

Mahaweli Project and kidney diseases (CKD)  
among the peasants in the NCP  
By Eng. M Chandrasekera

In the lengthy essay dated 29th May, Dr. Prasanna Cooray in response to my comments dated 14th May on his original article which appeared on 9th May on the above subject proves that he has gone off the track. As a result, he now adds further loads of silt (if I were to use his own jargon), hearsay allegations etc. in the present essay. While his basic problem is finding an answer to where and how the drinking water in NCP is getting contaminated with heavy metals and agrochemicals, he keeps on beating about the bush.



In his original article he said that Uma Oya should not be diverted to Hambantota since the curse that befell the NCP peasants will befall the Hambantota peasants too. In the current essay, he has changed the topic to Ecology, Accelerated Mahaweli and Kidney diseases in which he talks very little about NCP and CKD but devotes much more space to Environment, Ecology, Agriculture, Engineering, Public Health and many more issues. He now attempts to say that all these problems originated with the Mahaweli Project.

I presume that he is a qualified man of medicine but not an engineer, agronomist, sociologist, environmentalist or economist. If he wished to seek assistance (from professionals other than from his own), in finding an answer to the above problem, he could have easily sought the assistance of the Organization of Professional Association (OPA) where his own profession is represented via GMOA, SLMA etc. I am sure that the OPA could commission a scientific study of this problem by coordinating the services of all the relevant professionals.

Instead he continues to depend on advice of soothsayers and some quacks who are leading him up the garden path. Before we proceed any further, we must understand the difference between the Mahaweli Development Programme (MDP) and the Accelerated Mahaweli Development Programme (AMDP).

The areas of NCP benefited by Mahaweli diversion were not parts of AMDP but under the original MDP. I have also indicated the areas worst affected by CKD. (Source: Island Paper - 29th May 2008 - Page 2, by reporter Don Asoka Wijewardhana)

According to this news clip, it is very clear that of the CKD affected areas, only Dehiattakandiya - 300 cases and Girandu kotte - 2,250 cases are the areas that receive Mahaweli water. Further, we note that these are areas on the banks of Mahaweli river itself and hence not the areas to which Mahaweli water had been "exported" as indicated by Dr. Cooray.

Parts of NCP where the incidence of CKD has been common, such as Medawachchiya - 3,550 cases, Padaviya - 1000 cases, Kebitigollewa - 300 cases, never received Mahaweli waters. Note that the original article by Dr. Cooray indicated Padaviya as one of the CKD affected areas but in the present essay he says that people living around Padaviya are relatively spared of CKD. Are we to believe him or the statistics given by the Island reporter?

The remaining areas such as Medirigiriya - 800 cases, Polonnaruwa - 800 cases, are those fed by Amban Ganga waters diverted from Elahera Anicut via ancient Elahera - Minneriya - Kantale Yoda Ela. They receive Mahaweli waters whenever the Bowatenna Power House is in operation.

The foregoing clarifications show the nature of the myth attempted to be spread by Dr. Cooray and his clan.

In the present essay, he has down played the suggestion I made for him to collect any number of water samples from the first diversion point to NCP (at Polgolla ) and from the areas in NCP that receive Mahaweli waters as well as those having an high incidence of CKD and to chemically analyse them for CKD causing material. Similarly he has down played the suggestion made by me to study the Chemical Analysis Reports of raw water from water treatment plants at Nawalapitiya, Gampola, Peradeniya and Kandy to verify the presence of CKD causing agents.

If he follows these lines, he will be able to clear the doubts that he has on "imported Mahaweli waters".

Although I do not want to take the valuable paper space in responding to the barrage of allegations made in his second essay, in order to

clear the minds of the many readers who may have been misled by these allegations, permit me to clarify the most serious of them:

1. Mahaweli Project resulted in mere transportation of water at high speed; methods followed in the diversion of water in the past are different now: There is nothing called high speed conveyance in engineering practice. Designers ensure to keep the flow velocities within a range called "non silting" and "non scouring" for canals. Depending on the canal bed materials values of these velocities will change. Also there are flow types called "sub critical" and "supercritical". Engineers also deal with 'varied flows' and "uniform flows". Operational velocities are judiciously decided to suit particular situations.

As for the methods followed in the diversion of water in ancient times and today from an engineering point of view, I do not see any difference.

2. Increase in the use of chemical fertiliser by 13-fold from 1960 to 1994:

This has nothing to do with the Mahaweli Project. It is so all over the country. As I am not an agronomist, I cannot say whether it is justified or not. You may consult a qualified agronomist for clarification on the merits/demerits of application of chemical fertiliser and agrochemicals.

3. Chemical and agricultural inputs take place in a big way as a consequence of the destruction of the Mahaweli watershed:

This statement is not very clear. The Mahaweli Project was not responsible for any destruction of the watershed. The only significant intervention in the upper catchment areas was the creation of the Kotmale reservoir. If the worry of the doctor is the clearing of the upper water shed areas, he has to talk to the vegetable and cardamom growers, tree cutters and the local authorities who grant permits for such activities.

4. Silt and sedimentation added to Mahaweli waters in a big way following the rape of forest cover:

I do not understand the meaning of "the rape of forest cover". If he means the clearing of forest, there is no purpose in blaming the Mahaweli Project. You have to ask the tree cutters, vegetable growers and the local authorities who grant permits to those persons.

5. Replacement of the ancient 'chastity belt shaped' barrage at Elahera with a straight concrete barrage and their impact on silt accumulation:

Professional engineers know that there are barrages of different shapes and crosssections. Decisions for adopting a particular shape are taken after performing site specific hydraulic and structural calculations. If the Record Rooms of Mahaweli Authority have been maintained up to now, a technically competent person will be able to look at these calculations (done about 25 years back). Since Dr. Cooray is not a professional engineer, I suppose that he was depending on advice received from somebody who has a liking for the 'chastity belt shaped' design. I have heard that when the Volkswagen car was made on the orders of Hitler, he ensured that its front appearance should be a replica of a certain part of the female anatomy. As for the accumulation of silt behind the structures please see the comments below.

6. Nobody could give a clue of the loads of silt that are carried by the diverted Mahaweli waters in terms of metric tons per year:

I must tell Dr. Coray that it is common knowledge that that any river or stream carries a variable amount of silt during rainy seasons. This is common to rivers in the NCP too. We as engineers use several accepted methods to calculate the silt loads carried by any stream. Such calculations are done in the planning stages of any reservoir for the determination their dead storage capacities. It is a known fact that excess silt needs to be periodically removed from the reservoir beds at convenient intervals. For this purpose, designers provide separate outlets called 'silt ejectors'.

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