

Proceedings of Consultative meeting for Preparation of DPR for Rejuvenation of River Narmada through Forestry Intervention

Date: 31 May 2019

Time :10.00 AM to 02.00 PM

Venue: Conference Hall, Genetics Division Building, TFRI

The consultative meeting on preparation of DPR for Narmada river was held at TFRI, Jabalpur, MP. under patronship of Dr. G. R. Rao, Director, TFRI. The program was the 1st such interactive meeting among heterogeneous groups of specialists, experts and scientists assembled from different corners of Madhya Pradesh and Maharashtra. In his inaugural speech Director, TFRI welcome all the guests and inform the house about the DPR on Narmada project, he reiterated that bottom line is to rejuvenate Narmada river by scientific and technological base of forestry intervention involving all departments / related organisations / stakeholders. He informed that this is the first meeting on DPR preparation and more such meetings will be held at Nagpur, Ahmadabad, Bhopal and Raipur covering all the states in which Narmada flows. He assured the participants that the DPR will be prepared after exhaustive meetings with all the concerned stakeholders and keeping everyone's point of view in legitimate way and will be submitted after incorporating the views of all the parties concerns.

Shri C. Behera, IFS, briefed about national project on major rivers across India initiated by ICFRE where TFRI was entrusted on Narmada river running across four states of India, viz, MP, Chhattisgarh, Maharastra and Gujarat. He highlighted the course and plan of work to be done, through power point presentation. He highlighted the major issues as Forest degradation in catchment area, Encroachment of river, Sand mining, Intense agricultural practice, Discharge municipal waste / urban waste / village waste in Narmada and its tributaries.

He emphasized on DPR has to deal with river basin management through appropriate forestry intervention and habitat management. He suggested various intervention models like Natural Landscape, Agricultural landscape, Urban landscape. He also suggested plantation models in which no chemical fertilisers should be used and indigenous / local species be planted.

A eleven point agenda note for the interactive meeting was presented to all participants so that their deliberation was pin pointed. After the presentation of Sh. C. Behera, house was open for discussion under the chairmanship of Prof. (Dr.) P. D. Juyal, Vice Chancellor, Nanaji Deshmukh Veterinary Science University, Jabalpur. In his inaugural

speech he laid emphasis on conservation of flora and fauna. He briefed about DPR Narmada, what may be done from Madhya Pradesh? What challenges, opportunities and weakness will be come and how to overcome all those problems.

Dr. Giridhra Rao, Director, SFRI Jabalpur stated that on both the side of river Narmada, there is perennial nature of tributaries flows. We should take up tributaries then only flow on Narmada river can be increased. He also emphasised on micro level catchment area management plan. He suggested in forest area we should give priority how best deterioration can check. So far as revival of plantation is concerned he suggested that bushes, shrubs and grasses should be added on the project besides local tree species. In non-forest areas emphasis should be given on Land Use Pattern of the area and convinced the surrounding people (like farmers and villagers) about the change in cropping pattern with respect to recharge of the river.

Dr. P. K. Shukla, Regional Director, RCFC, SFRI Jabalpur spoke about the comprehensive approach using GIS data and collaborating with other departments. He laid emphasis on soil and moisture conservation approach in the intervention areas. He also suggested the data from working plan should be taken up for the treatment area. He also suggested indigenous species plantation should be encouraged for better chances of survival. In private lands he suggested planting of medicinal and aromatic plants.

Sh. R. D. Mahla, CCF Jabalpur advised that DPR implementation plan should be divided in 10 years activities for micro level planning.

Dr. Anand Kumar, CF WP Jabalpur, suggested that before preparation of DPR consultation with local forest villagers for their local needs to be considered. He also advised that the proposed DPR should be evaluated from the angle of its implementation on ground.

Dr. Sunil Nayak, Director, Ext. Services, NDVSU, Jabalpur evoked concern about management of cattle population in which he suggested fodder-based crop plantation to be fed to cattle.

Sh. Rajendra Rai, CEO, Jabalpur Development Authority told that whatever responsibility will be given to their department, they will cooperate fully. He also suggested that eco or amusement parks may be established across the bank of Narmada.

Sh. A.K. Reja, Engineer of Bargi Dam from NVDA, briefed about the Bargi Project in detail. He assured that any kind of relevant information / data required can be shared with TFRRI for DPR preparation. He shared and discussed various data of E-flow of Bargee project on Narmada river.

Sh. Sandeep Srivastava, Director, Survey of India, Jabalpur suggested for detail survey along the river Narmada and its tributaries for animal corridors, encroachments, mining activities along the river Narmada and its tributaries for identification of corridors for

wild animals, encroachments, mining activities etc. He laid emphasis on drainage system / sewage treatment plants.

Sh. Sunil Sinha, Dy. Director of Kanha Tiger Reserve, Mandla told about last 10 years changes in the buffer zones of protected areas. He also suggested about the cash crops cultivation through agroforestry. He also asked to take care of wildlife in the adjoining / common corridors areas of tiger reserves.

Sh. A.K. Srivastava, Ex. Engineer, Railway, WCR, Jabalpur suggested that more water bodies formation required in Narmada basin.

Sh. D. K. Jhariya, Asst. Director, Fisheries, Jabalpur told about fish fauna and its population dynamics in Narmada river. As per him 15 species of fishes on verge of extinction due to severe water pollution. Human intervention is main cause of this water pollution. He emphasises to identify the causes and remedies of Narmada and its tributaries pollution. He strongly emphasised on conservation of 'Mahasheer' the state fish of M.P. through people awareness programme.

Dr. B. Mahesh Kumar, AC/MU, 29thBtln, ITBP Jabalpur advised that untreated sewage and industrial waste management plan along the Narmada river and its tributaries should be included in the proposed DPR.

Dr. S. K. Khare, Scientist, MP State Pollution Control Board, Jabalpur informed that they collected water samples of 51 places of Narmada river for water quality analysis. He told for proper treatment of domestic waste, which is main cause of Narmada water pollution. He suggested the plantation should be carried out along the urban sewage drainage and treatment of all urban sewage drainage.

Dr. Manoj Kumar Rai, Asst. Prof, Dept. of Env. Sc., IGNTU Amarkantak spoke about various tributaries of Narmada originates from Amarkantak and suggested other alternative practices for tree plantation.

Dr. Tarun Takur, Asso. Prof. & Head, Dept. of Env. Sc., IGNTU Amarkantak elaborated about the Narmada and its tributaries originating from Amarkantak. He informed that earlier there was perennial flow in Narmada as well as its tributaries in Amarkantak but now a day there is no perennial flow in Narmada at Amarkantak. More emphasis should be laid on how to rejuvenate small rivers meeting in Narmada. He also talked about land use dynamics, forest fire management, Sal regeneration problem and soil moisture loss. He showed his concern about sal forests around Narmada basin and explained role of this important species in river water restoration through moisture percolation by their roots. He particularly emphasized that depletion of sal forests has reduced the river flow and has increased the incidents of forest fires.

Dr. Sahni, from Nanaji Deshmukh Veterinary Science University, Jabalpur discussed about his scientific experience through various research projects completed on Narmada river in which he tested / analysed water samples of Narmada, quality of water, heavy metal toxication, chemical discharge in Narmada, TDS counts study at various location on Narmada, pH level, temperature etc. He suggested that all these parameters should be address in proposed DPR.

Dr. V. S. Gigimon, Head of Dept. from Dharmshashtra National Law University, Jabalpur suggested that people should be sensitized towards environmental laws. He suggested to take up the area specific activities for DPR. Role of tribal communities and their rights should be addressed. He advised that environmental law should be more effective and implementable in forestry intervention of Narmada river.

Prof. R. K. Grover, Dept. of Civil engineering from JEC, Jabalpur discussed about hydrology of Narmada river. He assured full cooperation and involvement of manpower if needed from his institute for the work.

Er. Arvind Kumar Gupta spoke about civil engineering concrete structural planning like impregnation of armour rock and concrete blocks for reducing soil erosion in the banks of Narmada. He also suggested construction sewage treatment plants in each prime location of the cities.

Dr. M. S. Raghuvanshi, Scientist, ICAR-NBSS-LUP Nagpur suggested to identify the challenges and constraints of the proposed forestry intervention in DPR. He suggested to plant native tree species and to take care about fisheries conservation, soil conservation and watershed management. He also proposed to share Land Use plans of the areas for ease of work of the DPR.

Dr. Sushil Kumar, Scientist, ICAR- DWR Jabalpur suggested to aid on management of weeds in aquatic system of Narmada and utilization of weeds for purification and removal of heavy metals from water.

Dr. S. Sambath, Director I/C, ZSI Jabalpur informed about that ZSI have baseline data of Narmada Basin fauna and his dept. is ready to share the baseline data for the proposed DPR. He also proposed plantation of tree species to harbour maximum biodiversity.

Dr. S. D. Upadhyaya, Prof & Head, Forestry & Director Instruction, JNKVV Jabalpur laid emphasis on plantation of lemon grass, vetiver species to control soil erosion which is already being done under aroma mission. He suggested extension meeting at Jabalpur for agenda item no. 07. He also spoke about productive pasture and coordination with KVKs for various agroforestry and medicinal plant related models to convert non-productive grasslands into productive silvipasture systems

Shri. Umesh Kumar Pataria, Agriculture department, Jabalpur recommended promotion of biogas plants and organic fertilizers across villages of Narmada basin to minimise discharge of harmful chemicals in the river and phyto and bioremediation through native species.

Sh. Rajesh Singh Chauhan, Technical Expert, Jila Panchayat, Jabalpur suggested that plantation activities should be done as per the micro, macro and catchment area across the Narmada river.

All the participant shared their working experience on Narmada river and provided valuable suggestions during the interactive session. Everybody expressed their willingness to cooperate and assist to their level best for preparation of DPR on Narmada river. As concluding remarks, the Chairman Prof (Dr.) P. D. Juyal gave his thanks to all participants for their valuable points and suggestions. He assured that all the valuable and applicable points will be address in the proposed DPR.

The meeting ended with vote of thanks by GCR, TFRI.

Chaturbhuj Behera, IFS
Nodal Officer, River-Narmada

No.--

Date:

For information copy to

1. All participants /HoDs, TFRI
2. PS to the Director for information of the Director

List of participants present in the meeting held on 31.5.19

Sl. No.	Name	Designation
1	Dr. G. R. Rao	Director TFRI
2	Sh. C. Behera	Head of Office, TFRI
3	Prof (Dr.) P.D. Juyal	Vice Chancellor, Nanaji Deshmukh Veterinary Science University Jabalpur
4	Dr. P.K. Shukla	Regional Director, RCFC, SFRI Jabalpur
5	Sh. R.D. Mahla	CCF Jabalpur
6	Dr. Anand Kumar	CF, WP Jabalpur
7	Dr. Sunil Nayak	Director, Ext. Services, NDVSU, Jabalpur
8	Sh. Rajendra Rai	CEO, Jabalpur Development Authority
9	Sh. A.K. Reja	Engineer of Bargi Dam from NVDA
10	Sh. Sandeep Srivastava	Director, Survey of India, Jabalpur
11	Sh. S.K.Sinha	Asst. Director of Kanha Tiger Reserve, Mandla
12	Sh. A.K. Srivastava	Ex. Engineer, Railway, WCR, Jabalpur
13	Sh. D. K. Jhariya	Asst. Director, Fisheries, Jabalpur
14	Dr. B. Mahesh Kumar	AC/MU, 29 th Btln, ITBP Jabalpur
15	Dr. S. K. Khare	Scientist, MP State Pollution Control Board, Jabalpur
16	Dr. Manoj Kumar Rai	Asst. Prof, Dept. of Env. Sc., IGNTU Amarkantak
17	Dr. Tarun Takur	Asso. Prof. & Head, Dept. of Env. Sc., IGNTU Amarkantak
18	Dr. Sahni	Nanaji Deshmukh Veterinary Science University, Jabalpur
19	Dr. V. S. Gigimon	Head of Dept. from Dharmshashtra National Law University
20	Prof. R.K. Grover	Dept. of Civil engineering from JEC, Jabalpur
21	Er. Arvind Kumar Gupta	
22	Dr. M.S. Raghuvanshi	Scientist, ICAR-NBSS-LUP Nagpur
23	Dr. Sushil Kumar	Scientist, ICAR- DWR Jabalpur
24	Dr. S. Sambath	Director I/C, ZSI Jabalpur
25	Dr. S.D. Upadhyaya	Prof & Head, Forestry & Director Instruction, JNKVV Jabalpur
26	Sh. Rajesh Singh Chauhan	Technical Expert, Jila Panchayat, Jabalpur
27	Scientists of TFRI Jabalpur	