

Minutes of the First Meeting of the "Group on Financial Aspects under Task Force for Interlinking of Rivers" held on 24.10.2017 at 11:00 AM in the Committee Room, CWC, 3rd floor, Sewa Bhawan, R. K. Puram, New Delhi.

The First meeting of the "Group on Financial Aspects under Task Force for Interlinking of Rivers" was held under the Chairmanship of Dr. Prodipto Ghosh, Former Secretary to Govt. of India and Chairman of the Group on 24.10.2017 (Tuesday) at 11:00 AM in the Committee Room of CWC, Sewa Bhawan, R.K. Puram, New Delhi. List of Members and other participants is enclosed as Annex-I.

At the outset, the Chairman welcomed all the Members and other participants and explained briefly the background for formation of the Group on the Financial Aspects. He mentioned that the timeframe of four months has been given to the Group for completion of assigned task. As such, in first meeting itself, we have to work out strategy for carrying out various studies and submit the Report in a reasonable time. After brief introduction of the Members and other participants Chairman requested Shri K. P. Gupta, Member Secretary of the Group for taking up the agenda items for discussion.

Item no.1.1 Review of the ILR Projects:

A power point presentation on the background and latest status of ILR projects was made by Shri K.P. Gupta, Director (Technical), NWDA and Member Secretary of the Group. It was informed that out of 30 identified link projects of NWDA, DPRs of only three links, namely, Ken-Betwa, Par-Tapi-Narmada and Damanganga-Pinjal links have been completed and the estimated cost of these links have been firmed up. Shri H. Satish Rao, Member desired to know how many of the identified links of NWDA are independent. Shri K.P. Gupta, Member Secretary clarified that seven links, namely, Ken-Betwa, Par-Tapi-Narmada, Damanganga-Pinjal, Bedti-Vardha, Hemavati-Netravati, Parbati-Kalisidh-Chambal and Pamba-Achankovil-Vaippar links are independent and remaining links are dependent links. Shri Dhiraj Nayyar, Member desired to know about the nodal agency for the Interlinking of Rivers Programme. It was clarified that for overall planning and implementation of ILR programme, NWDA is the nodal agency. Shri Jagmohan Gupta, Joint Secretary and Financial Advisor, MoWR,RD&GR clarified that DPRs of three projects are not only ready but statutory clearances of these projects are in advanced stage. Ken-Betwa Link Project Phase-I is about to be taken up for implementation. Shri Bhubesh Rathore representing Shri Rana Kapoor, MD &CEO of Yes Bank desired to know the kind of Revenue Model proposed to be followed. Chairman clarified that cost recovery is no doubt an important part of the project but at the same time it is also fact that in irrigation sector, huge problem of cost recovery of irrigation tariff persists. Revenue collected at present is not even sufficient to meet the O & M cost of the project. It is, therefore necessary to incentivise the States so that the cost recovery system at least in case of ILR programme is revamped.

Some of the Members desired to know whether the environmental cost, cost of R&R, Cost of Compensatory afforestation, etc have been included in the overall cost of the Projects at DPR stage. It was clarified by NWDA that these costs have been included while working out cost of the projects at DPR stage.

Shri Y.K. Mittal, Director (Finance), NHPC mentioned that since irrigation sector is having subsidised tariff in our country and so is the case with drinking water supply to a great extent, it would be appropriate to clearly define the components of commercial tariff and subsidy to be given by the Centre and the States in case of Revenue Model of ILR projects. For any institutional funding, the projects should be financially viable with a reasonable rate of IRR. Chairman mentioned that due diligence is required for working out revenue model and for sourcing of funds from different sources.

Item no.1.2 Review of Recommendations of the Sub Group on Finance constituted by earlier Task Force on Inter-linking of Rivers (2002):

Shri Prodipto Ghosh, Chairman of the Group made a presentation on the funding options suggested by the earlier Task Force for ILR (Year 2002) to familiarise the Members about the issues involved in funding and earlier thinking of the Task Force-I, headed by Shri Suresh Prabhu. Copy of presentation is enclosed as Annex-1.2.1. He mentioned that NCAER has estimated total cost of ILR programme as Rs.4.4 lakh crores in the year 2004. Taking inflation rate of 6% per annum and current exchange rate of Rs.65 per US \$, current estimated cost of the project works out to be US\$ 144 billion and annual cost as US\$ 12 billion. During presentation, he broadly brought out and discussed various recommendations made on funding options under Action Plan-II of earlier Task Force (Year 2004).

- Public-private partnership
 - a) The annuity model
 - b) The viability gap funding model

- Public funding / participation
 - a) Access to capital markets
 - b) Retail Investors
 - c) Banks/FIs
 - d) Cess and duties
 - e) Allocation from employment generation schemes
 - f) other options

Apart from above, norms and modes of cost recovery were also presented and discussed. Finally it was felt that the proposals are generic in nature and do not amount to a clear, pragmatic financing and cost recovery plan. International Sources were also not considered by them.

During presentation, Chief Engineer (IMO), CWC pointed out that the present average cost of irrigation projects is Rs.3.0 lakh per hectare. Since irrigation benefits envisaged from ILR projects is of the order of 35 million

hectare, the estimated cost of irrigation development will work out to Rs.10.5 lakh crores.

Regarding Green Bonds to be issued under Sec-54 EC and 54 ED of IT Act, representative of NHPC mentioned that at present NHA and REC are only two agencies who are authorised to issue such bonds in the market and raise Rs.5,000 crore from the market. Chairman clarified that two more agencies namely, Power Finance Corporation and Railway Finance Corporation have been authorised to raise funds from the market by issuing bonds.

Shri Dhiraj Nayyar, NITI AYOOG emphasized the need to work out clearly the Capex part and Opex part of the project to decide funding of the project. Chairman of the Group endorsed his views.

Shri Satish Rao, Member expressed concern over political risk involved in the implementation of the ILR programme and how this risk can be eliminated or mitigated. Chairman mentioned that Hon'ble Supreme Court, acting on PIL filed on "Networking of Rivers", has directed the Central Government to implement the ILR Programme. As a result, a Special Committee on Interlinking of Rivers (SCIR), headed by Union Minister for Water Resources, River Development and Ganga Rejuvenation constituted a committee for implementation of ILR programme. In view of this development, political risk has been mitigated to a great extent.

Shri Rao further mentioned that two factors, i.e. implementation schedule and various risks involved on fiscal side needs to be addressed properly. Thinking of the Task Force-I under NDA-I that the entire ILR programme would be implemented in a span of 12 years is highly optimistic. Quoting example of China, he told that they planned their Interlinking of Rivers Programme in three phases. They took up the works of Phase-I and Phase-II in the year 2005 and completed in 2014. Now they have postponed the idea of implementing the Phase-III of the programme in view of various environmental problems and protest by the public. One of the major problems, cited by him was disposal of industrial waste in to the canals causing water pollution. So he was of the view that in our case also implementation of links should be prioritised before finding source of funds. Chairman and other Members also agreed with his views.

Item no.1.3 Identification of possible funding options

Chairman mentioned that most of the funding options have already been discussed under previous item and necessary action will be taken as the views emerge in next few meetings.

Item no.1.4 Drawing up a work plan for the Group on Financial Aspects

It was felt that in one meeting it would not be possible to draw up a work plan for the Group on Financial Aspects. It was therefore decided that three presentations, as mentioned below, should be made by the respective

organisations first to appreciate the issues associated with the ILR programme and then to draw up tentative work plan for the Group.

- (i) Presentation by NWDA on financial aspects of an ILR project for which DPR has been prepared and Projected cost of entire ILR Programme based on extrapolation of DPRs of three ILR Projects of NWDA. Presentation may be on KBLP covering important technical aspects in nutshell and the financial and economic analysis in detail.
- (ii) Presentation on availability of fiscal resources for the ILR programme over the implementation period by NITI AYOOG
- (iii) Presentation on availability of Indian Institutional finance for the ILR programme over the implementation period by YES BANK

It was agreed that the presentations would be shared with the members of the Finance Group at least one week prior to the date of the second meeting.

It was decided that next meeting of the Group should be held within next three weeks. Subsequently the Group can meet on fortnightly basis to expedite its work.

Members were of the view that NWDA should try to work out the average cost of irrigation development per hectare and average cost of power generation per MW based on the DPR prepared by them. Apart from this, they should also try to find out the average R&R cost per household and average cost of compensatory afforestation per hectare based on their EIA Study & EMP and show them in their presentation.

Item no.1.5 Any other item(s) with permission of the chair

The Chief Engineer (IMO), CWC stated that the Chief Engineer(PAO), CWC who is dealing with National Projects would have been the correct choice as a Member for this Group from CWC as one of the TORs of the constituted Group is to study the option(s) of declaring some of the IBWT links of NPP as 'National Project' on the pattern of Ken-Betwa link. Chairman of the Group suggested that the Chief Engineer (PAO), CWC should be made Special Invitee for all the meetings of the Group.

The meeting ended with vote of thanks to the Chair.

Annex-I

List of Members, Special Invitee and other participants of First meeting of the "Group on Financial Aspects under Task Force for Interlinking of Rivers" held on 24th October, 2017 at New Delhi

1.	Dr. Prodipto Ghosh, Former Secretary to Govt. of India & Member of Task Force for ILR, New Delhi	Chairman
2.	Shri Dhiraj Nayyar, OSD (Economics, Finance & Commerce Cell), NITI Aayog, New Delhi	Member
3.	Shri M.K. Mittal, Director (Finance), NHPC, Faridabad	Member
4.	Shri H. Satish Rao, Retd. Director-General, ADB	Member
5.	Shri Navin Kumar Chief Engineer (IMO), CWC, New Delhi	Member
6.	Shri R.K. Jain, Chief Engineer (HQ), NWDA, New Delhi	Member
7.	Shri K.P. Gupta Director (Technical), NWDA, New Delhi	Member-Secretary
8.	Shri Bhupesh Rathore, President Strategic Govt. Advisory, Yes Bank Ltd., New Delhi	Representing Shri Rana Kapoor, Managing Director and CEO, Yes Bank Ltd., Mumbai
	Special Invitee	
1.	Shri Jagmohan Gupta, JS & FA (WR, RD&GR), New Delhi	
	Other Officers	
1.	Shri B.P. Pandey, Director (ISM), CWC, New Delhi	
2.	Shri Rajat Narang G.E.V.P. Corporate Finance, Yes Bank Ltd., New Delhi	
3.	Shri Anil Kumar Jain, Deputy Director, NWDA, New Delhi	
4.	Shri M.K. Sinha Senior Consultant, NWDA, New Delhi	

ILR Programme: Summary of Proposals for Financing made by NCAER in 2004

Prodipto Ghosh, Ph.D

24 October 2017

Estimated Costs

- Estimated total cost in 2004: Rs 5.6 lakh crores over 12-15 years. Annual cost (for 12 years implementation period) is estimated at c. Rs 46,500 crores.
- At inflation rate of c. 6% pa, and current exchange rate of c. per Rs 65 per US\$, current estimated cost is c.US\$ 183 billion, and annual costs is c. US\$ 15 billion.

Annex-1.2.1 (Contd..)

Macroeconomic Perspective:

- Estimated incremental financial assets in 2015 is Rs 13 lakh crores, or c.USD 200 billion a year. [Prima-facie, annual funding requirement could be met from domestic sources]
- *Key to raising financial resources: Cost recovery in an equitable manner.*

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Modes of raising Finance

- **Private participation:** Primarily for the hydropower components (c.34,000 MW).
 - Debt: Equity envisaged is 70:30.
 - About 25-26% of total cost may be raised from private participation.
- **Public-Private Partnerships:** Primarily for canal tributaries and command areas. Two Models:

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Annex-1.2.1 (Contd..)

PPP: Two Models

- (i) Annuity Model:** A developer is selected on the basis of competitive bids for annuity payments.
 - Government pay annuity to the developer, and assumes market risks.
 - Developer bears financing, construction, and operations risks.
- (ii) Viability Gap Model:** Government assigns rights for land development, fisheries, etc., and provides gap financing for viability determined by competitive bids.
 - Release of gap financing is subject to developer meeting defined milestones.

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Public Participation

- (i) Access to capital markets:** "Green bonds may be issued by Government with maturity of 20-25 years. Investors: may be incentivized through IT rebates under Secs 54 EC and 54 ED of IT Act.
- (ii) Retail Investors:** Two approaches:
 - Incentives under Secs 80 an 88 of IT Act.
 - Bonds etc. issued by Government for ILR m be eligible for deduction in computation of total taxable income on recurring basis (c. 6 years). Principal would be non-refundable.

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Annex-1.2.1 (Contd..)

Public Participation...

(iii) Banks/FIs:

- ILR may be declared a “priority sector” for lending by banks/FIs within the norm of 40% of total lending
- Government may borrow through bonds and various debt instruments. However, Debt:GDP target of public borrowing may be breached.

(iv) Cess and Duties: Considering the impact on agricultural output, cess may be imposed on agricultural *mandis*.

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Public financing...

(v) Allocations from employment generation schemes:

Part of the allocation for labour employment under (rural) employment schemes (earlier, *Sampoorna Grameen Rozgar Yojana*, now MNREGA) may be allocated for meeting labour costs under ILR.

(vi) Other Options: Various options:

- IT Amnesty scheme
- Part of existing allocations on water programmes may be allocated to ILR.
- Part of Central allocations to beneficiary states may be allocated to ILR.

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Annex-1.2.1 (Contd..)

Norms and Modes of Cost Recovery.

- At minimum, cost recovery should cover O&M, interest, and depreciation charges.
- Imposition of cess on water users, focused on states that would benefit from ILR.
- Enhancement of irrigation tariffs:
 - In 2004, water charges were < 3% of gross crop yield in 1994-95.
 - Recovery of working expenses fell from 93% in 1976-77 to 34% in 1988-89.
 - Subsidies for irrigation were c. Rs 14,000 crore

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Cost recovery...

- Various options for water pricing:
 - Volumetric basis
 - Non-volumetric pricing
 - Quotas/rationing
 - Market based: Requires assignment of property rights over water, and market interactions between buyer and seller.
 - Enhanced land-tax on irrigated land above a certain size of holding
 - Royalty from private players: Payments may be made by private players who are assigned rights to provide irrigation water.
 - Land development rights: Auctions of rights for land development, esp. along canal banks that are also used for inland water transport.

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Annex-1.2.1 (Contd..)

Overall Comment

- The proposals by NCAER are rather generic in nature, and do not amount to a clear, pragmatic financing *and cost recovery* plan.
- International sources are not considered.
- Requirements of due diligence for sourcing funds from different sources are not addressed.

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