

# **National Workshop on Reservoir Operations Model (ROM) and Improved Water Management**

**21<sup>st</sup> June 2011, Vyapara Bhavan, Chalakudy**

Organised by:

Chalakudy Puzha samrakshana Samithi (Kerala State Centre)

Forum for Policy Dialogue on Water Conflicts in India

Downstream impacts of dams are presently one of the most discussed topics in India. Dam operations especially power generation pattern from hydro power reservoirs decide how much water would be released, in what quantity and at what time to the downstream side. Such flow regulations created by upstream dams are impacting on drinking and irrigation water needs of downstream populations apart from the impact on river ecology and flood plains. Since late 2008, The Kerala State Resource Centre of the Forum for Policy Dialogue on Water Conflicts in India has been carrying out an Action Research program in the Chalakudy River Basin in Central Kerala with the broader objective of resolving upstream – downstream conflicts existing in the basin between hydro power and irrigation uses. One of the main objectives of the action research is to develop year round ‘Reservoir Operations Model’ options for the Kerala Sholayar and Poringalkuthu HE projects in the Kerala part of the river basin inclusive of ensuring minimum flows that would synchronise with the needs of the downstream Major irrigation project, the Chalakudy River Diversion Scheme (CRDS).

The Reservoir Operations Model was presented at a National Workshop held on June 21<sup>st</sup> 2011 at Vyapara Bhavan, Chalakkudy, to seek expert comments, inputs for refinement before a selected audience. Experts from across the country and the State, members of Kerala State Legislative Assembly, Member of Parliament, local self government representatives, and officials from all the concerned departments were invited.

The Introductory session was chaired by Prof. M K Prasad who emphasized the need for changing existing policies and laws if we really wish to preserve our natural resources including rivers. In this session K J Joy from the Forum, explained the work pattern of the forum in the water conflicts sector in India. Dr.A.Latha, Principal Coordinator of the Forum’s work in Kerala briefly presented on the need and significance of River Revival in Chalakudy river basin emphasizing that Reservoir Operations Management is just one of the strategies towards improving flows in the heavily dammed river.

The first session was chaired by Himanshu Thakkar from SANDRP, New Delhi. S.P.Ravi from the CPSS made a detailed presentation of the ROM . Dam re- operation patterns were suggested for the existing main reservoirs, Sholayar and Poringalkuthu HEP operated by Kerala State Electricity Board. The river presently has six dams out of which

four are part of Interstate Parambikulam Aliyar Diversion. For Sholayar, a reduced monsoon discharge by 10 – 15 % and non – monsoon discharge to be increased correspondingly was suggested. It was recommended that the present average non-monsoon discharge of 201MCM can be increased to about 230 MCM. The data processing steps were explained. For Poringalkuthu HEP, it was suggested to run the station as base load station at about 24 MW capacity from the present peak load during summer. For the major irrigation project downstream, the altered flows would ensure improvement in 15 cum/ sec with a balance of 2.25 cum/sec to be released into the main river. The suggested ROM after fine tuning based on expert comments is to be presented before policy makers. Steps to seek the support of people's representatives, LSGs, and public will also be carried out. Improved system and functional efficiency of CRDS is to be assured in a participatory manner.

Expert comments to the presentation were given by Dr. Janakrajan from Madras Institute of Development Studies, Shripad Dharmadhikary from Manthan, Suhas Paranjpye from SOPPECOM and Dr. Indira Devi from Kerala Agricultural University. Himanshu Thakkar summed up the session.

The second session on 'Improved Water Management' in CRDS was chaired by Suhas Paranjape. The introduction to the presentation was given by Dr. Latha and detailed presentation made by P. Rajaneesh. It was specifically based upon the exhaustive field level monitoring of the canal and irrigation management in the CRDS. Canal survey and documentation of problems in water management followed by mobilization of farmers and local self governments, farmer level best water management practices documentation, linking up departments and farmers, formation of LSG level water resources management committees was explained in detail. Water In the ongoing third phase, activities to improve water management are being carried out with the cooperation of irrigation department, agricultural department, local self governments and farmers. He pointed out the challenges ahead as to how to ensure continuity of the process and what sort of institutional mechanism would be needed to carry forward.

Everyone appreciated the efforts taken by CPSS to take water to the tail end after more than a decade thanks to the joint efforts of all stakeholders within two years of working in the field. Expert comments to the presentation were given by Dr. George Chakkachery from CWRDM, Dr. Indira Devi and Suhas Paranjape.

Post lunch session, chaired by K J Joy, opened up the floor to the audience. The objective was to seek consensus, develop the model into a public document and to make it ready for advocacy level. In this session, Dr. S Sankar (KFRI), Dr. Bridjith (ARS, Director), Sasilal (State Landuse Board), Dr. Amitabh Bachan, Mohandas, Vinod Goud ( National Steering Committee member of Forum), Shyji Boss ( President Kadukutty GP) , PP Augusty ( member, Kadukutty GP), Chandrasekharan ( Nitta Gelatin Action Council), P K Dharmaraj ( Nilanipu ), KJ Joy and Latha gave comments.

The concluding session was presided by Chalakkudy MLA Sri. B. D. Devassy. S.P Ravi made a presentation of the important recommendations that had emerged from the day's

sessions. The session was inaugurated by the Member of Parliament, Sri. K. P. Dhanapalan. The MP emphasized the need for a policy to conserve our water resources. River Authority should be proposed again and pressurize concerned authorities to implement the same. Every project should be people friendly. He also assured full support to organize a one day workshop is organized for people representatives. BD Devassy told said that society should take up the responsibility to conserve our rivers. Ad. Biju Chirayath, the Chalakkudy Municipal Councilor added that it is important to change our perspective towards environment. S.Unnikrishnan from CPSS proposed vote of thanks.



**Gathering at the Workshop**



**S. P. Ravi presenting the ROM**