DROUGHTS – PEOPLE – RAINS

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Droughts and water shortages are now a regular feature in Sri Lanka and a major outcome, during this period, is that the cost of living is pushed up and many hardships caused. Here D. P. Chandrasinghe, a former Chairman of the Ceylon Electricity Board and Civil Engineer by profession, discusses how the adverse effects of these droughts can be minimised. One suggestion he makes is that fuller use should be made of the multitude of reservoirs in the mid up-country.

During drought there's an island wide cry for water. People who depend on their crops are hard hit; prices of vegetable and fruits go up raising the cost of living, followed by pestilence. Even weddings in the villages are postponed, due to lack of water for cooking the traditional meals which are often served for two days prior to the wedding. When the rains come and the same people are again in despair. So the people get wedged in between the Drought and Rains. Year in and year out, people are told that there is a water shortage due to drought. This is not good enough for them as our island is blessed with sufficient rain water and topography for storage, unlike countries like Bangaladesh.

Fortunately, the Government is fast in getting through the completion of many reservoirs in the lower reaches of the rivers and the restoration of small tanks; these provide water availability during droughts and afford flood protection. Meanwhile, what happens in the more hilly areas, where there are hundreds of small villages off the beaten track is very depressing. The press reported there was a water shortage at Hatton. There are many locations for water storage. Hiniduma was a victim of the drought. In the Hiniduma plateau there is an area where water storage is possible by small dams. I was surprised to find a stream which carries water during the drought about three miles on foot across Galaboda Estate Akuressa. At an estate at Padukka a stream flows through a rubber estate and enters a paddy field. During droughts the rubber trees are withered, latex yield falls, paddy yields fall, cattle are starved and the villagers feel the pinch. Also, the estate cannot run its pelton wheel to work the factory. The stream flows through a plateau and commences to fall on a rocky incline about 800 feet above the level of the paddy field. There are a few gaps which have to be bridged at the plateau to a height of about 10 feet, to provide water storage of about 30 acre-feet of water (1,205,000 cu. ft.) If water is made available during the drought, the environment will not drastically change to a scorched earth condition. Diyatalawa and Badulla areas are equally hard hit. At Diyatalawa there is a stream beyond the Pepper Pot Hill and Fox Hill, which did not go dry during severe droughts. In 1954 a two–hour walk took me to the stream during a very severe drought; this was an unofficial visit. The water flow was measured; there was enough to generate power for Diyatalawa, Bandarawela and the estates which were served by the Diesel Power Station at Diyatalawa. A lifting dam about 25 ft. was necessary. Water storage in that area will be a God-send to village folk. I wonder what the plight of the people is now, with the increase in population since 1954. It was reported that there was recently a shortage of drinking water up-country. Work at the T.R.I. was stopped due to lack of water and staff were sent home. There is a waterfall at St. Coombs, T.R.I. and the topography lends itself to water storage. It is also reported that there was shortage of water at Ginigathhena. These conditions cannot be allowed to continue without serious repercussions.

Where ever there is water the vegetation is lush and green Mr. U. B. Dedigama, R. M. (Rtd), who was a contemporary of the later Mr. D. S. Senanayake, when he was Minister of Agriculture, found that the coconut trees at Botale were withering away; they dried up yielding poor crops. Mr. Senanayake built up a series of small water storages along a stream which was running through the estate. Thereafter there was a marked improvement in the crop. He had then summoned the Government Agents in the area and showed them how he got good results. This reminds me of the withered condition of the coconut plantations and vegetation downstream of the Polgolla Division. By shifting the road to Teldeniya to a higher contour, about three miles, a very large quantity of water could have been stored by bridging the narrow gap through which the Mahaweli flows. This would have changed the condition of vegetation on both banks of the rocky river, which is often dry, exposing the rocks to the sun's heat.

Nature has endowed this country with enough rain and topography for small lakes to make conditions better for the people by a multitude of small lakes or reservoirs all over the country. They will release water when it is most-needed and will be almost empty at the end of the dry weather. When the rains come they will minimise flood havoc, as these reservoirs, while filling in, will delay the rapid swelling of tributaries of the rivers. Agarapatana goes under water practicacally every year in May/June. Now there are too many flash floods due to the rape of forests, making things worse. The lack of small water storages resulted in a Mahaweli Tragedy which occurred in 1982 when the farmers at Minipe had no water in the river and crops failed. According to a Press Photograph and the news, the Minister of Labour along with the Minister of Trade shed tears at Minipe when they saw the plight of the people due to crop failure and consequent food shortage.

Small water reservoirs are easy to build; they do not take a long time to build. I am aware lending institutions are ready to bank their money in such projects as the returns are high. In the year 1977 when an ADB team visited the Ceylon Electricity Board to draft the terms of a loan for the Canyon Power Project, the writer as Chairman, C.E.B., appealed to the team to include in the same agreement the grant of a loan for storage of 32,000 acre-ft. of water at Ulapane and a number of other sites which I picked up on the tributories of the Mahaweli; as these would help to tide over to some degree the water shortage for electric power and also help irrigation. The ADB team visited the sites, accepted the appeal and included a clause, as I convinced them that there will be a water and power crisis in about 1978. Beaureaucracy killed it; The Ministry stated through the radio that there will be no crisis.

Meanwhile, the Secretary sent me a Memo requesting me to stop all action I took about water storage and water diversions into the Maussakelle and Castlereigh Reservoirs. The memo was ignored by me. I let the work go on and the survey was very quickly completed in December, 1977. The survey indicated that no inhabited areas or roads will go under water by the proposal. The results were sent to the relevant authority by the Surveyor General, Mr. T. S. Munasinghe in January, 1978. Unfortunately, no action was taken.

The Prime Minister, the Finance Minister and the Minister of Trade on many occassions stressed the importance of self-reliance. Aid was flowing in from democratic countries as the policy of Government is rid of the ideas of confiscation; but, building of small dams for water storage is work which could be done by self-reliance; the country has the skills for it. For such work long drawn out investigations for several years are not necessary as in the case of large dams. Even after the large dams are completed, small reservoirs wherever possible will improve the water position both for food and energy.

A multitude of small reservoirs in mid and up-country will arrest the rising cost of living by the following benefits:

1. Ensure water availability during drought for cultivations.
2. Sustain vegetation and environment.
3. Help afforestation.
4. Ensure village drinking water supply.
5. Prevent migration to towns.
6. Milk supply will not fall during drought as at present.
7. Increase water availability to Hydro Power Reservoirs.
8. Increase availability of fish.
9. Increase energy output of run of the river small hydro plant.
10. Water wheels can be provided at small dam outlets for power.
11. Provide for less expensive transport in long lakes.
12. Provide for water sports and enhance attractions to tourists.

Now that District Ministers are given more authority according to the Policy of the President — "Greater participation of the people in the affairs of the people" — small water storage should be made their charge. The young irrigation engineers should go to the interior and explore sites for small water storage, for execution by the private sector for consultancy and construction, as senior Government Engineers are too busy on big projects.