The Proceedings of the Conference on AGRICULTURE IN THE ECONOMIC DEVELOPMENT OF SRI LANKA

Edited by

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Life in the purana villages on the other, are some of the healthy features which one should seek to retain in the new Mahaweli settlements. At the same time, the heterogeneity of social and cultural interests and the indiscriminate mixture of settlers generally observed in the colonisation schemes have to be avoided when planning the new settlements. Also the lethargic social attitudes etc. which lead to fatalistic and defeatist thinking among many of the old villagers must be changed through a programmed education of the settlers in the new areas.

A combination and amalgamation of the healthy features in the two types of settlements as part of the new settlement programme should necessarily be experimented. A pilot resettlement project undertaken by the MDS is explained in considerable detail in the course of the paper so as to underline the problems faced and to illustrate the form in which MDS is thinking. It may be questioned whether only some of the elements of the social pattern either in the colonisation schemes or in the purana villages could be copied and adapted without the other aspects of the society as a whole. The author concedes that this is only an experiment and admits that the extent of its success could only be assessed after it has been tried out.

The purpose of this experiment however, the writer goes on to explain, is to create a healthy and dynamic community in the Mahaweli Development Area which could utilise to the maximum advantage the costly facilities provided by the State, not only for their own benefit but also in support of the economic development of the country.

6.2 COMMENTS

BY ROBERT CHAMBERS

The Mahaweli Project is by far the largest single development project in Sri Lanka. Its implementation has been tentatively programmed to cover 30 years. If fully implemented it would be capable of generating 500 MW of electricity and providing irrigation water for 900,000 acres, of which, however, 360,000 already receive some irrigation water. To clear up a confusing inconsistency, the generally agreed usage for describing the sequence of implementation is that there are phases, projects and stages. In the first Phase there are three Projects, and Projects 1 and 2 are described briefly. The sectors of land which is already being implemented, those which are being planned and those which remain to be considered are indicated in the table which follows. It is anticipated that the outcomes of the first three stages will be (apart from hydroelectric benefits):

Stage I: 120,000 acres which are already being irrigated will receive additional irrigation water.
Stage II: 100,000 new acres will receive irrigation water, and 20,000 acres which are already irrigated will receive additional water.
Stage III: 30,000 acres under the Kaudulla and Kantalai reservoirs will receive water.

In my remarks I shall be concerned not only with these stages but with some aspects of the development project as a whole and in the longer-term.

The two papers deal respectively with settlement policy and with the likely impact of Project I on agricultural productivity in Sri Lanka.

SETTLEMENT

My remarks on Jayaratne’s paper will be brief as settlement will be considered in more detail later in the conference. He is concerned with settlement in Stage II, particularly in Kaudulla and Kala Oya where about 70,000 acres are to be provided with irrigation water. To these areas there will be both new settlement and old purana settlements to be incorporated into the new system.

The proposals for policy and procedures for new settlement appear sensible and humane. The adoption of individual family holdings avoids the tempting pitfalls of ideological utopianism.
and recognise the wisdom of giving settlers a form of tenure and security which they are likely to want. Relating the initiative of settlers themselves should also avoid the worst courses of the dependence syndrome which so commonly make the costs and reduce the benefits of settlement programmes.

The proposals for incorporating existing peasant lands into the new irrigation system are noteworthy for introducing a small-scale land reform. As the author points out, they do not involve very large areas, but they may prove to be important testing grounds to identify the practical and problems of an evolving land reform on USA lands. The proposal is to acquire the land compulsorily from the owners with compensation but that later to give them preferential mortgages for the acquisition of new allotments if they are otherwise eligible to receive land. This will presumably mean that those with small paddy holdings will receive more land, and those with large holdings will receive less. But the latter may be compensated by the earlier mortgage of part of their land. The proposal is at the outset an imaginative one that may warrant critical examination, and it might be useful if the process could be monitored and evaluated.

Finally, the proposal in the paper, as so often with settlement promoters, balances a mixture of delay and procrastination on the one hand between compromise and consent. For example, one wonders when the majority will be that follows from the observation that enrolment to each of the settlement schemes may be delayed for several years. The Indian farmer is a very patient man but he is also a traditionalist. In many areas the settlement schemes have already been proposed for several years, and it might be appropriate if due consideration are given to the question. The experience gained there should be incorporated into future policy-making, and it might be useful if the process could be monitored and evaluated.

THE IMPACT OF PROJECT 1

Mahawetawa’s paper and its supplement discuss the possible impact of Project 1 on Sri Lanka’s agricultural development and through this on economic development. This is a big and complex subject with many interrelations and anyone who has to attempt to cover it is a short paper deserves sympathy. However, the conclusion that Project 1 was justified “to produce the food requirements of the country” is not, to my mind, effectively substantiated either by the authority of the UNDP’s study’s finding that Project 1 would give the best results, or by the evidence presented in this paper. Much more detail of the costs and benefits of the alternative projects was needed to demonstrate that Project 1 is the most economically viable option. The question of the viability of a project of such magnitude to the Mahawetawa Development Project as a whole. Moreover the benefits estimates appear high. If national income is measured at around 90 million dollars of paddy production at about 45 million dollars, the benefits must be expected that Project 1 will close the gap of 25 million dollars. The figures given in the paper is about 16 million dollars from the three stages of Project 1. This appears a high estimate, based at least in part on projected production of 90-100 hectares of paddy per annum. In any case, by the time that production starts the amount of paddy that can be produced per year would not be sufficient to meet the needs of the national self-sufficiency. Mahawetawa looks more like a holding operation which may prevent the gap widening rather than a means of closing it.

GENERAL COMMENTS

Four sets of comments seem worth making.

(1) Economic “viable”

The paper by Mahawetawa states that “the economic and technical feasibility of the project has been established.” The economic feasibility is only in dispute. It is still difficult to determine the results of economic feasibility, even though the authors claim this. In any case, economic feasibility means whether or not the necessary funds can be raised, and economic feasibility means whether or not the necessary funds can be raised, and economic feasibility means whether or not the necessary funds can be raised, even though the authors claim this. The two differ only in that it is with government projects, to raise or fail money to finance them what from a strictly economic angle they are least desirable than alternative ways of those funds. We are told in the paper that stage I has been fully 42
financed and Stage II partly financed. But the question of greater interest and importance is whether or to what extent Mahaweli Ganga is justified economically.

Many hard questions need to be asked and answered before one can say that a major project is economically justified. It is not enough to quote an official internal rate of return since it is so common even in the most respectable circles for internal rates of return to be fiddled to produce the answers that are wanted. In the case of Mahaweli Ganga some of the hard questions are:

— what are the estimated recurrent costs? Uda Walawe, I believe, costs about Rs. 10 million a year just to keep running, quite apart from development costs. If some 33,000 acres are irrigated, and our target is over twice this figure, this means a recurrent cost to the government of no less than Rs. 400 per acre per annum merely to keep the project operating. It is difficult to know how to remove the persistent blind spot in economic evaluations which fail adequately if at all to anticipate recurrent commitments of this sort and which fail adequately to include them in the discounting of future cost flows as part of the calculation of the internal rate of return. So the questions are: what recurrent costs are anticipated for Mahaweli Ganga (in the employment of staff, in maintenance, in vehicles, in subsidies to settlers, etc.), and have they been taken into account in calculating the internal rate of return of 12 per cent?

— what provision has there been for cost escalation? There seems to be a paradoxical law that the larger the project, the larger is the proportion of unanticipated costs to original estimates. One may perhaps be forgiven for asking whether Mahaweli Ganga might not become Sri Lanka's Concorde.

— what provision has there been for the avoidance of the mistakes made on Gal Oya and Uda Walawe? It would be tedious to recite the catalogue of criticisms in the Gal Oya Evaluation Report, or to labour the difficulties which have beset Uda Walawe through the irrigation for a paddy crop of land with high percolation rates, or to emphasise the unresolved problems of water control and management which both projects still face. But if such difficulties are to be avoided in the construction and operation of Mahaweli Ganga, deliberate provision has to be made.

— is there an economist or a team of economists responsible for continuous reappraisals of the desirability of the next steps in the programme, whatever they may be, in the light of the very rapidly changing economic situation both within Sri Lanka and in the world? And if so, does he or do they have the degree of detachment needed to be able to turn their thumbs down when necessary? And if they do turn their thumbs down, how likely is that to be effective?

(iii) Thinking about water

There is a persistent and quite extraordinary gap in thinking about water. The three volumes of the Final Report of the UNDP/FAO on Mahaweli Ganga present a striking demonstration of this gap. Apart from the hydroelectric aspects, the justification for the Mahaweli Ganga Project is that it will increase agricultural production through the provision of additional water for irrigation. The Report states that in the area under command, although 1.5 million acres are suitable and available for irrigation, water is only sufficient for 0.9 million acres. The immediate and obvious implication is that water is a scarcer resource than land and that the sparing use of water through good water management will be critical in determining production benefits. Yet the Report gives less than one page to the organisational aspects of water control, while devoting an average of eight pages each to the organisational aspects of supply of inputs, marketing, agricultural credit and co-operatives, and agricultural research, extension and education. It is understandable that the paper by Maheswaran should follow the distinguished international team of UNDP/FAO experts along the path which they so authoritatively blazed in
The wrong direction. The paper states, for example, that "The cropping patterns in the new point of time." This is sensible as far as it goes. But the cropping pattern should also depend on the types of soil and the marketing conditions operating at any point of time.

The diverted water of Mahaweli Ganga represents a huge national investment and it is at best possible, the farmer will be able to so choose his crops as to get the best returns for himself. But for all the creative aspects, the vested interests attracted to and supported by large projects are beloved with objects of unquestionable beauty and high cost but of doubtful productive value. There is a persistent danger, and not by any means only in Sri Lanka, of what I hope I can without disrespect call the Peronozzana Bacta complex. It is more exciting, more satisfying, and eager to ensure special efforts for works of construction than it is to manage their operation once constrained. Moreover, as Parakrama Bahu the Great knew too well, construction is more prominent and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation.

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Albert Hirschman, in his characteristically provocative book Development Projects Observed, has presented the doctrine of the Hiding Hand. According to this, habitual underestimates of the diffculties which projects will face are offset by compensating habitual overestimates of the difficulties which projects will face. Moreover, as Parakrama Bahu the Great knew too well, construction is more prominent and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation. Moreover, as Parakrama Bahu the Great knew too well, construction is more prestigious and more likely to immortalize the names of those responsible than subsequent operation.
In this respect, Mahaweli Ganga has the strong advantage of being much more divisible than some other projects. In Maheswaran's words, "Each phase consists of several projects and implementation could be in stages in separate units without prejudice to subsequent developments." The questions then are — is there a hatchet machinery which can stop the flow of phases, projects and their stages? Is it powerful enough to operate? What vested interests, if that is not too pejorative an expression, might resist such a decision? How, if necessary, could they be overcome?

A real aspect of the large project trap is the inertia of special organisations set up at the development and settlement stages. This may apply particularly to engineering, settlement and extension staff. Heavy staffing becomes less necessary as construction and settlement are completed. But the parent organisation finds itself with its own resettlement problems for its staff. The easiest solution is a sequence of further projects to employ the same people: in Britain, Blue Streak followed by TSR 2 followed by Concorde; in Sri Lanka, is it too fanciful to draw a parallel in Gal Oya followed by Uda Walawe followed by Mahaweli Ganga?

(iv) Opportunities to innovate

Although the tone of these remarks has been generally critical, I should like to end on a positive note. Large projects present challenges which sometimes call forth great effort and imagination. I do not mean to undervalue the work which has gone into the Mahaweli Ganga Project. But I do think that the opportunities which it presents, for as long as it is being implemented, should be adequately exploited. Perhaps the greatest opportunity is to innovate. A partially independent Board with its own organization has shown the way to try out new forms of organization and new procedures which it might be much more difficult for ordinary government departments to undertake. The experience gained with consolidation of paddy fields, as described by Jayaratne in his paper, is a case in point. Perhaps other new departures should be tried. And perhaps the most important of all would be to design, test and replicate management systems for water, concentrating on the management of the people who manage the water; for if water management on major irrigation could be made much more efficient through methods developed in the relative freedom of Mahaweli Ganga, and if those methods could be spread through major irrigation in Sri Lanka, the benefits might even be greater than those which derive directly from the Mahaweli Ganga Project itself.

6.3 DISCUSSION

By Piyathiri Wickremasingha

R. S. Jayaratne's paper received little attention on the ground that it was best dealt with in the afternoon session on settlements. The discussion was mainly concerned with issues raised by the discussant (Robert Chambers). The major topics were as follows:

(a) A review of the economic appraisal of the project with a view to testing its soundness.

(b) The advisability of reconsidering each stage of the project.

(c) Water management issues.

M. Maheswaran (Deputy General Manager, MDB) took up some of the points raised by the discussant, especially the question whether a feasibility study undertaken in the early 1960's had much relevance in the present context. He agreed that there had been unanticipated escalation in costs. Estimates have been revised in the latest feasibility report (not made available to the public) in order to allow for these. He explained that some cuts in the original plan had been made to exercise economies, i.e. giving up of automatic control devices, etc. In reply