

Minutes of the First Meeting of the Committee of Environmentalists, Social Scientists and other Experts on Interlinking of Rivers, held on 18th January 2005 at New Delhi.

The first meeting of the Committee of Environmentalists, Social Scientists and other Experts on Interlinking of Rivers was held under the Chairmanship of Shri V.K. Duggal, Secretary, Ministry of Water Resources (MoWR) on 18.1.2005.

The list of participants of the meeting is shown at Annexure-I.

After the formal introduction, the Secretary, MoWR welcomed the distinguished Members of the Committee, special invitees and other participants of the meeting. In his welcome speech, the Secretary (MoWR) mentioned about the background of formation of the Task Force on ILR (TF-ILR) by the former NDA Government and the activities performed by them. Secretary (MoWR) also mentioned that inspite of the best efforts made by the Task Force, consensus between the concerned State Govts. on the ILR programme couldn't be reached. After the formation of UPA Govt. at the Centre, the National Common Minimum Programme (NCMP), envisaged for comprehensive assessment of the feasibility of linking of the rivers of the country starting with southern rivers in a fully consultative manner. An assessment of ILR has been taken up at the level of Secretary (MoWR) through detailed discussions and interactions with various stakeholders, State Govts., officers of MoWR and other Central Deptts. A Conference of Chief Secretaries of States/UTs was also held on 2nd -3rd August 2004. During the conference most of the States were supportive of the concept of the ILR Project, provided the project can somehow ensure a "win-win" situation for all states. A power point presentation on ILR programme was made by MoWR before Hon'ble Prime Minister on 11th October 2004. The important decisions taken after the Presentation are: ILR Programme to be continued with focus on Peninsular Component; Task Force which has completed its assigned task and given valuable advice to NWDA needs to be wound up; an Expert Sub-group of Environmentalists, Social Scientists etc. will be constituted by MoWR. As a follow up action, the present expert committee was constituted.

While concluding the welcome speech, the Secretary (MoWR) stated that the main objective of the first meeting is to invite the views of the Members on the future course of action to be adopted by this Committee in addressing the Terms of Reference assigned to the Committee. Secretary (MoWR) requested Director General, National Water Development Agency & Member-secretary of the Committee to give a Power Point Presentation on ILR Programme and its status and also on the TOR for preparation of DPR, suggested by the TF-ILR.

D.G., NWDA made the presentation by covering the various aspects of ILR programme such as Need for ILR, Earlier proposals of ILR, National Perspective Plan (NPP) on ILR, Formation of NWDA, Links identified by the NWDA for conducting feasibility studies, Writ Petitions filed in the Hon'ble Supreme Court of India on networking of rivers and the directions of the Supreme Court thereon and Constitution of the TF-ILR and the works performed by the various committees of the TF-ILR, including Terms of Reference(ToR)

for preparation of Detailed Project Reports(DPR). Hard copies of the presentation and the ToR for DPR were also circulated amongst the participants.

After the completion of the presentation, the Secretary (MoWR) mentioned that the ministry is in the process of conducting deliberations with the concerned State Governments of Uttar Pradesh and Madhya Pradesh and Madhya Pradesh and Rajasthan respectively for arriving at consensus for the DPR preparations of Ken-Betwa and Parbati – Kalisindh – Chambal links projects. He added that it has been decided to take up on priority a few more links in Peninsular Component for consensus building. The key concern of the Government is to solve the socio-economic and socio- environmental issues on the proposed links under ILR and to obtain consensus in a fully consultative manner.

While opening the floor for taking the views from the experts, the Chairman requested the honorable expert group to play an active/supportive role in the consultative process.

Views/suggestions made by the experts during the meeting are given below:

- (i) Shri P. Sen, Rtd. Member, CWC, Kolkata, West Bengal:
 - (a) Since, Manas and Brahmaputra rivers are international in nature, planning of water resources of the region need lot of care with respect to international dimensions.
 - (b) We have problems presently in sharing of Ganga waters and this type of problem may also arise in Brahmaputra & Manas regions in additions to the environmental and ecological issues attached to the regions. Hence it is better to give up the MSTG link under ILR.
 - (c) The water problems of Southern States can be overcome more economically and amicably by taking up the Mahanadi –Godavari link by tapping the surplus waters of Mahanadi & Godavari rivers with the construction of three dams namely Manibhadra on Mahanadi & Inchampalli & Polavaram on Godavari.
 - (d) He also stressed the importance of efforts on improving the efficiency of irrigation systems through lining the irrigation canals and field channels and changing the cropping pattern with respect to climate, topography and water availability of the region to improve the crop yield from command areas.

A note provided by Shri Sen is also attached at Annexure -II.

(ii) Dr. Ms. Mala Kapur Shankardass, Chairperson, Development, Welfare & Research Foundation (DWARF):

- (a) Alongwith the environmental & ecological aspects, it is necessary to consider health issues - environmental as well as social health issues, while framing the ILR proposals.
- (b) Water borne diseases due to water quality in general dimensions, which at present are found slightly less emphasized need more concern for the well-being of the society.
- (c) Requested to give more time to come back with detailed views on the ILR proposals.

(iii) Shri Rajinder Singh, Director, Tarun Bharat Sangh:

- (a) Apprehended about the objectivity of controlling the flood and drought conditions through implementation of ILR project.
- (b) It is necessary to view the ILR programme from the view point of Indian Civil Society Engineering (CSE) - both in terms of Political as well as Social Engineering of the CSE of India.
- (c) Opined that there may be chances of creating conflicts between the farmers of the upstream areas (whose land is coming under submergence) and downstream areas (where irrigation benefits will be available) of the ILR project.
- (d) While mentioning the ILR as a "conspiracy to privatize the water sector", intimated regarding the need to interlink the minds of the people prior to interlink the rivers because the sentimental values attached to the local mindset of the people cannot be neglected and should be given due concern socially, environmentally and ecologically.

(iv) Dr. Biksham Gujja, Representative of Dr. Ashok Khosla, President, Development Alternatives, New Delhi:

- (a) As the ultimate beneficiaries of the projects are the people, they should know what they are going to achieve from the ILR.
- (b) Civil society wants to know more about the programme on ILR and requested to make available all relevant materials on public domain.
- (c) People are having lot of concern about Ken-Betwa link project and hence its objectivity and benefits should be made available in detail to the civil society.

- (d) Recommended to adopt Nitin Desai Committee Report, which specifies the guidelines for approval of any projects in the country, for the ILR.

Reacting to the views, the chairman mentioned that in the case of ILR project, only those projects, where the benefit outweighs the total costs should be considered for implementation and the Planning Commission of India will scrutinize the project from each and every angle, before giving a green signal.

(v) Shri A.C. Kamaraj, Chairman, NAWAD Council, Madurai, Tamil Nadu:

- (a) It is necessary to project the benefits from irrigation, water supply, navigation & power generation through ILR programme to each State/Country.
- (b) Views of the concerned States/Countries are to be discussed in detail.
- (c) Expressed his willingness to take part in the deliberation processes with the concerned state governments and neighbouring countries, namely Bhutan, Nepal and Bangladesh especially for building consensus for links under Himalayan Components.
- (d) Requested to consider the proposals prepared by the NAWAD Council and provide permission for carrying out the feasibility studies for at least one component, which may cost around Rs. 35 crores.

(VI) Prof. M.N. Madhyastha, Emeritus Fellow (AICTE), Dept. of Chemical Engineering, National Institute of Technology, Surathkal, Mangalore:

- (a) Biodiversity impacts on flora and fauna of the area coming under the ILR scheme are to be studied and adequate control measures are to be built in the programme to maintain the balance of the eco-system.
- (b) Alongwith the biodiversity aspects, health issues also require due consideration.
- (c) For offering detailed comments/observations, requested more time for studying the materials on ILR and interactions with the members.

(vi) Shri B.R. Lall, IPS (Retd.):

- (a) It is necessary to consider political aspects of the scheme, as this issue is prevailing in the country everywhere. This type of issues usually will make hindrances while planning, implementing and management of water resources projects like ILR. We witnessed the same in Punjab and Haryana also. We have to learn from the experiences to go ahead with the scheme further.

(b) Requested more detailed aspects of the programme to comment further.

Reacting to above, Secretary (MoWR) proposed that NWDA can give a detailed technical presentation of Ken – Betwa link project in next meeting, which was welcomed by all.

(vii) Shri Z.Hasan, Former Secretary MoWR, Govt. of India:

Shri Z. Hasan, through e:mail conveyed his thanks for the invitation and also his inability to participate in the first meeting. He also conveyed the vital issues that are to be considered while implementing the ILR. Issues mentioned have been placed at Annexure-III.

In the concluding speech, the Chairman expressed his sincere gratitude to the experts and requested to go through the hard copy of the presentation made by DG, NWDA, ToR for preparation of DPR and the details available in the public domain on ILR and provide the views by the middle of March, 2005. These observations will be helpful for detailed deliberations and thereby converging the various issues involved in the ILR Programme. Chairman, CWC and DG, NWDA mentioned that the ILR programme is all about for the provision of sufficient quantity of water to the needy areas during the period of its scarcity and mainly by diversion of flood water. They also requested the experts for full cooperation to have a meaningful beginning to fulfill the objectivity of the ILR for the interest of the nation.

The meeting ended with the Vote of Thanks to the Chair.

Annexure-I

List of Participants who attended the First Meeting of the Committee of Environmentalists, Social Scientists and other Experts held on 18.01.2005 in the Committee Room, Ministry of Labour, Shram Shakti Bhawan, New Delhi.

Sh. V.K. Duggal, Secretary, MoWR In Chair

Members Present:

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| 1. Sh. R. Jayaseelan | Member |
| 2. Sh. P. Sen | Member |
| 3. Dr. Mala Kapur Shankardass | Member |
| 4. Prof. M.N. Madhyastha | Member |
| 5. Sh. Rajinder Singh | Member |
| 6. Dr. Biksham Gujja | (Representing Dr. A. Khosla) |
| 7. Dr. S. Bhowmik | (Representing, Secy. MOE&F) |
| 8. Dr. R. Vandru | ((Representing, Secy. MOSJ&E) |
| 9. Sh. R.K. Sharma | Member - Secretary |

Apologies:

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| 1. Sh. Z. Hasan | Member |
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Special Invitees:

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| 1. Sh. B.R. Lall | IPS (Retd.) |
| 2. Smt. Sushma Singh | Addl. Secretary |
| 3. Sh. A.D. Bhardwaj | Commissioner (PR) |

MOWR:

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| 3. Sh. M.S. Gupta | Senior J.C. (BM) |
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NWDA:

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| 1. Sh. N.K. Bhandari | CE (HQ) |
| 2. Sh. K.P. Gupta | SE |
| 3. Sh. Nizam Ali | SE |
| 4. Sh. Jabbar Ali | DD |
| 5. Smt. Jancy Vijayan | DD |

Views/Observation of Shri P. Sen

Respected Chairman, Members and Friends,

I must thank the Ministry of Water Resources for inviting me in this august meeting of Experts to consider the very vital issue of augmenting the supply of water in the water-short regions of our vast country.

The proposal of NWDA for interlinking of Indian rivers has been discussed in various forms and many questions have been raised for and against. As I never got any opportunity to go into its details, I would like to place a few of my observations, most of which must have been already considered by the learned planners of the Project.

1. The most important donors of water, considered in this project, are two major tributaries Manas and Sankosh of the mighty river Brahmaputra originates in India, receiving ample rainfall every year, but the riparian users are mainly the people of Bangladesh. Therefore, it is an international river system which needs careful handling. It is known to all that, after the partition of India, our Policy makers made a judicious approach to the problem of water-sharing of the Indus river system. Since there also, all the sources originate in India and the riparian users were divided between India and Pakistan, amicable settlements were reached through friendly dialogues between the policy makers and engineers of both the nations and then only the development plan were taken up.

Unfortunately, for the Brahmaputra basin, I am not aware of any such agreement regarding the sharing of its water. We have enough discontent already about the Ganga water sharing at Farakka. Our share had to be modified only a few years ago, even at a considerable discomfort for the Calcutta Port, navigability of the Hoogly river and intrusion of salinity.

I would therefore humbly suggest that, we must not take any hurried decision about the withdrawal of water from Manas and Sankosh and even from Torsa, Raidak and Jaldhaka rivers unilaterally which will surely increase the discontent to a great extent.

Apart from the above controversy, the proposed Manas-Sankosh-Teesta-Ganga (MSTG) link is fraught with grave environmental and socio-economic problems. It would cross 22 tea gardens, requiring acquisition of 530 ha of land. This would mean sure death of these tea gardens. It would pass through the Buxa Tiger reserve and reserve forests of Raidak, Upper Tandu and Appalachand acquiring 770 ha. of land of the reserve forests. It would virtually separate the Himalayan foothills from the North Bengal plains, creating significant adverse impact on the flora and fauna of the fragile forest cover that West Bengal still have in its northern parts. Land acquisition would lead to displacement of indigenous people who live in these areas and is likely to heighten the already existing social tension between the tribals and non tribals.

An expert committee set up by the Ministry of Environment and Forests, Government of India in 1997-98 vehemently opposed the proposal and requested the Ministry of Water Resources to drop the Canal Project (i.e. MSTG Link).

In addition to above, thousands of hectares of fertile cultivated land will be acquired for the canal and thousands will become homeless.

It appears therefore desirable to give up the proposed MSTG link, as it is not viable for environmental and socio-economic reasons.

But the acute shortage of water in the Southern States cannot be ignored any more. Even the Supreme Court has stressed this point recently. The problem can however be overcome more economically and amicably, if the mighty rivers Mahanadi and Godavari can be tapped, after construction of three dams i.e. Manibhadra (49 M high) on Mahanadi and Inchampalli (41 m) and Polavaram (41 m) on Godavari. National Commission on Integrated Water Resources Development Plan (NICWRDP) in 1999 has dealt it in detail and came to the conclusion that the Mahanadi and Godavari have sufficient surplus water to meet the requirement of water scarce basin of the Krishna, Pennar, Cauvery and Vaigai.

For more effective results, we are also to put more efforts on improving the irrigation systems by lining the canals, constructing field channels, strict control at the outlets, changing the cropping pattern by adopting less water requiring crops, prompt repair and maintenance of conveyance structures etc. Central Water Commission in 1998 published a statistics which showed that the crop yield per hectare in India and Pakistan are the lowest in the world. We produce only about 2100 kg/hectare whereas in Korea and Japan it is nearly 6000 Kg/hectare. Even in India, in some experimental farms, yield of wheat exceeded 6000 Kg/hectare. If we can raise our yield at least to 4000 Kg/hectare on an average, the problem of South India can easily be solved, even, may be, without the three dams. We should give more stress on management of the water supply systems than looking at simply increasing the supply.

It may be relevant here to give a warning that, we cannot depend on high storage dams for a very long period, in view of the heavy rate of sedimentation of reservoirs. The data collected by CWC for Bhakra and Hirakud dams are alarming. Therefore, more stress on field management is urgently necessary. We may try to follow the example of Korea and Japan for a more sustainable solution.

INTERLINKING OF RIVERS (ILR) - General Observations of Shri Z. HASAN

- The primary objective of ILR is to transfer Surplus Waters of The Rivers to meet the demands of Water in Deficit Areas and address the problems of Water Supply, Energy, Floods and Drought. The Environmental and Socioeconomic benefits of providing Water Supply and Energy to Agriculture, Industry and People are important factors that need to be assessed objectively and presented. Similarly the benefits of Protection from Floods and Drought need to be brought out clearly in various ILR proposals.
- Scientific Studies are carried out to determine Surpluses and Deficits under Ultimate Development in different River Basins/Sub-basins and feasibility of transferring Surplus Waters from appropriate locations. The results of the Studies carried out by NWDA and the status of their acceptance by the concerned States are important elements that need consideration before proceeding further in ILR. The preparation of Detailed Project Reports can be taken up only on Schemes accepted by the States at Feasibility Stage.
- Surpluses are available mostly during Flood Season and require Storage Reservoirs and Link Canals to enable Transfer of Water to benefit enroute and distant Water Short Areas. Environmental and Socioeconomic Issues due to Submergence including R & R of Displaced Persons in ILR are therefore similar to other WRD Projects involving Storage Dams and Canal Systems for Water Supply
- The Hydropower potential of Storage Dams is a Pollution free source of Energy and its Environmental and Socioeconomic benefits as compared to Fossil Fuel based Energy need due consideration. The low level of Hydropower Development (15%) in the country and specially low in certain regions has retarded growth of Agriculture and Industry resulting in large scale Unemployment and Poverty. The related Socioeconomic Problems need to be adequately covered in ILR proposals.
- The Socioeconomic and Environmental Issues involved in Flood Moderation and Drought Mitigation as a result of ILR also need to be considered. The long distance canal system has great potential to provide a green belt all along and to meet the water requirements of the Dry Areas encountered enroute the canal including the potential for recharging the Ground Water and Water Transport besides other Environmental Improvements.
- ILR generally involve more than one State and therefore various Inter-State Issues particularly relating to Water Allocation and Sharing of Water becomes more complex and implementation of the scheme including preparation of DPR depends on the Agreement reached between Concerned States. It may perhaps be necessary to address the issues involved and reach an agreement before undertaking preparation of DPR and subsequent implementation of the ILR. The experience of Betwa River Board and Bansagar Control Board in the execution of Interstate Projects may be of great help.

- The smaller independent links with relatively small quantities of Diversion involving one or two States may be left to the concerned States to examine their merits based on the feasibility reports prepared by NWDA and take appropriate action for their implementation with a standing offer of central assistance. The Central Government may concentrate its energies on the long distance interlinking projects of national importance involving major river systems that would address the regional flood and drought problems.