household and individual level. She emphasized that there is often an issue of connecting the problem of individual and household level to communities and society level and there is an urge of right kind of sensitivity towards the issue. She said that water is a limited resource and if we continue to exploit the water resources then water scarcity is imminent. Public engagement is necessary for giving them correct, complete and timely information and also information about how we should act. Emphasizing on behavior change, she said that behavior change means that individual and households also take full responsibility rather than expecting action from community and society.

   She added that there should be openness and everybody should know everything that he has to know about the complexities of water. She emphasized on protection of core values keeping in view of equity, equality, and said that equitable distribution for water resources is necessary for communities and societies. There is demand from the farmer at different levels, from consumers in different forms. Creation of safe space is necessary for discussion so that it allows all stakeholders to keep confident that core values are not compromised and, in this space, NGO's can play very critical role. Water situation is reaching critical condition and there is strong requirement of keeping momentum for preservation and augmentation. One of the ways water sustainability is done is to have target driven approach having clear deliverables known to everybody. She emphasized on the need to create performance measures related with action and result. Ending her talk she emphasized that public engagement is very important towards creating responsible citizens for conservation of stewardship of water.

4. **Shri U.P. Singh, Secretary, MoWR** delivered a special talk highlighting the importance of water and stressed on the frequent conflict of States on the issue of water. He said that water is one of most

politicized commodities and he suggested the perception regarding water should be dealt with real data in order to bring understanding between state governments and water users. He said that climate change and unregulated use of water resources have created a very bleak situation for sustainable development of water resources and mentioned that last 30 year have witnessed extensive decrease in the water table across the country. He added that erratic rainfall and untimely monsoon are also creating challenges in managing the water resources. He said that there is limited quantity of water in aquifer and we have been drawing water without any focus on conservation and augmentation which will only lead to water less blocks in many parts of the country. Secretary said that until now we had mainly focused on supply side water management, however, demand side management of water is equally important and more emphasis need to be given on demand side management. He suggested promoting ground water storage, increasing water storage capacity, using irrigation water in effective way and taking initiative at individual levels. He emphasized on using available extension machinery and said that low water use efficiency in irrigation leads to utilization of 2.5 times more water than required. He stressed on structural and non-structural measures including the selection of suitable crops keeping in view of the water situation in that geographical area. He said that awareness among citizens should be promoted and also there is need of revision of policy framework citing the example of Punjab where despite of canal water availability in the whole State farmers utilize approximately 73 percent of ground water for irrigation purposes. Secretary further said that participatory ground water management and water management can be achieved through participation of people and NGO's where common citizen may monitor automatic rain gauge stations and NGOs support in capacity building. Based on the analysis of supply and demand side of water for a particular geographical area, the people should participate in building ground water recharge system, water harvesting, and recharge structures. He said that agriculture system should adopt scientific basis rather than perception, citing the example of paddy cultivation he said that 27% of water consumption can be saved by adopting cultivation through puddling and other similar methods. He emphasized on developing real time data monitoring system and said that it helps in better planning of water conservation schemes. Concluding his special address he suggested to promote Pani Panchayat model of groundwater management where small irrigation project can be undertaken by a water user association and appreciated the role played by NGOs in water sector in implementing innovative water management practices and said that on the whole NGO's have done excellent work despite their low strength in terms of manpower.

5. NGOs from four zone i.e. North, South, East and West Made a brief presentation introducing their background, project undertaken towards water conservation, achievement and impact made on society and area of cooperation

   i. **Shri Harshvardhan Dhawan, Senior Manager, Arghyam** made a presentation and apprised that Arghyam is a grant making foundation and focused on groundwater and sanitation. It has identified four factors viz. supply and demand management, Governance and human resource training and suggested for convergence of these factors at various level is imperative to build resilience of communities to climate change. He informed that 20 experts have trained more

than 500 master trainers over 7 years. He described the workflow of Arghyam and inform that workflow involves identification of stakeholders, Training and capacity building of stakeholders, data collection and analysis, preparation of plans, DPRs and lastly implementing plans and evaluation. He presented outline for Programme design of the projects for pre-implantation, implementation and post implementation phase. Shri Harshwardhan emphasized on convergence of efforts of Governments, NGOs, academia, increase community participation and building strong institution for better management of water resources. He explained capacity building workflow and stressed on the need of nonlinear approaches. He cited limited experts and organization in water field, time and cost intensive process, and limited abilities in many sectors as major challenged in water conservation

ii. **Society for Development Alternatives (DA)** made a presentation on Sharing Knowledge and Experience of Development Alternatives on Integrated Water Resource Management and apprised that it has presence in more than 7 states and actively engaged in implementation of water related project in Uttar Pradesh. He emphasized to create enabling systems and build capacities for water resources management and livelihood enhancement and proposed an integrated approach to accomplish the community-based water resource management. DA is engaged in participatory action plan preparation, promotion of water conservation, encouraging local planning and participation and increasing water use efficiency through sustainable utilization, awareness and capacity building. The organization has also conducted a number of awareness programme through Krishi Jaldoots, play, distribution and providing water quality training and publishing magazine. The organizations initiatives resulted in the implementation of IWRM in more than 50 villages where 19000-hectare land has been treated and 10 ML of water saved annually. The initiatives also resulted in 30% increase in farm productivity and conversion of 50% of land under single cropping to double cropping. Mr …proposes the way forward through scientific planning, Multi-stakeholder engagement and monitoring and evaluation in short medium and long run.

iii. **Ms. Charu Jain, Managing Trustee, Advit Foundation** made a brief presentation on conserving environment resources and enhancing livelihoods with a focus on Watershed approach to livelihood enhancement. The foundation has completed many projects of developing sustainable ground water recharge system. She discussed the approach and methodology and informed that step by step approach has been adopted to assess the situation on ground & develop the design of the project. Major steps followed are Collection of data & preparation of maps, Resource analysis and Implementation. The intervention by Advit foundation ensured water availability for Drinking, Sanitation, Livestock and Agriculture. The foundation has done a large number of projects in villages of Rajasthan. She apprised that Advit foundation has designed and constructed 15 check dams and created a rainwater storage capacity of overall 2,13,286 cubic meter of water storage capacity through these projects. In year 2017-18 it has replicated and constructed four more water structures in 3 states and created 35,000 cubic meter of water storage capacity. It has established a rural self-employment training centre ‘aarohan’ with an objective to generate self-employment in rural areas through demonstration

and training for capacity building. The efforts of foundation resulted in ensured water availability, creation of water storage structures, increase in soil moisture, benefitting more than 40,000 population. The organization has set a model in Rajasthan, Haryana, Maharashtra, Telangana covering 25 villages.

iv. **Shri Bhaskar Padigala, Duputy Manager, ICLEI South Asia** made a presentation on adopting integrated urban water management and briefed about organization. ICLEI has presence in more than 100 countries having a network of more than 1,750 local and regional governments. ICLEI promotes urban sustainability through connecting leaders, accelerating actions and providing gateways to solution. It has implemented projects in Rajasthan and Maharashtra covering cities of Jaisalmer, Krishnagar, Solapur, Ichalkaranji with focus on Revival of interlinked pond and traditional RWH structure, reduce pollution in the catchment areas of local water bodies, Revive and recharge ground water and include local level sources in supply, Reducing pollution load on water bodies. ICLEI has conducted two national level workshop to disseminate IUWM Toolkit. It has completed numerous pilot projects and one detailed project report benefitting 11552 people in Rajasthan and 2953 people in Maharashtra. ICLEI has initiated Integrated Rural Urban Water Management for Climate based Adaptations in Indian Cities (IAdapt).

v. **Shri J.V. Rohan Rao, Executive Director EFFORT** made a brief presentation and apprised that organization main focus is on sustainable agriculture, Natural Resource Management. EFFORT has facilitated 90 Watershed development Fund projects with the support of NABARD with involvement of 16 grassroots organisations focusing the soil, water & vegetative conservation. EFFORTS initiatives resulted in enhancing capacities of 1,00,000 population on water, soil and vegetative conservation practices, reduction in cost of cultivation by 30%, help in adoption of best practices of wash by 1 Lakh families. 20,000 Ha of waste land was brought under cultivation and the farmers have adopted water efficiency mechanism covering 10,000 Acres such as drip, sprinklers etc. He suggested that EFFORT can play active role in implementing NWM activities in awareness and Sensitisation of communities, on climate change related issues, Mitigation and adaptive measures, Capacity Building on Water conservation and Water Management and increase the water use efficiency

vi. **Shri Nandalal Baksi, Coordinator, Tagore Society for Rural Development, Kolkata** made brief presentation and apprised that the organization is actively working in Jharkhand, West Bengal and Odisha on implementing water conservation and watershed development projects. The organization has executed rain water conservation and irrigation projects, water conservation projects, provided support in flagship govt programmes, campaigned for water conservation through collaboration of various state government, central government departments, corporations and other organizations. It has developed various model like In-situ rain Water conservation-30/40 Models, 5% Model, SCT, TCB, field bunding, Gully Plugging. Major achievement of the organization has been creation of WHT and small pond-601, 415 hectare Upland and Mid land treatment, installing 5 Micro lift Irrigation installed, installing drip irrigation

in 25 Hectares, Poly Mulch in 12 Hectare. The initiative of the organization has benefitted around 10000 families.

vii. **Shri Bharat Kakade, Executive Vice President, BAIF Development Research Foundation** made brief presentation and apprised that BAIF has executed various water conservation related programmes in 15 states of India covering 90,000 villages of 300 district. BAIF has taken many participatory water resource management projects through PRI/WUGs/Local stakeholder in Maharashtra Karnataka, Gujarat and Uttarakhand. BAIF has also actively undertaken project in vulnerable ecosystem for irrigation and drinking water. It has carried out project related with goal 4 and goal 5 of national water mission which focus on increasing water use efficiency and water basin management projects. BAIF approach is to use efficient technology to save water. BAIF proposes to collaborate with NWM on undertaking the pilot projects, capacity building through BAIF-water academy, conjunctive use in command area, resource support organization and monitoring evaluation and documentation of programmes in the selected basins.

viii. **Shri Himasnhu Kalra from Vyakti Vikas Kendra** made a presentation and apprised that the NGOs operates under Art of Living and it is actively engaged in capacity building and in River Rejuvenation through community participation. The NGO has Pan India outreach and developed more than 1000 community leaders. He presented the case study on Akharwai Watershed Development where measures were taken to increase the groundwater levels in the catchment area including construction of artificial groundwater recharge structures, afforestation, promotion of horticulture and trainings on sustainable agricultural practices thus impacting around 12000 people. He also presented the example of Shri Ramling Pundhari and smt.Mangala Waghmare whose efforts have set a model to follow. Shri Kalra proposes to collaborate with NWM in establishing filed schools in over exploited river basin and strengthening and creating local institution for participatory natural resources.

ix. **Ms. Anagha Mahajani, General Manger Ambuja Cement Foundation** made a brief presentation and apprised that the organization has presence in 11 states, 21 location covering 952 villages. The organization creates drought resilient rural villages with focus on water harvesting, drinking water and water use efficiency It has taken a number of projects for pond renovation, check dams, interlinking canal, soil and water conservation, micro irrigation etc. Community participation is key for the organization for various stage of the project like project conceptualization, implementation, operation and post maintenance. The major impact on water resources includes 54.05 MCM water storage capacity creation, 404 check dams construction, 6488 rooftop rainwater harvesting structure development leading to increase of 3-3.5 ground water level. Ms. Mahajani proposed to collaborate with NWM in the area of community based water resource management projects and capacity building of PRI/WUAs.

x. **Shri Rishu Garg, Deputy Director, Watershed Organization Trust (WOTR)** made a brief presentation and apprised of two major water management initiates of WOTR. These initiatives are (a) Water Stewardship Initiatives and (b) Water Governance Standard and Certification

system. Collective conservation and management of ground water is main aim of water stewardship initiative. Under this initiative strategies like engagement of multiple stakeholder groups, Jalsevaks, formation of VWMT, Water Stewardship Plans, crop plans, water budgeting, sharing of research finding have been identified and practiced. Stakeholder engagement is the key strategy and the organization has created 34,600 farming households in 106 villages, organized 65 stakeholder engagement workshops, created 27 Jalsevaks. The initiatives of WOTR helped over 2000 farmers adopting practices of micro irrigation, mulching, vermi-composting, and organic manures and saved 3.24 billion liters water. Stakeholders have been voluntarily collecting daily rainfall data through 212 rain gauge units and monitoring water level data. Water Governance Standard and Certification is a tool developed to incentivize villagers to undertake good water governance while on the other hand it could help donors/government agencies make informed decisions regarding investments for water management.

xi. **Shri T. Pradeep, Secretary SAMUHA**, made a brief presentation and apprised that the organization is operating in Karnataka for more than 30 years. The organization has saved around 40% of water in canal-irrigated Paddy through Water Management, Line Planting and Non-Pesticide Management thus leading to saving of 106 billion liters of water in the past 4 years. This result has been assured by E&Y, Deloitte and KPMG over three years. SAMUHA has been shortlisted to develop a financially viable business for paddy cultivation to allow this water saving through a bankable process which can make the possibility of saving 38 trillion litres of water across all the Command Area Development Authorities in the country. The organization is working on harvesting fecal sludge from black water for brick and compost making. It has received a provisional patent on a process for treatment of sewage water to tertiary water as a single step. SAMUHA recommended to introduce Water Savings in Irrigation and Agriculture Ministries reporting indices. Under MGNREGA and Climate adaptation programme. It has supported the Raichur District Administration to implement Rs39.72 Crores of MGNREGA works and built 541,386 cum / 0.54 TMC of water holding capacity at a cost of Rs 25.82 Crores. SAMUHA suggested to adopt blue green credits for incentivizing Gram Panchayats and farmers to drive faster adoption. It made recommendation to agriculture Ministry to identify water-savings schemes and technology for added support. It has identified rain based assured irrigation as a core area for popularization through the promotion of aeroponics and NDRI's hydroponic fodder. The company is also working with a focus to reduce energy cost to utilizing atmospheric water and sea water for agriculture.

xii. **Dr. Sumit Roy, Programme Officer, Bharat Rural Livelihoods Foundation (BRLF)** apprised that BRLF was set up by the Government of India as an independent society under the Ministry of Rural Development, to scale up civil society action in partnership with the central and state governments. BRLF is working to build the capacities of rural professional in the country and it has designed a training programme called Certificate Programme in Rural Livelihood (CPRL). CPRL incorporates a series of capacity building modules on Rural Livelihoods, packaged as per the needs of the target groups and different institutional partners (both Government and CSOs). He said that initial geographical focus of BRLF has been the Central Indian Adivasi belt, centered

on sub-districts with more than 20% tribal population in 1077 sub-districts across 190 districts in the 9 States-Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Telangana and West Bengal. BRLF function is to strengthen and facilitate the work of civil societies by providing funding. on modules that they have experience and expertise in the fields. He said that augmentation, conservation and protection of water resources are the top priorities of BRLF in all of its projects. The pilot for participatory Ground Water Management (PGWM) s being currently implemented in 10 locations in the country with support from 10 BRLF partners and the resource agencies. Dr. Roy proposed to collaborate with NWM on capacity building and that BRLF Participatory Ground Water Management (PGWM).

xiii. **Shri Debashish Sen, Director, People Science Institute (PSI)** made a brief presentation and informed that that PSI is working with a goal to enable communities to manage their water resources in sustainable manner and focused on community driven and empowering practices. PSI activities cover almost all the geographical areas of the country and it is more active in the western and north eastern Himalayas and the Bundelkhand regions of India, especially in the area of water resources management. Few major initiatives of PSI include Sukha Mukti Abhiyan (Drought Proofing), Participatory watershed development, Community based fluorosis mitigation, participatory Springshed development and integrated water resource management. Under Sukha Mukti Abhiyan, PSI has created 1800 ha command area and formed 15 Paani Panchayats. It has trained 880 Watershed professional, prepared community based fluorosis mitigation plan for more than 100 villages of five states, prepared inventory of 300 springs and actively contributed in water budgeting for water demand management. PSI proposed to collaborate with NWM on capacity building of stakeholders, watershed and aquifer based water security planning at panchayat and block level, training and field support for revival of spring and integration of PGWM in watershed, agriculture and drinking water programmes.

xiv. **Shri K.K. Krishna Kumar, Senior Fellow Centre for Socio-economic and Environmental Studies (CSES)** made a brief presentation on apprised that it has conducted large scale projects all over South India and it has rich experience in water, sanitation and watershed management related projects. The organization has been empaneled by a number of ministries and state government department. CSES has conducted social and technical audits in water sector, sustainability evaluation of water supply projects, watershed projects monitoring of drinking water/ watershed projects, baseline and endline studies supported by state governments. CSES proposed that it could collaborate with NWM in the field of Development of Capacity Building/ Awareness programmes, Concurrent Evaluation/ Monitoring/ Baseline/ End line studies, Documentation of Best Practices, Sensitization of Local Governments and to provide support in preparing projects in Water Resource Management, Coordination and monitoring the activities of field agencies.

xv. **Shri Brijesh K Rawat, Executive Director, Social Action for Rural Development (SARDA)** made a brief presentation and informed that the organization is functioning in Bihar, Jharkhand, and four other States. The main functional area of SARDA are drinking water and sanitation,

livelihood promotion activities and watershed development and management. It has executed a number of watershed programmes, groundwater management with ACWADAM and Tata Trust and it is directly implementing watershed promotion programmes in about,40,000 hectare of land. It also constructed more than 300 water harvesting structure. SARDA proposes to collaborate with NWM in the area of Integrated Water Resource Based Planning, Capacity Building and Training of Community and other Stakeholders, Support in Implementation of Planning, Pilot phasing and Replication of Water Efficient prototypes, GIS based planning and monitoring.

xvi. **Shri Ajit Bhor from Yuva Mitra** made a brief presentation on organizations water interventions and apprised that it has working majorly on 4 type of projects namely Rejuvenation of diversion-based irrigation system, desilting of water bodies, Participatory irrigation management (PIM) and micro irrigation system. Under PIM initiatives it has established 49 WUAs to manage available water efficiently and effectively. The organization has performed desilting in 131 sites thus increasing water storage capacity by 1721 TCM and provided lifeline for 65 villages. Shri Bohr informed that Yuva Mitra has planned to Excavation of 85 lakh CuM silt from existing water bodies, Rejuvenating more than 250 DBI systems and Establishing 100water user association to maintain repaired structures and irrigation management.Yuva Mitra proposed to collaborate with NWM for PIM in Increasing water use efficiency, Community ownership, reducing water losses, Promote Water user associations, Traditional water management system and desilting of existing water structures.

xvii. **Shri Kailash Khandelwal, Director, Humana People To People India (HPPI)** made made a brief presentation and apprised that HPPI has association with 74 govt and non-government organization and it is working in 14States and have annual outreach of 20 lakh people. HPPI has implemented projects aligned with NWM goal 3 in some of the most over-exploited areas through programmes like groundwater water resource development and management ground water recharge, improve cultivation practices, Safe Drinking water through fluorosis management in 7 states. Shri Khandelwal said that HPPI use innovative technologies for Water Restoration & Conservation, Efficient Use of Waterand Safe Drinking Water & Sanitation. The initiatives of HPPI resulted in rain water harvesting benefitting 1,400 ha of land, 1,30,000 m^3 of total groundwater recharged, 49,500 litres of rainwater successfully harvested in year 2017-18. HPPI suggested to carry out pilot projects in ground water recharge, runoff water harvesting, roof-top water harvesting, Water Saving through Smart Irrigation & Cultivation Practices, Safe Drinking Water and Sanitation in Rajasthan, Haryana, Uttar Pradesh and Madhya Pradesh.

xviii. **Shri Suresh Babu, Director, Rivers, Wetlands and Water Policy, WWF-India** made a presentation on the potential areas of collaboration with NWM. Regarding enhancing water use efficiency, he highlighted the need to link this goal of NWM with environmental flows. Mr Babu shared the work done by WWF on smart agricultural practices in 39 villages of Uttar Pradesh along Ganga and Ramganga and suggested that there is a need to raise the level of ambition from current level of 20%. He further added that WWF is working on a project to save surface

irrigation water within the command of Khanpur minor and engaging with irrigation department and farmers to return the saved water into Karula river-a tributary of Ramganga. WWF has also initiated Manas Integrated River Basin Management Project (M-IRBM) to pilot ecosystem based adaptation for resilience between India and Bhutan where NWM is the nodal agency. Third, Mr Babu suggested that WWF-India has created several tools like water footprint calculators, wetland health app and others, which could be used to design a national campaign to reduce water footprint. He also suggested a campaign on wetlands with NWM. WWF-India have been campaigning in collaboration with other agencies for water footprint. Shri Babu proposed that WWF can collaborate with NWM for projects of water use efficiency, wetland management, National compaign on water footprinting and Manas IRBM.

xix. **Shri Utkarsh Dwivedi, Project Coordinator Shramik Bharti** made a brief presentation on Public Participation Experience in Water Saving and Conservation and have presence in the state of Uttar Pradesh and Punjab. Shramik Bharti has designed and organized Jal Chaupal in a number of Gram Panchayat. Jal Chaupal is being organized on three modules, namely (a) gender and water (b) climate change and its impact on water security, and (c) water budgeting. Shri…. highlighted the importance of water budgeting and said that it is essential for every village. The water budgeting exercise includes estimation of availability of water in the respective Gram Panchayat from different water sources like groundwater, surface water and rainwater, and planning its use in various sectors.Shri …also informed that the organization is working on water related transboundary project. Shramik Bharti proposes to collaborate for with NWM on creating awareness among citizen and performing water budgeting at village level.

xx. **Shri Ramasamy Krishnan, Executive Director, SNEHA** made a brief presentation and apprised that the organization is actively engaged in the project of water and sanitation section, solid and liquid waste management through biological methods. Also SNEHA has implemented soil and Water Conservation activities in 8000 hectors covering about 5000 families and trained more 2000 water and sanitation committee members from 200 Grama Panchayaths on drinking water management issues. Currently the Organisation is working with more than 45,000 children from 527 schools on behavioral change in Sanitation and water related issues. Shri Krishnan proposes that the organization could collaborate with NWM in water quality related projects.

xxi. **Shri Prem Ranjan, Programme Manager, Action Aid** gave a brief talk and said that his Action Aid is has presence in over 40 countries worldwide and in India it works in 25 States and 1 union territory. Shri Ranjan said Action Aid is supporting communities to cope with the disastrous effects of climate change and also campaigning for change at the global level, because international action is needed to make a difference.

xxii. **Ms Deepti Mahajan. Senior Project Manager, ISAP** made a brief presentation and apprised that the ISAP is actively engaged in agriculture and rural development. She said that the initiatives of ISAP has Incubated 2458 Agribusiness Enterprises; trained more than 10,000 BPL youth on vocational skills; 31 Community Water Treatment Plants: 2 Rural Hospitals (100 beds capacity)

across 5000 Villages in 250 Blocks of 100 Districts in 18 States with its 25 Field Offices and 300 Employees. She said that ISAP is promoting multiple water use services through its programmes and also bringing change in rural communities through watershed natural resource management and participatory irrigation management. ISAP has partnered with organisations to provide micro-irrigation systems at affordable cost thus helping in improving water use efficiency in irrigation system. ISAP has also taken the initiative of setting up of arsenic and fluoride removal plants in acutely affected areas.

xxiii. **Dr Sanjay Rana, Chairman, Aqua Foundation** apprised that his organization provides training & knowledge sharing platform to decision & policy makers, working professionals, operating level personnel and aspiring students willing to specialize in technical sectors. Dr. Rana said that the children are changing their attitude and approach towards water management due to awareness and expressed hope the coming generation will be more proactive towards its resource management in sustainable way. He informed that aqua foundation organizes, conferences on water efficiency, gave awards to promote water conservation. He stressed that various water related data is being collected by different organization and it is scattered and emphasized to develop a common platform to for making data available easily. He said that training of NGOs is necessary to impart scientific knowledge. He emphasized on developing pure water professional, creating scientific approach to water is need of hour. He said the more technological intervention are needed to ground water management specially ground water recharge. He suggested that mobile app should be develop related with water where complaint point and their solution should be accommodated.

xxiv. **Dr. K. Gopalkrishna, Adviser SAMATHA-Society for Rural Education and Development** made a brief presentation apprising that the organization is working with an objective of promote education and development intervention. Ithas conducted various programmes in 30 villages covering 3 mandals. The organization has completed watershed management programme in collaboration with ICRISAT, awareness programmes on water management with NABARD and convergence with line departments. Adviser proposed to collaborate with NWM on watershed management and water awareness programmes.

6. **Dr.Harinarayan Tiwari, Consultant, NWM** delivered vote of thanks and thanked to Secretary MoWR, Mission Director, Advisor NWM, Director TISS for their valuable suggestion on water. He also thanked to participants for coming all the way to present their contribution in water conservation, augmentation and preservation.

7. Conclusionway forward: NGO's help in bridging the gap between govt and community as they work in close proximity with the grass root level communities and gain their confidence. As the NGOs have trained manpower in the field of IEC and Social mobilization they can act as good communicators, activators and motivators. It has been observed the participating NGOs work is aligned with the Objective and Goals of NWM and active collaboration of NGOs and NWM will achieve the sustainable development of water resource.