Note for Apprroval

RENOVATION OF PANCHAYAT POND IN MALOBH/Bai/Nurserai VILLAGE Jheels and degraded Water Bodies in NUH MEWAT FOR PUBLIC UTILISATION FOR DAY TO ACTIVITIES & WATER AUGMENTATION & GROUND WATER RECHARGE

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INTRODUCTION

There are large nos of Water Bodies evenly spread across the Aravalli mountain range comprising large areas of Haryana, Rajasthan and NCR Delhi with undulating topography. Lack of Institutional and legal instruments with weak local governments coupled with population and livelihood pressure resulted in all-round deterioration of such community ponds/wetlands/jhodas/depressions.

Investments in community led innovative technologies for enhancing productivity, conserving and protecting common property resources with pollution control, recycling storm & wastewater for alternative uses (as a part of net demand) and developing non-conventional water sources should be explored in addition to seeking opportunities for enhanced water storage, including year round aquifer/ground water recharge and recovery. Ensuring the rapid dissemination and appropriate adaptation or application of these advances are needed to strengthening area wise water security management, especially in Mewat region, Haryana India situated about 70 KM away from NCR Delhi.

CONCEPT

Fresh water is a finite and scarce resource for which there is no substitute and an increasing demand in all regions. In order to sustainably maintain the semi urban open spaces like water bodies/Jheel. To unlock social, economic and environmental and health benefits linked to existing water resources associated with Panchayats a paradigm change in attitude & conception and workmanship is required. The existing water bodies have good potentials as public utility for augmenting Ground Water Recharge, maintaining a healthy and fresh micro environment, walking trail/Jogging/Morning walk and other water sports/entertainment which allow a people to get refreshed and de-stressed.

INITIATIVE FOR EXISTING STATUS

Investments in community led innovative technologies for enhancing productivity, conserving and protecting resources needs pollution control, recycling storm & wastewater for alternative uses (a part of net demand), in addition to seeking opportunities for enhanced water storage, including year round aquifer/ground water recharge and recovery. Ensuring the rapid dissemination and appropriate adaptation or application of these advances is needed to strengthening area wise water security management, especially in Nuh, MEWAT region. As per request of WATER, President Dr D K Paul for empanelment with DRDA Nuh, as a Project Implementing Agency PIA for area development on Watershed approach WATER was advised to take up rehabilitations of some degraded Jheel/Jhoda/Water bodies in and around Nuh. Accordingly a field visit was taken up under the leadership of CEO Sri Mahavir Prasad on 23.2.2021. The comprising DRDA, WATER, Mewat Engineering College and others visited three degraded Water Bodies at Village Malogh, Bai and Nuhsera. A summery brief is put up for approval by Competent authorities as bellow.

The degraded water bodies has the following common visible deficiencies and problems:

- A. There is seasonal water supply from fresh rain water in all
- B. Stored water is unfit for human consumption/agricultural/domestic use except in Bai village
- C. Salinity is common point in all 3 water bodies
- D. Water quality is most poor in Nurserai followed by Malogh and Bai Villages
- E. Malogh WHS is a multiple pond system with high water use by villagers
- F. Bai water body has water supply system Tube Well for drinking water to Bai village
- G. External Pollution from semi urban areas from multiple Non Agricultural Sources consisting Madrassa, Idgas, etc all except Bai village is rampant and continuous.

Accordingly for that in such reservoir oriented Public Places it is necessary to take up:

- Purification and pollution control of existing water bodies in respect of its water quality and habitat maintenance for living flora and fauna especially fish/oyster/aquatic species etc.
- Systematic awareness and capacity building for Panchayats and people in the surrounding areas need organized
- Control of direct feeding of storm water/runoff water fromstreets, RWA areas, Institutional areas need to be regulated controlled and purified before allowing to the parks/storage tanks/water bodies like in Prasadnagar, Karolbag or Madipur, Delhi
- Multi tier Plantation(grass-bush-tree)/Medicinal-forestry-horticulture plantation in open areas around large Jalashayas/water bodies in Delhi
- Year round spreading of treated waste water in regulated manner from STPs to open grass lands/lawn in the pond and in plantation areas around the Jheel/Reservoir for purification of waste water and recharging ground water without contamination to stored water with associated hazards.

As suggested WATER is ready to take up the above mentioned advisory initiatives along with DRDA, Nuh and Gram Panchayats of the villages as suggested bellow

A. Conduct feasibility study and give a detailed cost estimate to be taken up by DRDA Nuh as the Project Implementing Agency. WATER will be involved for

technical and scientific guidance and advise. WATER Experts and Field level officers will be posted at DRDA for mutual and speedy implementation.

- B. For this WATER Expects 20% as overhead consulting/advise/implementation charges of the Project Cost.
- C. DRDA is requested to identify the local level officer as the Keyman for such initiatives and local level speedy Implementation.
- D. A detailed action points and technical advise can be arrived at after administrative approval of the CEO of DRDA, NUH, Mewat.
- E. We propose for a developmental instrument like a Task Force Committee" for such WATER CONSERVATION & UTILISATION activities with latest Scientific and technical Input for speedy action during the Pre Kharif Season in MEWAT/Nuh, Haryana for a duration of 3 months i.e., March to June, 2021 as per PM India's call for Save Rain Water.

New Delhi dated 01.03.2021

Dr D K Paul, President and

Former ADG (Integrated water management), ICAR, GOI Delhi

Annexure

ABOUT WATER the planner (www.waterindian.org.in)

WATER the Non Profit NGO (Regd.1998 at NCR Delhi) has been working as a Supporting Organisation/Consultant to 5 districts under the World Bank Funded Accelerated Development of Minor Irrigation Project, WBADMIP at West Bengal since 2018, on Construction and maintenance of small MI schemes, Agricultural development and Plantation activities, Raising of Seedling plantations, Construction of vermi compost Pits and organic farming, Raising of fingerling in hatcheries and commercial production of composite fish rearing in large scale with Water Users Associations numbering more than 260 around 300 villages in West Bengal Burdwan, Nadia and Malda Districts since 2018.

WATER has successfully completed 4 nos of Integrated Watershed Management Projects(www.iwmp.nic.in) funded by Department of Land Resources ,DOLR, Ministry of Rural Development in West Bengal in 2 districts and developed water security oriented livelihood and environmental management in large tracks of areas covering 134 villages in varying landscapes. We have worked for construction of Water Resources with moderate scales within cost norms Water Harvesting Structures(WHS) like Small Farm Ponds, Irrigation Field canals, Open wells, check Dams, Nala Bundhis in the areas of construction, maintenance and productive to beneficiaries.

WATER was a collaborating partner of IARI, PUSA Institute in the developmental initiatives. WATER was one of the Consortium partner in the World Bank-Global Environmental Facility (WB-GEF) funded 'Strategic Intervention in Agriculture for Climate Change Adaptation' Project. Climate Change Adaptation project was implemented at 4 states representing 4 eco-systems-Dry Land (Haryana, MEWAT)/Tribal (MP, Jhabua)/High Rainfall (Orissa)/Coastal inundation and salinity (Maharastra) with a total outlay of 2.45 US\$ Million for a duration of 2009-2014. WATER worked as grass root implementer of the project at MEWAT, Haryana, for the dry land eco system. It involved 4 clusters of villages (9 Nos) at Nuh Block for developing a model of sustainable agriculture based livelihood system for the villagers through 'on farm' and 'off farm' activities.

WATER demonstrates and assists in various aspects of area development programs especially Water and Watershed Management with location specific natural resource management technique, production and employment generation activities with new research developed latest technological intervention from ICAR Institutes Universities and IITs (Delhi and Kharagpur).

WHAT WE CAN DELIVER

• WATER has huge experience in water resources management and command area development: we have over 20 years' experience in delivering integrated and degraded water resource management related solution in India (Haryana, Jharkhand, West Bengal, Haryana, MP, Bihar/Jharkhand). WATER has developed practical and in-depth understanding of the local water challenges and linked socio-economic systems to offer a complete range of technical and scientific services mixing conservation and production linked process of design led thinking and landscaping/ engineering.

SPECIFICALLY WATER PROPOSES for Mewat region

- A. COST EFFECTIVE LONG TERM PURIFICATION METHODS OF WASTE WATER TREATMENT FROM CERT/STPs FOR WATER AUGMENTATION & GROUND WATER RECHARGING THROUGH AGRO-FORESTRY-HORTICULTURE INPUTS
- **B.** MEDICINAL/AROMATIC/HORTICULTURE TREE TIER PLANTATION WITH VERMI COMPOSTING FOR IMPROVING MICRO CLIMATE AND PEACEFUL HEALTHY ENVIRONMENT FOR GENERAL PUBLIC /COMMUNITY.
- C. REARING OF COMPOSITE FISH/AQUATIC CULTURE IN DEGRADED JHEELS, RESERVOIR FOR SUPPLY TO COMMUNITY AS WELL CREATE ADDITIONAL INCOME AVENUES.
- D. INTRODUCTION OF WATER SPORTS/ENTERTAINMENT AS INCOME GENERATING ACTIVITIES FOR THE LOCAL UNEMPLOYED YOUTH
- E. ALL ROUND CAPACITY BUILDING FOR DRDA/PANCHAYATS/VILLAGE OFFICIAL/VILLAGERS FOR USE AND MAINTENANCE OF SUCH RENOVATED COMMON POPERTIES