

## WORKSHOP NOTE ON ROHANI, DANDA AND TINAU RIVER BASIN AREA WATER PARTNERSHIP, NEPAL

Consolidated Management Services (CMS) a partner member institution of JVS/NWP in collaboration with Friends Service Council Nepal (FSC/N) a local NGO organized a workshop in Butwal Municipality, Western Development Region of Nepal, on 31<sup>st</sup> August 2003 for the formation of Area Water Partnership Forum (AWPF) in Rohani, Danda and Tinau River Basin Area. The main objectives of the workshop were to:

1. Introduce the concept of AWP as well as the need to establish such a partnership to the potential member (Participants)
2. Establish initial networking and receive feedback from the stakeholders of the river basin and
3. Recognize the participants as AWP members to initiate the AWPF registration process.

Mr. Ajoy Karki, the consultant of the Rohani, Danda and Tinau River Basin Study was the Resource Person of the workshop. The study, as per the preliminary guidelines of South Asia-TAC, was undertaken to form a basis for establishing AWP in the Rohni, Danda and Tinau River Basin for JVS/NWP.

Altogether 62 representatives from Government Line Agencies, Local Government Units, NGOs and Media Representatives attended the workshop. Mr. Surya B. Thapa, chairman of FSC/N chaired the workshop. The chief guest of workshop was Mr. Hira Raj Regmi, Local Development Officer of Rupendehi district. Dr. Upendra Gautam, Acting Secretary General of JVS/NWP and President of CMS and Mr. Ajoy Karki, were the main speakers. The workshop was conducted in Nepalese language. Translated copy of river basin study in the Nepali language was distributed as a concept paper to the participants. In addition, Nepali version of IWRM, a GWP publication and brochure of NWP were also distributed to the participants.

Following characteristics of river basin were presented in detail the workshop with the help of PowerPoint.

**Rohini River:** The catchment area of the Rohini river basin within Nepal is 240 km<sup>2</sup> and lies between 83° - 24' - 30" to 83° - 39' - 10" longitude and 27° - 28' - 00" to 27° - 43' - 50" latitude. The river length (from its origin to the Nepal India border) is about 37 km and its elevation varies between 950 m to 100 m above mean sea level (amsl).

*Present Water Use Status:* The use of surface water from Rohini River is nominal. This is primarily due to inadequate flows in the river during the dry season (less than 2m<sup>3</sup>/s). The water stress is not due to lack of flows during the low flow season, but more due to floods during the monsoons.

**Tinau River:** The elevations of the headwaters of the Tinau River's tributaries vary from 1000 m amsl to 1700 m amsl. The total catchment area of Tinau basin within Nepal is about 1100 km<sup>2</sup> of which 550 km<sup>2</sup> is located in the hills and the rest in Tarai.

*Present Water Use Status:* The Tinau river water is extensively used along its entire reach as well as along its tributaries. Uses include irrigation, hydropower and domestic consumption.

**Danda Khola:** Danda Khola is a small stream between Tinau and Rohini. It drains in the Churia hills between Tinau and Rohini catchments. Furthermore, seepage water from the upstream irrigation schemes (Sorah –Chhatis Mauja) also augment the Danda Khola flows. Its total catchment area is estimated to be about 70 km<sup>2</sup>.

*Present Water Use Status:* The only significant use of the surface water from the Danda River is by the Danda Irrigation Scheme. Apart from this system there are few shallow tube wells installed by individual farmer and hand/rower pumps installed in the households within the river catchment area.

**Population:** The total population of the three basins is estimated to be 654,300 in 2001. By the year 2025 the total population in the Rohini-Danda-Tinau basins can be expected to be 1099,000.

**Projected Water Scenario in 2025:** By the year 2025 the population in the river basins may increase by 68% and this could result in further water stress situation unless judicial planning and use of water is practiced.

- With the increase in population the volume of municipal waste and sewer will increase and unless adequate wastewater treatment and solid waste disposal facilities are timely developed, such wastes are likely to be disposed of in the Tinau river. This would cause severe water pollution downstream. Furthermore, disposal of even treated wastewater can cause disputes with the downstream irrigation users.
- Further development of small run off river hydropower project in the upper Tinau basin will be difficult as they have to be located such that there is adequate flow at the hydro-intake and the tail-water is released upstream of intakes of the existing irrigation system.
- The intensity of flood impacts due to encroachment of the flood banks would significantly increase in the Rohini River, where this has been a recurring problem annually.
- If the farmer managed irrigation systems in the upper and middle reached of the Tinau basin choose to construct more permanent intakes and diversion structures, there will be less flow for the irrigation systems downstream which currently depend on the seepage from the upstream systems. This would cause water stress in the lower irrigation systems especially during the low flow season.

With the increase in population in the river basins as well as growing industries and urban area, the consumptive use of water will increase. Along with lack of sufficient water supply during the low flow season in certain parts of the basin, the flood impacts could be more severe. Therefore, it is likely that the three river basins will be water stressed by 2025 unless Integrated Water Resources Management is initiated.

Constraints faced during registration process of Mai Khola AWP in Ilam last year was also shared with the participants during the workshop participants actively participated in the discussion followed by the presentation of the basin study.

The participants extensively discussed the concept paper presented by Mr. Karki. Dr. Upendra Gautam, Mr. Ajoy Karki and Mr. Deepak Pandey responded to the question raised during the floor discussion.

Towards the end of workshop, the participant elected 9-member ad-hoc AWP that will do the necessary work to establish permanent AWP. They also agreed to nominate the local NGO FSC/N to act as the local host of the AWP network.

On the same day afternoon, the ad-hoc AWP organized its first meeting and decided to take the following actions.

*Draft Constitution:* The meeting decided to form a four-member constitution draft committee. The meeting also decided to register the AWP in Rupandehi District Administration Office under the Association Registration Act 2034.

*Nomination of Advisor:* The meeting decided to nominate various government entities (Chief District Officer, Local Development Officer, Water Induced Disaster Prevention Division Offices, Irrigation Development Division, District Soil Conservation Office, District Forest Office and Drinking Water And Sanitation Division Office) in Palpa and Rupandehi districts as advisor to ad-hoc AWP.

*Others:* The constitution Draft Committee will submit draft constitution by 2<sup>nd</sup> October 2003.

The meeting ended with the vote of thanks of the workshop coordinator Mr. Dipak Pandey.