NARBO workshop participants' study tour to the upper part of Maha Oya on 27 of April 2005

B. R. Ariyaratne

Problems in the upper part of the basin

Major problems in the upper part of the basin are soil erosion, unplanned settlements, direct discharge of effluent from factories and urban waste to the river, and negative impacts of water tapping for mini hydropower projects.

Clearing of jungles in the upper part of the catchments for settlement and other development activities and wood logging has resulted in soil erosion in the most sensitive areas of the catchment. Due to the soil erosion, only a very thin layer of soil remains in the mountains. This has reduced the water holding capacity of the soil in this part of the catchments and has created serious negative impact on the base flow of the river. It is also observed that land has been allocated for new settlements in the sensitive areas of the catchment and this would lead to further deterioration of the catchment area.

Rubber is the main crop cultivated in this area and there are a large number of rubber processing factories along the river. Most of these factories have wastewater treatment plants, but in many of them, they do not function properly or are not operated properly. As a result, wastewater from these factories is drained in to the river without being properly treated. This creates serious health hazards for people who use river water tapped by the Water Supply and Drainage Board for drinking. For example, there are factories about 100 meters in the upstream of Mawanella intake of the Water Supply and Drainage Board.

The other major problem in the Mawanella area is the location of settlement areas in the immediate vicinity of the riverbank. Majority of people living close to the river do not have sanitary facilities like toilets and they discharge sewage direct in to the river. This too creates health problems for down stream people using the water from the river. In addition, there are factories and industries releasing pollutants to the river. For example, many service stations do not have wastewater treatment plants. As the Water Supply and Drainage Board have no facilities for remove oil and other chemicals from river water in their water purification process, this creates serious health problems for the people using river water for drinking and other domestic purposes.

There are mini hydropower schemes owned and operated by private sector in the upstream areas. It is observed that some schemes can store the entire discharge of the river for power generation, which leaves the immediate downstream river channel without base flow. This creates localized water shortages and increased potential for local water disputes.

Specific problems

- 1. Soil erosion in the catchment
- 2. Urban pollution
- 3. Industrial waste
- 4. Negative impacts of mini hydropower projects

Maha Oya Basin Upper reach program

27th April

Time	Location	Description of problem	Contact persons / Remarks
06:00	Negombo		Depart Hotel
09:00 – 11:00	Aranayaka junction	 Urban waste water / garbage Unplanned settlements Mini hydropower Effect of pine cultivation Water shortage and water quality related problems for domestic water supply 	Mr. E. N. Wijesingha (CBO president) Mrs. W. A. N. K. Wickranaratne (GN Uda gama) W. J. Chaminda Snap 1 – 6 Locations marked on map
11:00 - 12:00 12:00 - 13:00	Aranayaka DS Office Aranayaka		Meeting with officials Lunch
13:30 - 15:00	Mawanella	 Untreated waste water from vehicle service stations Urban waste water Discharge of pollutants from Rubber factory Water pollution at intake of a domestic water supply scheme 	Mr. Chatura Singhapurage (Maha Oya friends) Mr. Chandra Ranatunge (Maha Oya friends) Mr. D. A. Jayatilaka (GN- Mawanella) Snap 7 – 14 Locations marked on map
15:30 – 17:00	Mawanella DS office		Meeting with officials
19:30	Negombo		Back to Hotel

Snap - 1 Snap 4





 $Snap-2 \hspace{1.5cm} Snap-5$





Snap 3 Snap - 6





Snap – 7



Snap - 8



Snap – 9



Snap -10



Snap – 11



Snap – 12

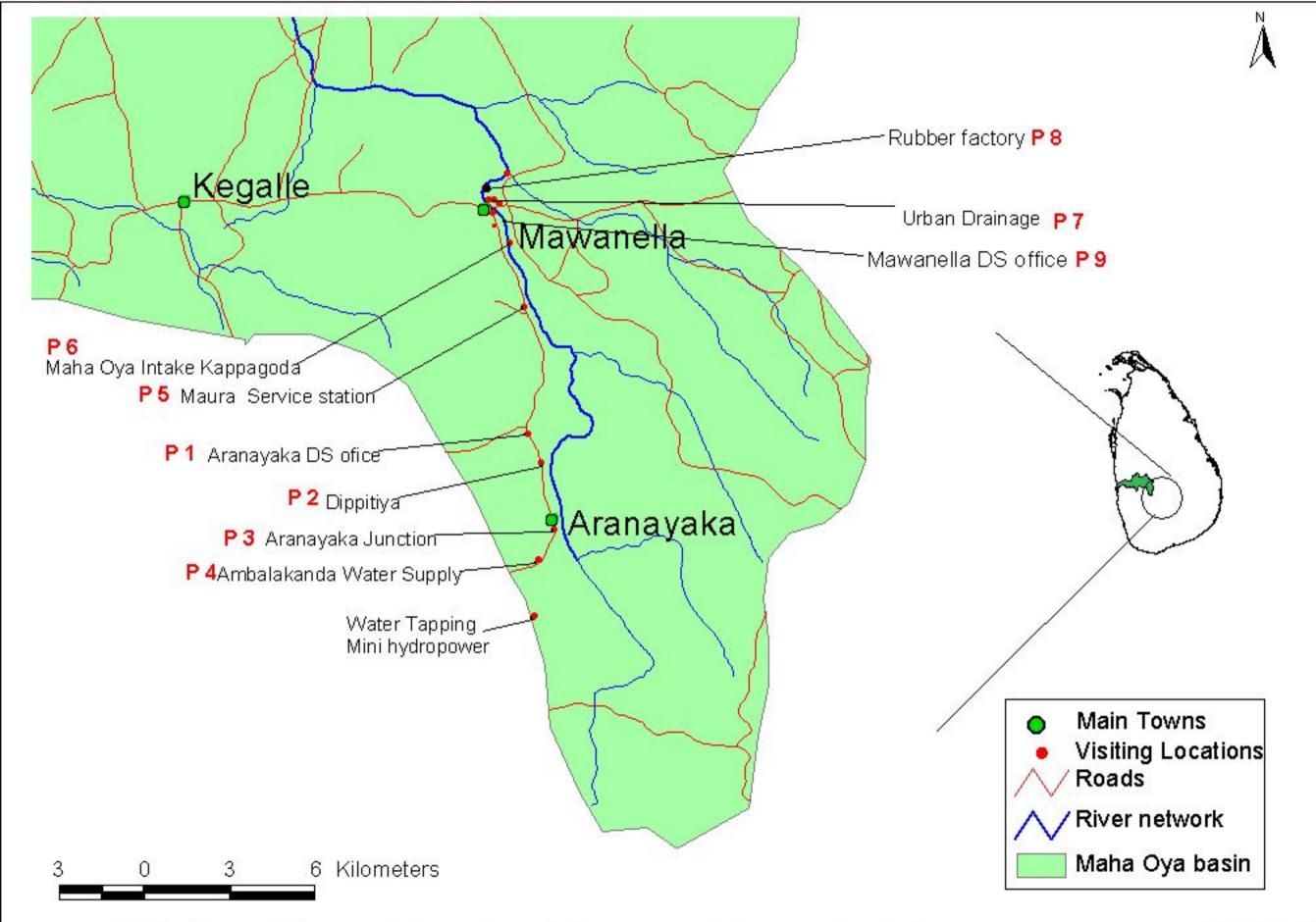


Snap - 13



Snap -14





Maha Oya Basin Upper Reach Program

