

DROUGHT HAZARD AND RURAL DEVELOPMENT

A study in perception of and adjustment to drought

By M.U.A.Tennekoon

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One of the motivating factors for the giant irrigation tanks and the smaller village tanks which were built by our forefathers and the mighty Mahaweli diversions built by the technocrats of the present era was solving the problem of water to the farmers. Without water the farmers in this country will starve. Water is the life-blood of our economy. Therefore, a Study on Drought Hazard and how it effects the rural life of our country should be of much interest.

Tennekoon is one of those who is competent to write on this subject: His intimate knowledge of the Dry Zone farmer and the irrigation systems has made this research document both authentic and scientific. The erratic weather conditions of the North-Central Province have resulted in frequent droughts. But, it is also strange that:

"It was in the inhospitable Dry Zone which occupies about 70 per cent of the land area of Ceylon that man settled down to direct nature to his needs in the age-old battle to win food from the parent earth. This battle has been waged against the twin enemies of drought and flood". R.L. Brohier.

Tennekoon starts his book explaining evidence of research done on this subject by earlier authors. However, when it comes to Sri Lanka one could see that very little has been done and, therefore, Dr. Tennekoon's research is both timely and original.

In this Study, he has selected five settlements which fall into the transitional zone between the North Western arid and the North-Central dry zones. Further, he has selected both the traditional and the colonization schemes, and gone further to divide the selected colonization schemes into new and old schemes. His reliance on data has not only been statistical but has been extended to an opinion survey.

The author has also been able to explain some of our traditional systems of cultivation aimed at maximizing the benefits of irrigated farming and to manage the likely crop losses due to rainfall vagaries. The collective decision-making at farmer level to maintain irrigation canals, release water for reservoirs, plant crops during a particular month, use a seed variety with a particular growing period, distribute water to different tracts at different times: are all a process finely defined for the purpose of out-bidding the vagaries of drought to the N.C.P. farmer. It is this need to protect oneself from the vagaries of the weather that resulted in the farmer-community building themselves into a closely-knit social fabric without which the Dry Zone would never have become the granary of this country.

Very correctly, Dr. Tennekoon explains that it is the colonists past experience of seasonal droughts and rainy periods which bears a profound influence on their perception of droughts in the Dry Zone. A drought to a Dry Zone farmer has very severe consequences: Not only will he lose his crop, resulting in physical damage to his land, but he will lose all his surpluses of food, a reduction of his on-farm employment income, loss of animal husbandry, starvation, bringing disease, malnutrition and ill-health to himself and his family.

A drought would also bring about a social degeneration, disappointment, frustration of hopes for the future for himself and his children which would take long years to repair. Therefore, the effect of a drought should be one of the most cardinal issues to which the leaders of this country should pay attention in deciding on the development of the Dry Zone.

Tennekoon, in the final Chapter of his book, goes on to explain the farmer's adjustment to conditions of a drought. The adjustment to a drought has not only resulted in the construction of both large and small reservoirs but has also resulted in the cultivation of upland chenas, pre-sowing and after-sowing adjustments, the utilization of available resources sparingly,

so that he would be able to hold on as long as possible until the rains arrive.

The author further explains how droughts have affected the land tenure system in traditional villages, and how attempts have been made to modify this system in the face of droughts. The very system of land inheritance, by dividing it into equal shares, is itself the result of an attempt to cushion the effects of drought hazards. Berhna cultivation and the strip system of holding ownership of land are all the result of their adaptation to drought conditions.

He calls for a National effort, involving the services of many Departments to form an Organization for drought protection and to adopt a systematic and meaningful programme of work to mitigate the recurrent drought losses. He also suggests a very scientific Study of Drought Patterns in order to arrive at better conclusions and to provide protection to the farmers in time.

He also argues the case for a better approach towards drought assistance. Tennekoon's dealing of the Thesis, though academic, makes very simple and easy reading, and this should provide both the academician and the administrator with a more enlightened knowledge not only of the Dry Zone farmer but also show the direction which rural development of the Dry Zone should follow.

Before closing this Note, I wish to point out an important area where Dr. Tennekoon would be able to effectively contribute as a post-script to his thesis, and that is the impact of the diversion of Mahaweli waters towards drought hazards into the Dry Zone irrigation system. A timely comparison of the situation before the Mahaweli, and after, would make his thesis much more valuable to the future researcher. It is a known fact that the Mahaweli waters will feed almost every big irrigation tank in the Dry Zone and this would cushion in no small way the drought hazard which had been agonizing the Dry Zone farmer from time immemorial.

While commending Dr. Tennekoon for his excellent write-up, I would recommend that this should form the basis for new thinking and planning in order to bring greater benefits to the Dry Zone farmer.

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