



LAND SETTLEMENT IN SRI LANKA

1840 - 1975

A REVIEW OF THE MAJOR WRITINGS ON THE SUBJECT

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FOREWARD

Land settlement in Sri Lanka has been traditionally understood as the process by which the Department of Land Settlement determines whether a given extent of land belongs to the Crown or to a private citizen. This conventional understanding of land settlement did not of course apply to the settlements of people under major and minor irrigation schemes situated principally in the Dry Zone areas of the country. This process of settling people under irrigation schemes in the Dry Zone which came to be known as 'colonisation' occupied an important position in the history of domestic agriculture in this country for nearly four decades. Nevertheless, the overall impact of colonisation schemes was comparatively small when compared to the dominant position occupied by plantations in the export sector of the country. One of the most important changes that has taken place in the agrarian sector of Sri Lanka during the period 1972-1976 has been the implementation of the Land Reform Programme which started in 1972 and was continued further by the takeover of the Company-owned Estates in 1975. This has indeed been a radical transformation of the agrarian situation. The full impact of these changes will not be seen for a long time to come. Nevertheless, the question of utilising these lands for productive employment has come forcefully before the public eye. The magnitude of the land taken over by the State and the manner in which it is to be utilised in the different parts of the island has made land a key issue in contemporary agrarian policy. The conscious attempt at finding new avenues of employment in the agricultural sector has been a national reaction to the unemployment problem and the international food crisis which has affected most parts of the world during the last few years.

It is for these reasons that the Agrarian Research and Training Institute which has always attempted to maintain a central concern in the agrarian policies and programmes of the government brought out in August 1974 an important research study on "New Settlement Schemes in Sri Lanka." This study which has received considerable attention has raised a great deal of interest in the various forms of settlement planning that are being undertaken in Sri Lanka at the present time.

While the land reform programmes carried out by the government during the period 1972-76 have raised the subjects of land settlement and settlement planning to a level of national concern, the historical perspectives would indicate that the alienation of land for human settlement has been a major concern of agricultural policy for several decades. The interested student of contemporary changes in the agrarian sector in Sri Lanka must be alive to the manifold ramifications of this subject in terms of historical developments, political changes and the changing economic and social objectives which in turn greatly affected the policies regarding man and land in the country. It seems to us that all citizens of this country should have a good general understanding of how the agrarian situation in this country has evolved, at least in the post-independent era, and be able to make informed and analytical judgments about contemporary developments.

It is to meet and foster this need this publication, which seeks to review the major writings on the subject of land settlement in Sri Lanka during the period 1840-1975, is being issued. The authors are mindful of the fact that this review may have overlooked some writings on the subject. If this be the case, we hope that our readers will help us in rectifying any such omissions. Every effort has however been made to ensure that this publication is a reasonably accurate and comprehensive guide to the literature on land settlement in Sri Lanka.

We trust that this publication will provide a further incentive to policy makers as well as the general reading public to take an abiding interest in one of the most crucial development areas of this country.

A.T.M. Silva
Secretary, Ministry of Agriculture and Lands,
and
Chairman, Board of Governors,
Agrarian Research and Training Institute

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Chapter 1

Studies of Land Settlement - An Analytical Overview

Our initial objective in compiling this review of literature on land settlement in Sri Lanka was to present, in a readily available form, summarised documents on the subject which would be of interest to settlement planners and implementers but which might otherwise be overlooked. However, in reviewing the literature it became clear to us that the study could serve an additional, more valuable purpose: namely to define the trends in land settlement policies over the last 50-100 years, to evaluate the results of particular policies at particular times, and to assess the relevance and effectiveness of the large number of studies that have been carried out in the field. This, we feel, may be helpful to policy-makers and planners, both in formulating future settlement policies and implementation procedures, and in identifying areas and methodologies for further research.

This introductory chapter presents an overview of the published literature on land settlement in Sri Lanka, defining and analysing the major trends discernible in various aspects of settlement policies and implementation from the Crown Lands Ordinance of 1840 up to the present time.

1.1 Objectives of Settlement :

From the time that the first settlements were started in Sri Lanka, the policies adopted by the Government for developing and settling new land have reflected an amalgam of objectives - relief of landlessness, increase in food production, protection of peasant farmers, provision of employment on short and long terms, increase in the Gross National Product, establishment of dynamic growth centres, etc. Some of these objectives have inevitably proved to conflict with others : the social objectives with the economic, the short-term requirements with the long-term, the local political interests with the national. The emphasis given to each kind of objective has varied from time to time and from place to place during the period under review, and the balance between different objectives has been the major single influence affecting the outcome of the settlement exercise.

The conflicts between different objectives emerge clearly from an analysis of the various aspects of land settlement policy, which are outlined in this chapter.

1.2 Land Alienation :

In the nineteenth century the Government's chief concern was to get new land developed, to boost the economy with minimum cost and trouble to itself, and to bring maximum returns to the colonial planters and officials. Land was given at a low cost to any one who had the capital and know-how to develop it, and little interest was shown in assisting small peasant cultivators. The Crown Lands Ordinance (2.1) and Waste Land Ordinance (2.2) reflect this trend. In the rare instances where peasant colonisation was promoted, as at Kalawewa in the 1890's (4.1), minimum investment was made by the Government such that the experiments inevitably failed.

From the 1930s there was a growing feeling that the peasants as a class should be protected and assisted. There was at the same time an increasing awareness that the peasantry constituted a potentially productive but underutilised economic resource. This feeling grew quickly in the light of the growing landlessness in the wet zone, and the importance of raising internal food production for the increasing population. The Land Development Ordinance (2.3), enacted in 1935, introduced the principle of Government initiative in selecting settlers and alienating Crown Land to landless people who lacked the capital and resources needed to obtain and develop such land on their own.

While Government intervention was essential for promoting the interests of the poor farmers, it has - as in every country where State-sponsored settlement has been attempted - introduced many new problems of its own.

1.3 Selection of Settlers :

Under the Land Development Ordinance, while some large holdings were allocated to "middle-class Ceylonese", the main criterion in selection of settlers was landlessness or social need. Several studies point to the conflict that this introduced between the objectives of social justice and agricultural efficiency. Many of those who moved to the early dry zone colonies were landless people with large families who, however, lacked agricultural experience and ability or were otherwise unsuitable as settlers (2.6, 3.1, 5.1, 6.1).

The conflict was accentuated by the tendency to distribute places on settlement schemes among people from as many parts of the country as possible, in order to spread the benefits of the schemes more widely. This led to the creation of heterogeneous communities on the new settlements, to factions based on caste, politics, locality etc., and to frequent conflicts between the settlement population and neighbouring communities (3.1, 4.5, 4.13, 5.2).

The importance of selecting homogeneous groups and of planning carefully their integration with the existing population of the settlement area was recognised as early as 1929 (4.2), but has proved difficult to achieve. The Mahaweli Development Board has proposed to accept collective applications from groups of settlers, and to allow the settlers to choose with whom they will live in the new villages, thus facilitating the establishment of integrated communities (7.1).

Since the 1960's priority has been given in some settlement schemes to selection of educated youth, particularly in collectively operated settlements such as the Youth Schemes (3.6), Co-operative Farms (2.7), Divisional Development Council Projects (2.8) and settlements established on estates acquired through Land Reform (2.9). The Members of Parliament have actively participated in the selection process in addition to the Government officials (2.7) : this seems to have been justified in view of the ideological objective of the new settlements (4.9, 4.13) though it has led to uncertainties about the settlers' future in case of a change of Government (7.5). However, while the youth have generally proved open to new ideas and new forms of organisation, several studies show the problems that have arisen and the conflicts that have developed between the settlements and neighbouring villages, through the creation of artificial communities of a single age-group and sometimes a single sex (3.5, 3.6, 4.9, 4.13). The short-term objective in creating this kind of community - of creating employment and providing training to the youth - was clear, even in a scheme put up as early as 1941 (4.4). But the manner in which the settlements were going to be stabilised in the long term, both internally as well as in their relations with surrounding communities, does not seem to have been clearly thought out.

In the Land Reform settlements an additional complication has arisen from the need to integrate the youth brought in from nearby villages with the other settlers to whom priority in selection is given - the old workers on the estates. Attempts have been made in some cases to combine the education and enthusiasm of the youth with the age and experience of the old workers (4.13, 7.5) but this has not always proved easy.

In all cases the studies suggest that the training and orientation given to the new settlers have been quite inadequate to prepare them for the new way of life and new production techniques which they are expected to adopt (3.5, 4.10, 6.2). If intensive and continuous practical training is given to farmers on settlement schemes, it seems probable that many of those who appeared initially to be "unsuitable" as settlers will become quite suitable. It is noteworthy that in the plans for future settlements much more attention is given to settler training and development of internal leadership than was the case in the past (7.1, 7.5).

1.4 Land Tenure Policy :

The shifts in land tenure policy over the years reflect the changing objectives of land settlement and the changing attitudes of the Government towards the settlers.

(a) Protected Tenancy :

Under the Crown Lands Ordinance land was given on freehold tenure and there were few limitations on its transfer or use. The Land Development Ordinance introduced the principle of 'protected tenancy', where land was leased to settlers with conditions guarding its use and with limitations preventing transfer, mortgage, sale or sub-division of holdings (2.3). After some years the LDO permits could be converted into grants, but the restrictions on transfer, leasing and sub-division remained.

These limitations on a free market in land were intended, firstly to protect the tenants from domination by middlemen or capitalist entrepreneurs, and secondly to protect the holdings from fragmentation or misuse. However, several recent studies have shown that the protective measures proved largely ineffective in both respects.

On the one hand pledging of crops to moneylenders, and ultimately pledging of land, are shown to be common practices in Sri Lanka and could only be avoided on Colonisation Schemes if credit institutions such as Co-operative Societies provided a better service than the moneylenders. Several studies show that this has not been the case (4.6, 4.8, 4.13, 5.2). Furthermore successful farmers on some schemes have for various reasons preferred to change their status from that of active cultivator to landed proprietor (5.1). Thus a significant proportion of LDO holdings are effectively leased in or out, and hidden tenancy has become a growing phenomenon on Colonisation Schemes (4.6, 4.7).

On the other hand the principle of unitary succession, legally required by the Land Development Ordinance, is contrary to Ceylonese custom which normally provides for a man's land to be divided equally between his sons. In a situation of growing population and land shortage it is perhaps inevitable that hidden fragmentation should occur, with a significant decrease in holding size being noted on some schemes due to informal sub-division between the allottees' children (4.6).

(b) Freehold Tenure :

The conditional leases given under the Land Development Ordinance, and the long delay in converting these into grants, have been criticised by some writers on the grounds that they give the settlers the feeling that the land does not belong to them, that they reduce incentive to produce, and make credit more difficult to obtain (2.6, 3.1, 6.2). The Land Commission of 1958 proposed a gradual transition to freehold purchase, with only one condition retained to prevent fragmentation of holdings. Other writers, however, have stressed the dangers of such freehold tenure - using the same arguments which motivated the authors of the original Land Development Ordinance - and have suggested that production incentives can be obtained even with certain restrictions on land disposal (6.3).

This debate has continued for many years, leading most recently to the enactment of the Sale of State Lands Law of 1973 which requires that colonists purchase their holdings from the Crown (2.12), though restrictions on unauthorised sale and fragmentation of land are still retained. The provisions of this Law will be adopted in the largest new area of dry zone colonisation, the Mahaweli Development Scheme (7.1).

It is noteworthy, however, that along with the relaxation of conditions guarding transfers of Crown Land other important measures have been introduced, applying to privately held lands as well as to Crown Lands, to limit private ownership of land through imposition of a land ceiling (2.9), and to increase public control of private land use with a view to raising productivity (2.10, 2.11).

It seems possible that conflicts may appear between the movement away from conditional leasehold towards freehold tenure of land on the one hand, and the attempts to impose controls on the use that the new freeholders make of their land on the other hand.

(c) Collective Tenure :

While the general trend on settlement schemes has been in the direction of individual freehold tenure of land, experiments have been made in recent years with collective landholding - both for economic reasons of increasing the scale of operation, and for socio-political reasons of creating egalitarian communities. This objective was first given official recognition in the Paddy Lands Act of 1958 which empowered the Cultivation Committees to establish co-operative paddy farms (2.5). But very little headway was made and it is only in the last ten years, when the Government has taken the initiative in establishing co-operative farms, that significant progress has been made (2.7, 2.8, 4.9, 4.13).¹

Collective tenure has been adopted mainly on Crown Lands (where existing land rights do not have to be disturbed), or on acquired estates (particularly following land reform) where the economic arguments for maintaining the lands as single units are very clear. The experience of collective as opposed to individual land tenure on settlement schemes has been exhaustively analysed in the Agrarian Research and Training Institute study of New Settlement Schemes (4.13, 7.5). The conclusion drawn is that collective tenure has an important part to play, but that it requires unified groups of settlers, intensive guidance and support, and security of tenure to individual members within the collective system. It is intended to provide such security through new legislation - the "Janawasa Act" - which was still under preparation at the time of completing this review.

1.5 Financing of Settlements :

In the nineteenth century Colonisation Schemes very little money was invested by the Government : at Kalawewa only Rs 1,000 were spent on 26 families for one year, and much of this sum was to be recovered from the settlers (4.1). Since the 1930's however, massive investments have been made, in land clearing, irrigation works, housing, services, staff, and various forms of subsidy to the settlers. The cost of settling one allottee in 1953 was estimated to be about Rs 20,000 (3.4).

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More recently some of the Agricultural Productivity Committees, which are empowered to acquire land and establish co-operative farms (2.10), have attempted to follow the Government's lead but the results are not yet known.

The high level of investment was considered necessary to overcome the peasants' reluctance to migrate from the wet zone to the hot malarial plains of the dry zone. Resettlement of the dry zone was, in the 1940's and 1950's, a political issue of highest priority which ensured that funds were liberally available, and that rigorous financial analysis prior to investment was not applied (4.5). However, this fact had serious consequences, first in imposing a heavy financial burden on the Government and tying up resources which might have brought a better return elsewhere (5.4, 6.2); secondly in inducing a lack of cost consciousness on the part of the officials responsible for planning and implementing the schemes (4.5); and thirdly in creating a mentality of dependence on Government assistance in the minds of the settlers, which has been hard to eradicate to this day (3.1, 4.1, 4.5).

Very little of the investment was recovered from the settlers : a small land rent was levied under the Land Development Ordinance (2.3), and a water rate could be imposed under the Irrigation Ordinance (2.4); but these were rarely collected. It is now anticipated that part of the Government's investment will be recovered when holdings are sold to allottees under the Sale of State Lands Law (2.12), but the price at which the holdings will be sold, and the relation of this price to the total Government investment, have not yet been assessed.

Attempts have been made since the 1950's to reduce the cost of dry zone settlement, by lowering the size of holding (from 8 acres to 5 acres, and ultimately to 3 acres), by making the farmers clear their own land, by building cheaper houses, and by giving more of the investment as loans rather than grants (3.4). But it is only in the new Co-operative Farms and DDC Projects where a ceiling on investment per acre has been imposed (2.7, 2.8), and in the Land Reform settlements where most of the investment has to come from estate revenue (4.13), that the break from the tradition of heavy subsidisation has been easy to effect.

Recently attempts have been made to reduce the costs of settlement, or more exactly to increase the return from investment in settlements and thus to justify their high cost, by planning the new settlements as Growth Centres which bring benefits to the surrounding areas also. This approach has the added benefit of promoting social and economic integration between the settlements and surrounding communities, and thus avoiding the isolation or antagonism which has characterised relations of many settlements with their surroundings (4.13).

It is noteworthy that despite the vast amounts of money that have been injected into the Colonisation Schemes, the traditional dependence of small peasant farmers on private moneylenders has not been broken. Annual credit is intended to be supplied through Co-operative Societies, but studies indicate that, with one or two exceptions in the Youth Schemes, these Co-operatives are no more efficient as

credit agencies than those in the country at large (4.6, 4.8, 5.2).¹ On one scheme 77% of borrowings by settlers were from private moneylenders at an average interest rate of 14% per month (5.5). These moneylenders, and not the peasants, were felt to be the main beneficiaries of the scheme.

1.6 Management and Administration :

Along with the heavy financial investment by the Government in settlement schemes has developed a weighty system of management by officials, to supervise the settlers and protect the Government's investments. This reflected a paternalistic attitude to the peasants (5.3, 6.2) demonstrated in extreme form in the early years of colonisation when officials even chose marriage partners for the settlers in their charge (4.1).

The presence of Government appointed managers was not initially resented by the settlers, who were quite ready to have decisions taken for them by the officers. In recent years, however, especially in Co-operative Farms and on schemes populated by educated youth, the system of imposed management has become increasingly unacceptable and its limitations have become increasingly apparent (5.10).

Many studies have criticised the fact that some officials put in charge of the settlement schemes were trained neither in management nor in agriculture, with the result that they suppressed indigenous leadership without leading to raised agricultural productivity (3.1, 4.8). Furthermore, responsibility for different aspects of settlement management was divided between several Government Departments (Irrigation, Agriculture, Land Commissioner's Department, etc), often leading to increased confusion (3.3).

Attempts were made in 1968 to raise the quality of management and services on ten Colonisation Schemes, and to achieve co-ordination between the different Departments by forming "Special Projects" on these schemes (3.7, 3.8). Surveys made on one of the Projects, Elahera Special Project, at the time of its inception and again after a three year interval, suggest that the experiment in its early years had only limited success (4.6, 4.7). It is unfortunate that the other nine Special Projects, which were also surveyed at the time of their inception (4.8), were not resurveyed later along with Elahera.

It has now been generally recognised that rigid control of settlement schemes by officials produces a passive attitude on the part of the settlers, and that more people's participation in administration and policy-making is needed (6.2). People's institutions have been set up on all schemes since the Paddy Lands Act, but with the domination of the officials and with competition from the Mudalalies on the colonies, neither the Cultivation Committees nor the Co-operative Societies have proved very effective (3.6, 4.6, 4.13, 5.2).

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It should of course be noted in this respect that it was the Central Government and not the Co-operatives which decided on the allocation of credit, and that the Co-operatives were not given the opportunity to assess the creditworthiness or otherwise of the settlers whom they were asked to assist.

On one scheme in 1970, all the Government officials were withdrawn as an experiment and power was handed over to an elected Farmers' Organisation: initial results were quite encouraging (4.12). On some of the new settlements started since 1970 similar attempts at achieving self-management have been made, also with encouraging results. Evaluations suggest that for effective self-management small size communities are needed, with regular meetings, constant training and guidance by properly oriented staff, clearly defined rules and responsibilities for settlers and staff, and an impartial authority for establishing work targets and enforcing discipline (4.9, 4.13, 7.5).

In the Mahaweli Project it is proposed to codify the responsibilities of settlers and staff in a contractual agreement between the Farmers' Organisations and the Project Administration (7.1). This may prove to be the key to the problem of farmer participation in management, which has been sought for so long.

1.7 Planning of Settlements :

It is in the procedures adopted for planning land settlement schemes that the conflicts between different objectives have perhaps been most apparent, and have had the most serious effects both on production and on the kind of community which has emerged.

In the 1940's and 1950's the prime objective in dry zone colonisation was to get land developed and people settled as fast as possible, and almost at any cost. Economic viability and maximisation of production were not important considerations and little thought was given to the establishment of integrated communities. A comprehensive approach to settlement planning was not therefore adopted. Pre-investment analysis and farm budgeting were rarely done, detailed physical planning was not carried out, and settlers were brought in to the schemes often at a rate higher than the planning and administrative staff could hope to cope with efficiently (3.2, 3.3, 3.4, 4.5).

The results of this situation were several. First, following the traditional pattern of cultivation in both wet and dry zones, prime emphasis was given to paddy production to the exclusion of other crops, with the result that the highland soils, often more fertile than the lowlands, were neglected and both land and labour were under-utilised. One study of the Colonisation Schemes carried out in 1964 indicates that some 40% of the land area and 35-50% of the settlers' family labour were not utilised, due largely to mono-cultivation of paddy (5.8).

Secondly, the layout of the irrigation network was such that efficient management of water resources, and measurement of water issues to individual farms, proved very difficult. This fact, coupled with the tradition of not charging the farmers for irrigation water, led to tremendous wastage of water which is considered by some authorities to be the most important single shortcoming of the Colonisation Schemes(6.2).

Thirdly, the practice of siting farmers' homesteads along the irrigation channels rather than in village clusters, led to ribbon-type settlements where farmers are isolated from each other, community development and co-operation are inhibited, and the cost of providing services is greatly increased (3.1).

Fourthly, the tendency to adopt "crash programmes", starting new schemes and bringing in new settlers even when adequate plans had not been made for their reception and supervision, coupled with the problems resulting from division of responsibility for the schemes between several departments, led to many instances of unsuitable holdings being allocated, insufficient extension and other services being provided, and a generally low rate of adoption of advanced agricultural techniques on Colonisation Schemes, with consequent implications for productivity and return on investment (4.5,4.6,4.8,4.9).

These shortcomings have led several authorities to suggest that, purely from an economic viewpoint, rather than open new settlements it is preferable to improve planning efficiency and to intensify production on existing schemes (2.6, 4.5, 5.4, 5.6). Various measures have been adopted with this purpose in mind, in addition to steps taken to improve planning efficiency on new schemes.

First, a Settlement Planning and Development Board was established in 1969, with representation from the head offices of all Government Departments concerned with settlement schemes (3.2, 3.4). The objective was to co-ordinate the activities of these Departments, and to achieve a degree of uniformity in settlement policy. However, as indicated by a recent seminar on the subject (7.5g), such uniformity has been difficult to achieve.

Secondly, Special Projects were started on ten colonisation schemes in 1968, with Project Managers in charge and teams of specialists in agriculture, irrigation, soil survey, social development, etc., responsible for planning and implementing the schemes. The achievements of these Projects, in so far as they have been analysed, were discussed in the last section (1.6).

Thirdly, attempts were made on one Colonisation Scheme, Dewahuwa, to consolidate paddy holdings and thus to allow efficient water management, mechanisation, and intensive labour use (4.11). A similar scheme of land consolidation is proposed by the Mahaweli Development Board for fragmented paddy holdings in purana villages in the project area (7.1). Experience at Dewahuwa suggests that land consolidation is a costly process, and that further mechanisation of paddy cultivation may be uneconomic unless productive employment can be created for the labour released.

Fourthly, two special Boards were established under the Ministry of Irrigation to take overall responsibility for planning and development of two major colonisation areas, avoiding the problems of divided responsibility between several departments. The first of these Boards, the Gal Oya Development Board, was formed in 1949. In 1965 it was enlarged into the River Valleys Development Board; its activities in the Gal Oya valley were heavily censured — on the grounds of faulty planning and lack of cost consciousness — by a Committee set up to evaluate the Board's achievements in 1969 (4.5).

The second Board is the Mahaweli Development Board, which has not yet started to establish new settlements but whose plans for this task are reviewed in the final chapter of this volume (7.1). Detailed physical, social and economic studies of the project areas have been carried out, and careful plans have been made to ensure intensive use of land, labour and water; efficient management and servicing of settlements; establishment of integrated communities; and maximum return on investment. Whether it will prove possible to implement the plans exactly as anticipated remains, of course, to be seen. But it is clear that the Board has taken full account of earlier experiences in land settlement in drawing up its own plans for developing the Mahaweli area.

In the wet zone the problems of settlement planning are rather different from those in the dry zone, but some of the same conflicts are found. In particular the tendency to start new settlements without sufficient planning, or without providing sufficient services to raise productivity, has been as marked in the wet zone as in the dry zone.

Again in the wet zone, the local objective of relieving landlessness in a particular area has often led to land being put to a use for which it is ill-suited, or which conflicts with national production objectives. The major reason behind this is the short-term need to provide a quick income to the settlers, which often conflicts with the long-term need to establish or maintain permanent crops better suited to the land and the environment. Thus in many Village

Expansion Schemes productive estates have been blocked out among landless villages, and in the absence of essential inputs and services low value food crops have been planted and productivity has fallen. Furthermore, these landless families, who might otherwise have sought employment elsewhere, have been encouraged to remain in a particular area by being allocated a stake in it, which is, however, too small to support them and hence the scheme imposes a considerable long-term burden on the nation.

Since Land Reform, with increasing appreciation of the need to increase productivity and employment on acquired estates in the wet zone, greater emphasis has been given to the economic objectives of settlement though the pressure to relieve landlessness in the villages is still very strong. But the development plans of the Land Reform Commission, outlined briefly in document 7.5, attempt to reconcile the two objectives by providing land to landless families under conditions which aim to ensure its productive use.

1.8 Place of Land Settlement in the National Economy :

Despite the many shortcomings revealed in the studies of land settlement in Sri Lanka, there have of course been many real achievements. Production of paddy and other crops and creation of employment for landless people have increased considerably as result of dry zone colonisation. 35% of Sri Lanka's paddy is now produced on major irrigation schemes, and more than 400,000 acres of new land in the dry zone have been asweddumised. In the wet zone some 500,000 acres of land acquired under the 1972 Land Reform have been or are being allocated for new settlement. With another 400,000 acres of land in the wet zone being acquired under the 1975 Land Reform Amendment, and with up to 900,000 acres of irrigated land in the dry zone becoming available for settlement under the Mahaweli Project, land settlement is obviously going to play an increasing part in Sri Lanka's national development.

However, the studies indicate that the return on the Government's investment in most settlement schemes up till now has been very much less than might have been anticipated. The opportunity which new settlements offer for making a break with the past, and for intensifying training and services to selected groups of progressive farmers so as to achieve rapid adoption of technical and organisational innovations, has in most cases not been fully grasped.

While there are many reasons for this state of affairs, the major one, we have seen, is the difficulty experienced in reconciling the opposing pressures resulting from different objectives of settlement. Yet some of the studies reviewed in this volume show that a satisfactory balance between the different objectives can be achieved, provided all the objectives are recognised and taken into account at the planning stage, and provided services and inputs are supplied to ensure that the requirements for realising the various objectives are satisfied.

Thus even if political considerations play an important part in the selection of settlers, for the most part such people given adequate training can become good farmers. Conflicts between incoming settlers and local farmers can be reduced if local farmers are given priority in selection, and if steps are taken to promote integration between the settlements and surrounding communities. Security of tenure can be given, either individually or collectively, without sacrificing public control over land use and disposal. Settlement costs can be reduced if the farmers develop their own land, investments are given as loans, and the settlements are planned as Growth Centres bringing benefits to surrounding areas also. Self-management can be achieved if indigenous leadership and institutions are allowed to grow, and are given adequate services and training. High productivity can be realised, even in small farmer Co-operatives, if the settlements are based on careful physical, social and economic planning and co-ordinated provision of services and supplies.

The most difficult obstacle to overcome or control is the tendency to settle more people than the land can support, or to bring settlers in at such a rate that the planning staff have no time to prepare plans, the administrative and servicing staff are unable to provide the settlers' requirements, and the training staff cannot cope with the settlers' needs for intensive training and orientation.

A possible solution to this dilemma would be for the Settlement Planning and Development Board, perhaps reconstituted as a Land Use and Settlement Planning Authority, to lay down certain minimum requirements without which no new settlement should be started with Government funds, and no new settler should be brought in. These criteria would include the following:

- (a) Presentation of a comprehensive and realistic settlement plan based on physical, agronomic, social and economic surveys in the field;
- (b) Preparation of a financial plan assuring reasonable return on initial investment and an acceptable level of income to the settlers;
- (c) Assurance of availability of sufficient funds, both capital and recurrent, to establish the settlement;
- (d) Availability of sufficient competent staff to guide and train the new settlers;
- (e) A phased implementation programme for moving towards the objectives of the settlement, modelled perhaps on the guidelines summarised in section 7.5 of this study.

The functions of the Land Use and Settlement Planning Authority, operating perhaps through District Committees, would be to establish detailed criteria for approving new settlement proposals, to assess these plans prior to investment, and to evaluate the achievements in the course of implementation.

Where over-riding political or other considerations demand that any of the objective criteria for settlement planning be disregarded, the costs of taking this action must be recognised, the investment and repayment policy must be modified accordingly, and the settlement must be evaluated with that in mind.

1.9 Effectiveness of Studies of Land Settlement :

A vast number of studies of land settlement in Sri Lanka has been made, not all of which are included in this review. Some studies have been undertaken by academic observers both local and foreign, some by Commissions set up by the Government, some by Government institutions at the request of the settlement agencies, some by the implementing agencies themselves.

It is clear that many of the studies, while practically oriented and making recommendations for improvement of the settlements they examined, have led to no action at all. This may be because the recommendations they made were not communicated to the implementing agencies. It seems that the best chance of such research leading to action is when an evaluation of a settlement programme is made by the implementing agency itself (despite the risk of subjectivity in such an analysis), or when the implementing agency requests that an evaluation be made by what it considers to be an impartial authority.

On the other hand it is clear that many studies have been overlooked because they evaluate achievements against one particular objective of settlement (e.g. maximising income to settlers), while ignoring other objectives (e.g. maximising employment) which may be of equal if not greater importance. This problem could be overcome — and the unnecessary duplication of research which is very apparent from this review could be avoided — if the Land Use and Settlement Planning Authority specified the kind of studies which it would find useful, and clarified the objectives against which the settlements or aspects of the settlements should be reviewed.

1.10 Conclusion :

If it is possible to draw simple conclusions from an analysis of so complex a subject as land settlement in Sri Lanka, we would propose the following:

- (a) Settlement experience in Sri Lanka has recorded many achievements but many mistakes have been made, some of them expensive, largely through failure to reconcile, or sometimes even to recognise, the conflicting objectives with which the settlements were started. If all the objectives are recognised at the planning stage, experience suggests that most of them can generally be catered for.

- (b) Many problems arise in settlement planning and implementation because so many Government agencies and departments are involved. A strong Land Use and Settlement Planning Authority, which oversees the work of the different departments, co-ordinates services to settlements, and evaluates achievements, is a clear essential.
- (c) Many settlement programmes have started off well but have gone wrong, because they responded to pressure to take in more settlers than the land could support, or to expand at a rate faster than their administrative and financial resources could cope with. The Land Use and Settlement Planning Authority should lay down minimum requirements without which no new settlement should be started with Government support. If over-riding pressures demand that any of these criteria be ignored, the cost of doing so should be counted in preparing the investment and repayment policy and in evaluating the outcome.
- (d) The disproportionate investment in settlement schemes compared to other areas can be justified if the settlement is planned as a Growth Centre, integrated with and bringing benefits to surrounding villages also. This approach also reduces the risk of isolation of the Settlement and conflict with surrounding communities.
- (e) Monitoring of progress and review of targets in settlement programmes are essential. The Land Use and Settlement Planning Authority should provide guidelines for future studies, ensuring that all objectives of the settlements are taken into account, and that the outcome of the studies is communicated to the appropriate authorities.

Chapter 2

Review of Legislation and Major Policy Developments

This chapter describes the major developments in land and land settlement policies from the period of British colonial rule up to the present time. Most attention is given to developments which have taken place since Independence, when population pressure on cultivable land was increasing rapidly, and the need for increased State control of land alienation and new settlement was therefore very great.

2.1 Crown Lands (Encroachment) Ordinance 1840 :

This Ordinance, first enacted in 1840 and regularly revised thereafter up to its latest form in 1949, gave the Crown the right to take over any uncultivated land and to grant, sell or lease such lands to individuals or institutions "for any purpose which the Governor-General may approve".

The original objective was to make provision for "the ejectment of any person who, without probable claim or pretence of title, was in possession of land claimed by the Crown, provided that his possession did not extend to 30 (soon reduced to 5) years duration".

All forest, waste, unoccupied or uncultivated lands were presumed to be Crown property until the contrary was proved. Chenas and other lands cultivated only after intervals of several years were also deemed to belong to the Crown, except upon proof of a 'Sannas'¹ or grant, or evidence of having paid taxes within twenty years. The presumption in favour of the Crown was very strong, so that few peasants could win cases of land disputes with the Crown. Furthermore the initiative for alienation of Crown land had to come from the individual wanting to use the land, and payment had to be made for the use or grant of land. The system was heavily weighted in favour of investors, whether European or Ceylonese, who had ready capital, the means of knowing where land was available, and a knowledge of the methods of the Colonial Government. Small peasant cultivators, on the other hand, who lacked both capital and the necessary knowledge, were effectively excluded from land acquisition.

¹ A Sannas is a grant by a Sinhalese King, usually engraved on copper.

who had ready capital, the means of knowing where land was available, and a knowledge of the methods of the Colonial Government. Small peasant cultivators, on the other hand, who lacked both capital and the necessary knowledge, were effectively excluded from land acquisition.

The major impact of the Crown Lands Ordinance was in the mid-and up-country, where highlands which had been intermittently used by the villagers for chena cultivation, firewood collection, grazing reserve and food collection were deemed to be Crown property, and leased or sold to plantations. The Ordinance was the prime cause of the land hunger which later developed in the Kandyan areas, to which the pressure for population transfer and establishment of new settlements in the Dry Zone can ultimately be traced.

2.2 Waste Land Ordinance No. 1 of 1897 :

This Ordinance, later replaced by the Land Settlement Ordinance of 1933, took a step further the process of investigating and declaring whether a land is Crown land or private land. The term "Settlement" refers not to settlement of people on the land but to settlement of conflicting claims to rights in a piece of land. The Settlement Officer was empowered to declare that "if no claim on an undeveloped piece of land is made within a period of 3 months it shall be deemed that such lands are the property of the Crown".

2.3 Land Development Ordinance 1935 :

The first major change in the traditional colonial attitude to land policy came with the report of a Land Commission published in 1929, many of the recommendations of which were incorporated in the Land Development Ordinance of 1935.

This Ordinance reflected the increasing concern for food production and for improving the position of the peasant cultivator. For the first time the principle of Government initiative in alienating land was introduced. A Land Commissioner's Department was set up to supervise and control the alienation and use of Crown land.

Distinction was made between different classes of people to whom the land could be allotted, and different purposes for which it might be used. Crown land was to be "mapped out" for purposes of village expansion, village forests, pasture, chena cultivation, public purposes etc. Certain areas were to be allotted to local villagers or peasant colonists as well as to other categories such as "middle-class Ceylonese," "any persons irrespective of class or race," etc.

The peasant cultivator was to be given a permit to a piece of land which, once certain conditions of residence and cultivation had been met, would then be converted to a grant of title under one of three classes of tenure representing different degrees of 'protection' for the tenant. The land could not be sold, leased or mortgaged, either in part or in whole, without the written consent of the Government Agent. It could not be seized or sold in execution of the decree of any court.

No land should be alienated except at a Land Kachcheri, where the Government Agent would select applicants to receive permits or grants of Crown land.

An amount should be paid annually to the Crown in respect of any land alienated under a grant or permit. The amount is fixed with reference to the value of the land on the date of alienation.

The allottee may nominate a single successor, who should be the spouse or a relative by blood, unless otherwise approved by the Government Agent in writing.

If the allottee failed to observe any of the conditions of the grant or permit (illegal disposition, failure to pay the required dues, failure to take specified measures to prevent erosion or to develop the holding in a specified way), he could be issued with a warning notice and ultimately the grant or permit could be cancelled by the Government Agent.

The Land Development Ordinance of 1935, in basically the same form, continued to control the alienation and development of Crown lands until the 1960's.

2.4 Irrigation Ordinance 1946 :

Much of the Crown land alienated for new settlement under the Land Development Ordinance was in Dry Zone areas to which irrigation facilities had been provided. The use and operation of these facilities was prescribed in the Irrigation Ordinance of 1946, amended in 1951 and 1968.

This Ordinance, and the rules made under it for each District, specified the division of responsibility between the cultivators and the Irrigation Department for maintaining and operating the irrigation system. In most Dry Zone Colonisation Schemes the Irrigation Department took responsibility for maintaining the tank and major channels and for controlling water issues from the tank. The settlers were required to pay an annual irrigation rate, and to maintain the field channels, fences, etc.

An Irrigation Headman was appointed to control distribution of water through the field channels and into the paddy lands. He had power to withhold water from the field channels if farmers failed to clear and repair them. Although appointed by the Government Agent, he was paid by the cultivators, generally at the rate of 1.5% commission on the crop raised.

The Ordinance included provision for summoning a meeting of all cultivators in a tract before the start of each season. Here the cultivation programme was decided upon - the extent of land to be sown, the varieties of paddy to be used, the timetable for planting, issue of water, etc. The meeting was presided over by the Government Agent. The cultivators participated in formulation of the programme, but they had no power to make it binding, and even in decision making they could be over-ruled by the Government Officers.

2.5 Paddy Lands Act 1958 :

The main purpose of this act was to increase the security of tenure of tenant cultivators of paddy lands, and to regulate the rents paid to landlords. These provisions did not apply to settlement farmers where land was held by the Crown.

The Act also established Cultivation Committees as elected representatives of the farmers, with responsibility for maintaining and developing irrigation works, controlling water issues and collecting irrigation rates. In Colonisation Schemes, however, these functions were largely carried out by Government officials, and few of the Cultivation Committees were effective.

The Cultivation Committees have the power to submit plans for improving the efficiency of paddy cultivation, consolidating paddy holdings, establishing collective farms. But in this respect also they have not yet become operational.

2.6 Report of the Land Commission, 1958 (Sessional Paper X, September 1958) :

A second Land Commission was appointed by the Governor-General in 1955 to examine the policy of Government relating to alienation of Crown land, assistance to peasant colonists, efficient use of Crown land, and to propose necessary amendments to the Land Development Ordinance of 1935. The Commission presented an interim report in 1957, followed by the final report in 1958.

The Commission concluded that much of the past investment in Colonisation Schemes had been inefficiently used, and that, if these schemes were not to be a permanent burden on the Exchequer, economic rather than social criteria should be predominant in future settlement planning and implementation.

The Commission also felt that the long delay in giving the colonists title to their allotments, reduced their incentive and led to inefficient use of land and capital. It proposed a three stage tenure system as follows :

Stage I : the allottee receives a permit for a period of not more than 3 years, during which he must reside on the land and develop it under close Government supervision. He must pay an annual land levy. He is not entitled to sell or mortgage the plot. He must nominate a single successor.¹

Stage II : subject to satisfactory fulfilment of the conditions in the initial permit or lease, the allottee is given the opportunity to purchase his land from the Crown.

Stage III : after completing the purchase the allottee obtains a grant from the Crown subject only to conditions preventing fragmentation. He is otherwise completely free from Government supervision.

With regard to the process of colonisation, the Commission made several proposals, among which the following are the most significant :-

- a. Planning of land use should be done in terms of catchment areas, to make best use of land resources rather than to provide a pre-determined number of holdings of a pre-determined size.
- b. Houses in colonisation schemes should be grouped into neighbourhoods, to promote social cohesion and co-operation.

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One member of the Commission dissented from this proposal, considering it contrary to local custom, economically unnecessary and unenforceable.

- c. Colonists should be selected on the basis of farming experience and ability to achieve maximum economic production, rather than on considerations of social justice.
- d. On economic grounds most of the available paddy lands should be alienated to landless peasants, but some should also be alienated to educated youths, and to middle class persons who could cultivate larger units.
- e. Land suitable for cultivation of tea and rubber should not be alienated to smallholders. It should be given in units of 500 acres or so to middle-class allottees, co-operative groups if they are strongly united, and even to private capitalists if they can be attracted to such development projects.
- f. The scale of assistance given by Government for establishment of different kinds of schemes should not be reduced, but it should be given in a way which does not create dependence. In colonisation schemes and middle class schemes, the whole investment should be recovered over 20-50 years. In village expansion schemes 75% of the investment should be recovered from the allottees, either as annual payments or as lump sums towards the purchase price of the allotments.
- g. The level of complementary inputs in roads, marketing, credit and extension should be greatly improved.
- h. Responsibility for agricultural extension work should be removed from colonisation officers who are fully occupied with administration, and entrusted to agricultural instructors of the Department of Agriculture.
- i. The rate of colonisation should be kept under constant review, and should not be allowed to outstrip proper planning and organisation. It should be slowed down or stopped altogether if there are spectacular results from agricultural extension work on existing paddy lands, or if great strides are made in other sectors of the economy which give a greater economic return.

As result of this report some fairly minor amendments were made to the Land Development Ordinance in 1960 and 1969, but otherwise little action was taken on the recommendations of the Commission.

2.7 Agricultural Development through Co-operative Farms, Ministry of Agriculture and Lands, 1971 :

In 1971 a new approach to land settlement was introduced, where land and capital would be provided jointly to a group of farmers, and responsibility for planning, development and management of the agricultural projects would be transferred, in part if not in whole, to the farmers themselves. A booklet issued by the Ministry of Agriculture and Lands describes the details of this policy.

Priority in starting Co-operative Farms would be given to areas where unemployment is acute and where infra-structure development costs are low. Suitable sites would be unused Crown lands, Crown lands alienated to persons but not properly developed, forest reserves which are not required to be so maintained or which are already exposed to illicit cultivation, and private lands which are not cultivated or not properly managed.

Participants should be selected by the Government Agent in consultation with the Member of Parliament. They should be resident within a five mile radius from the project area, in the age group 18-35 years, should be interested in agriculture and co-operative farming, and should accept the terms and conditions of membership and financing.

The participants should be formed into a Co-operative Society, with model bye-laws prepared by the Assistant Commissioner for Co-operative Development.

The scheme of financing would comprise a grant of up to Rs.1,600 per acre to meet acquisition costs of private land (where Crown land is not available) and initial capital development costs, and loans from the People's Bank for additional capital expenditure plus recurrent costs. The members would pay share capital from Rs.500 to Rs.1,000; this would be loaned initially by the People's Bank and recovered in easy instalments.

The Board of Directors of the Co-operative Society, consisting of elected and appointed (ex-officio) members, would manage the project. Initially ex-officio members would be in a majority, to ensure proper direction and use of Government investments. As the members get trained, Government officials would withdraw. A Project Manager-cum-Secretary (initially a Government officer) would be appointed, responsible to the Board of Directors.

Agricultural operations should be organised as on large plantations. The land should be held by the Co-operative Society, initially under a long-term lease. Individual units would not be allotted on a permanent basis "at this stage"; however for cultivation purposes one of the following arrangements could be adopted :-

- i. The entire project area to be worked as one unit by members working on daily wages or on a task basis;
- ii. The project to be worked as several units each assigned to a cohesive group of members;
- iii. Each member or family to be assigned a unit, for purposes of cultivation operations only, under the general direction of the management.

The form to be adopted in each case would be determined by the lay of the land, the nature of crops and operations, and the social background and temperament of the members. The officials should work with the members in a spirit of understanding and co-operation.

2.8 Agricultural Development through DDC Projects, Ministry of Planning and Employment 1971 :

At the same time as the Co-operative Farms were proposed by the Ministry of Agriculture, similar projects for creating agricultural employment were initiated through the Divisional Development Councils, jointly by the Ministries of Agriculture and Lands and Planning and Employment. The policy is described in a booklet with the above title.

The DDC's operate over the area of a local authority. The members include the Divisional Revenue Officer, the Member of Parliament, Chairman of the Local Authority, and representatives of People's Organisations and relevant Government Departments. They are expected to propose small-scale agricultural or industrial projects which will create employment and increase production at a low cost.

The proposals will be examined and funded by the Ministry of Planning and Employment. Rs.100 million were allocated for the period 1970-1972, of which approximately 35% was earmarked for agricultural projects.

Participants will be selected, and funds provided, in the same way as described for the Co-operative Farms. In general the size of project should be 25-50 acres; in any case it should not exceed 100 acres. The projects should aim at a net monthly income of Rs.150 to Rs.200 per individual, or Rs.250 to Rs.300 per family.

The farms could be organised either as single units, or as several units each assigned to cohesive groups, or as individual units where each member farms his own land and joins the Co-operative Society for supplies and marketing.

The projects would be managed either by a specialised Co-operative Society affiliated to the primary Co-operative, or by a branch or division of the primary Co-operative itself.

2.9 Land Reform Law No. 1 of 1972 :

With growing shortage of land for new settlement in the Wet Zone, and with the rising cost of developing land for colonisation in the Dry Zone, pressure for the take-over of private estates became acute and a Land Reform Law was enacted in August 1972.

This Law fixes a ceiling on private ownership of agricultural land : 25 acres in the case of paddy land, 50 acres in the case of other land.

A Land Reform Commission is established to take over land in excess of the ceiling, to decide compensation payable to the previous owners, and to dispose of the land within two years in a way which increases employment and productivity.

Compensation shall be assessed on the basis of the value of the land or the average annual profit obtained from it, as declared or assessed for the purpose of taxation. It shall be paid in Land Reform Bonds (and/or in cash if so determined by the Minister of Finance) with an annual interest rate of 7% p.a., maturing over 25 years. These Bonds can be surrendered for payment of Government dues such as capital levy, estate duty and income tax, or for development purposes or any other purposes that the Minister approves.

The compensation paid to the previous owners shall be recovered from those to whom the land is transferred, either through rent payments or through purchase.

Land vested in the Land Reform Commission can be managed by the Commission; alienated by way of purchase or lease to landless individuals or to those who own less than the ceiling; alienated for co-operative or collective farms; transferred to State Corporations; or sold to people as individual allotments or used for any public purpose.

Detailed guidelines on how the acquired estates should be developed as new settlements are not specified in the Land Reform Law.

2.10 Agricultural Productivity Law No. 2 of 1972 :

One month after the Land Reform Law was enacted an Agricultural Productivity Law was introduced to ensure that the acquired estates, along with all other agricultural lands both private and in land settlement schemes, are properly utilised and developed.

The objective of this Law is to impose regulations on land use and management (including cropping patterns, cultivation practices, irrigation management, soil and water conservation, pest and disease control, etc.) with a view to obtaining maximum productivity from crops and livestock.

If an owner or occupier of agricultural land fails to fulfil such obligations, the Minister of Agriculture may serve on him a Supervision Order, which may be followed after one year (if the regulations are still not satisfactorily observed) by a Dispossession Order. In this event there is provision for appeal to an Agricultural Tribunal, and for payment of compensation to the dispossessed person.

The Law provides for the establishment of Agricultural Productivity Committees. These will have 10 members, appointed by the Minister of Agriculture, and will have authority over an area determined by the Minister. The members should normally be people engaged in agriculture, but the Minister may appoint others as he thinks necessary. The Chairman and Vice-Chairman of the Committee shall be designated by the Minister.

The Agricultural Productivity Committees are entrusted with the duty of promotion, co-ordination and development of agriculture, and of assisting in the formulation of implementation programmes and targets for the production of crops and livestock.

The Agricultural Productivity Committees have powers to acquire and dispose of any property, to order anybody to furnish information on land, to impose and collect an acreage tax not exceeding Rs 6 per acre per year and any other charges levied for services rendered under the Law, to utilise the money for the performance and exercise of their duties and responsibilities, to obtain loans from the Government or any approved credit institutions.

The Law provides for the establishment of Agricultural Tribunals, consisting of not more than eight members appointed by the Cabinet to hear appeals made by people who are served with Dispossession Orders, and to hear cases of disputes relating to farming or management of agricultural land referred by the Minister or the Agricultural Productivity Committee.

The Minister may establish Agricultural Co-operative Societies in each Agricultural Productivity Committee area, for the purpose of obtaining agricultural advances, supplying the farmers with their farm needs, organising the farming and utilisation of the land in the best possible way, selling the produce and taking welfare measures for their members.

These Co-operative Societies may secure land on lease and farm it under joint management as an 'Agricultural Co-operative Leasehold Society'.

The Minister may make regulations to establish, in any area serviced by an Agricultural Productivity Committee, Small-holders' Service Co-operatives as an initial step towards the transition from an individual to a co-operative or collective system of agricultural production.

2.11 Agricultural Lands Law No. 42 of 1973 :

This Law replaces the Paddy Lands Act No. 1 of 1958. Its objectives are similar : to provide security of tenure to tenant cultivators of paddy lands, to specify rents payable to landlords, and to establish Cultivation Committees as organisations of the cultivators.

The new provisions of the Agricultural Lands Law are -

- i. that the Cultivation Committee members are appointed by the Minister of Agriculture (while under the Paddy Lands Act they were elected by the cultivators);
- ii. that the Cultivation Committees are subject to the control and direction of the Agricultural Productivity Committee within whose area of authority they lie;
- iii. that the area of their jurisdiction is extended to include highlands as well as paddy lands;
- iv. that disputes regarding rights of land ownership or tenancy of paddy lands are referred to the newly established Agricultural Tribunals in place of the old Rural Courts.

2.12 Sale of State Lands Law No. 43 of 1973 :

This Law provides for the sale of State lands to individual cultivators, and for the repeal of certain provisions of the Land Development Ordinance. The Law aims primarily at giving freehold tenure to allottees on Colonisation Schemes, Village Expansion Schemes etc. It may apply, however, to undeveloped State lands also.

The price at which such lands shall be sold is determined by the Land Commissioner. Any payments already made on lands alienated under the Land Development Ordinance are deducted from the purchase price. Payment may be made either in full or in instalments. In the former case a grant in respect of the land is issued, in the latter case a permit is issued, which is converted to a grant when the final payment is made.

Permits or grants issued under the Sale of State Lands Law replace the permits or grants issued under the Land Development Ordinance. They bear similar restrictions on sale, fragmentation, disposition and succession.

Where any person holding land alienated under the Land Development Ordinance does not exercise the right that this Law gives him to purchase his allotment, his right to use the land may be cancelled by the Minister.

2.13 Land Reform (Amendment) Law 1975 :

While the Land Reform Law of 1972 covered only privately held lands, the 1975 amendment extends the ceiling on land ownership to estates owned by public companies also.

Company estates of over 50 acres are vested in the Land Reform Commission. The Agency House or organisation managing the estate at the time of acquisition becomes the statutory trustee and continues to manage the land on behalf of the Land Reform Commission.

The statutory trust shall be terminated not more than one year after the date of vesting. The trust may be extended for a second year by the Land Reform Commission; beyond that the approval of the Minister of Agriculture is needed.

Vested estates may be used for the same purposes, and may be alienated in the same ways, as specified in the 1972 Land Reform Law.

Compensation shall be payable in an amount considered reasonable by the Chief Valuer, taking account of the condition of the land, the profits and dividends declared over the last three years, and the prices at which similar lands have been sold over the last three years.

Where it is necessary for giving effect to this Law, the business undertaking of any Agency House or Organisation which is a statutory trustee may be taken over under the Business Undertakings (Acquisition) Act of 1971.

Chapter 3

General Works on Land Settlement in Sri Lanka

This chapter summarises some of the major publications which deal generally with different types of settlement schemes started in Sri Lanka.

3.1 B.H. Farmer, Pioneer Peasant Colonisation in Ceylon, 1957 :

This study, based on field investigations carried out in 1951 and published in 1957, still remains the standard work on Colonisation in Ceylon. It is an attempt to examine the entire colonisation exercise from a geographical viewpoint. The physical background to both dry and wet zone settlement is described. The socio-economic features of the new colonies in the Dry Zone are outlined, and there is a superficial treatment of the social system in the Wet Zone, from which many of the colonists came. The main part of the book is a detailed history of the process of Government-sponsored Dry Zone Colonisation, as it has developed since the nineteenth century.

Peasant colonisation is considered to have made a significant, though necessarily limited, contribution to the relief of landlessness and agrarian pressures, to food production, and to the development of the Dry Zone. It has, however, encountered several major problems, some of them a function of the way colonisation has been carried out. These problems are described and possible solutions are suggested.

Physical Layout of Colonies : Irrigation needs have been the major consideration in the physical planning of colonies. As a result of this, various physical as well as social problems have arisen. For example, insufficient attention has been paid to soil surveys, sometimes leading to siting of holdings in unsuitable areas. Again, community cohesion can hardly develop in long ribbon-like colonies, strung out for miles along a channel and lacking any focal point whatsoever. It is desirable that planning of colonies should be

done by an inter-disciplinary body which is independent of the Irrigation Department, so that due attention is paid to all relevant factors. While small colonies necessarily have to be run by normal Government Departments there is much to be said in planning and running future schemes, for the greater degree of independence and other advantages associated with a separate statutory authority like the Gal Oya Development Board.

Land Use : Many problems of land use arise because insufficient attention has been paid in the planning of colonies to local variations in physical conditions; standardization has in fact gone too far since 1939.

Cultivation techniques used in paddy cultivation in colonies are rather backward, and production could be increased if improved techniques like manuring, transplanting, weeding are more extensively used.

Highlands in colonies are not cultivated properly, mainly due to lack of irrigation facilities and other technical problems. Shifting (chena) cultivation is practised in some colonies. One way to solve this problem is to grow tree crops or drought-resistant crops, and to increase the irrigated area by preservation of the surface water-table and where practicable by lift irrigation.

The pattern of land use in colonies has led to soil erosion, which could be reduced if contour bunds are constructed, highland lots are planned according to contours and not to geometrical patterns or to irrigation requirements, and if cover crops are introduced.

Selection of Colonists : With relief of agrarian pressure as a primary aim of colonisation, it is clear that attempts should be made to match the number of colonists selected from a particular area with the agrarian needs of that area. However, it seems that in general too few peasants have been selected from districts with high agrarian pressure, while too many places have gone to people from villages in the vicinity of colonies.

This problem could be overcome if (a) the Land Commissioner were freed from political control in the choice of source areas for colonists; and (b) if he were to apply some objective and well publicized criteria in determining the number of colonists to be drawn from each area.

There has also been a tendency to select landless farmers with large families, but this may conflict with the needs of agricultural efficiency. More attention should be given to selecting good cultivators.

The heterogeneous nature of colony populations, and the lack of co-operation among the members, are partly due to the system of selection. These problems could be minimised if groups of kinsfolk were selected and settled together in the new colonies.

Economic Problems of Colonists : Although the level of income of the average colonist is higher than that of the average villager, it could be increased still further if communications, marketing, efficiency of co-operatives and productivity of highland lots were improved.

The allotments given before 1953 were too large for the colonists to manage, so that they found it difficult to cultivate the entire allotment. But from 1953 onwards, when smaller allotments were given, these were not large enough to give a sufficient income. More data is required to determine the size of economic holding : it should vary from area to area and sometimes from farmer to farmer, e.g. a larger allotment may be provided to specially efficient farmers.

Financial Problems of the Government : The level of investment made by the Government, and especially the level of subsidies given to the colonists, needs to be reviewed. In 1953 the Government took on itself responsibility for jungle-clearing, stumping, irrigation works, roads, schools, hospitals, colonists' houses, latrines, wells, provision of seed, and subsistence till the first harvest. This volume of aid put a massive burden on the Treasury, for both capital and recurrent expenditure. It also created in the colonists' minds an attitude of dependence on further Government assistance. Economy in expenditure is called for, and the low level of charges made to the colonist for his land and water needs to be reviewed.

Social Problems : Absence of co-operative work, friction in the colonies, especially between colonists of different castes, conflicts between colonies and purana villages, and absence of proper leadership are among the major social problems in Colonisation Schemes. Remedies proposed are : grouping of colonists in 'village units', reduction of Government aids in order to encourage the colonists to work together, selection of kinsfolk as colonists on adjacent holdings, harnessing of 'cohesive properties of indigenous religion', selection of colonisation officers from among the colonists, etc.

Land Tenure : Some of the provisions of the Land Development Ordinance do not accord with traditional customs and social institutions in Ceylon, e.g. regulations regarding succession tend to break down the basic unit of social structure in Sri Lanka, the family. The form of tenure envisaged by this Ordinance may not be acceptable to the peasants who are used to an entirely different tenure system. The granting of freehold may be desirable and acceptable in traditional terms in this connection.

Alternative Approach to Land Settlement in the Dry Zone : The two major aims of colonisation, i.e. relief of land hunger and production of food are often, though not always, incompatible. The landless are not necessarily efficient farmers. Those who are good farmers are often the people with least need of additional land. A further contradiction exists between the clauses of the Land Development Ordinance which prevent sale, lease or mortgaging of holdings, and the free market and economic individualism which may be felt necessary for colonists to become efficient producers.

These two contradictions would be avoided if there were two types of colonies. The main objective of the first type would be to relieve landlessness in congested areas. Relatively small lots would be issued and there would not be great expectations of high productivity. In the second type the main objective would be the maximisation of production. The best cultivators would be chosen. They would be granted freehold ownership and encouraged to buy more land when they proved their efficiency.

Development of the dry zone could also be accelerated if other methods of agricultural development and land settlement were tried out along with the traditional approach to colonisation. Alternative approaches are capitalist farming, collective, co-operative, State farming and a low cost village expansion type of settlement scheme. An 'eclectic solution' is proposed which combines all the different approaches tried alongside, recognising the 'great variety that exists both in the land itself and in the capability of individual men to develop its resources.'

3.2

Report of the Land Utilisation Committee, 1967
(Sessional Paper No. XI - 1968)

In 1966 a Committee was appointed by the Minister of Land, Irrigation and Power to investigate the use both of developed lands and of Crown lands available for alienation, with a view to recommending how maximum production could be achieved in keeping with the requirements of the food production drive which was current at that time.

The report does not concern itself primarily with questions of agrarian reform, which it considers to have been adequately dealt with by the Land Commission of 1958. It concentrates on the development of soil and water resources, crop diversification, forest and wildlife reserves. However, it includes two useful sections on land alienation schemes established by Government and other agencies.

It shows that the position on Colonisation Schemes and other new settlements was not very different from that set out in the Land Commission Report of 1958. "Mapping out of Crown land is a restricted concept pivoting around the needs of the villagers and does not result in an overall plan for the potential use of the land at the disposal of the Crown." Even with these restricted objectives, it had not been found possible to follow the procedures for alienation and development of Crown land laid down in the Land Development Ordinance, due to encroachments and the growing pressure for land.

The Report suggests that there is the need for an organisation which can advise Government Agents on the planning and feasibility of land settlement schemes. Systematic studies of the achievements of these schemes are essential, and it is recommended that a unit of the Statistical Department be attached to the Ministry of Agriculture and Lands for that purpose.

Paddy yields on Colonisation Schemes have been disappointingly low, and development of the highlands has been virtually ignored. Pilot projects are proposed with intensive provision of services and control of land and water use. A Central Colonisation Board is felt to be necessary to co-ordinate the activities of various departments concerned in land settlement.

Youth Settlement Schemes which came into existence in 1965 are reviewed. It is felt that young people who have passed out from Farm Schools are the most suitable for selection; they should be settled in contiguous allotments to facilitate provision of training and services, and to provide a demonstration to other colonists.

The achievements of village expansion schemes, middle class schemes, special land leases, River Valleys Development Board, State Plantations Corporation etc., are assessed.

3.3 An Appraisal of the Colonisation Schemes in Ceylon By J.C.C. Hartoungh, FAO, 1968 :

This review of the achievements and shortcomings of Colonisation Schemes in Ceylon was prepared by an FAO Consultant following a one month visit in May 1968.

The main difficulties in the major schemes are identified as being attributable to the following causes :

- a) The planning of the schemes is not based on a comprehensive approach including irrigation, agricultural, economic and social aspects;
- b) In implementing the Schemes there is a lack of overall co-ordination between management, labour and other departments, so that evaluation and rectification are difficult to make;
- c) Agricultural Department and the Agricultural Extension Service are not involved in the schemes satisfactorily, and do not adequately develop and educate the farmers.

The Consultant makes the following recommendations :

- a) The Planning Unit of the Irrigation Department should be staffed with Economists, Agronomists, Agro-Economists, and Sociologists, so that it is possible to prepare comprehensive agricultural plans.
- b) The plan should be implemented and evaluated over short periods of 1-2 months at a time.
- c) A Planning Expert should research and set up a system of 'time planning' which is best applied on the major schemes under construction.
- d) Selection of new colonists should be based on research into 'what is the nature of the good colonists'.

- e) There should be better co-ordination between agricultural research and extension departments, to ensure that the recommended fertilisers, seeds and credits come in time to the farmers.
- f) Agricultural training should be given to the members of the Cultivation Committees.

3.4 Colonisation in Ceylon K.N. Weerakody, Land Commissioner, 1970 :

This review of the development of colonisation in both the dry and the wet zone of Ceylon was prepared by the then Land Commissioner in 1970.

Colonisation in the dry zone :

The earliest attempts at colonising the dry zone were primarily aimed at relieving population pressure in the crowded South-West quadrant of the island. Peasants with large families were selected for resettlement and the poor quality of the selectees was one reason for the non-viability of some colonisation schemes. Now the situation has been remedied. Initially holdings with 5 acres of irrigated land and 3 acres of highland were allocated in these schemes. Subsequently it was reduced to 2 acres of paddy and 1 acre of highland. Since 1935 about 325,000 acres of irrigated land were alienated in about 75 major colonisation schemes. Up to 1953 the cost of settling an allottee was about Rs. 20,000 and later it was reduced to about Rs 10,000.

In 1956 a system of "advanced alienation" was introduced in colonisation schemes, under which settlers were brought into the scheme two years before the projected date on which irrigation facilities would be available to their farms. The scheme was in operation from 1958 to 1969. The settlers participated in the initial development activities. Due to various reasons the Irrigation Department was unable to provide irrigation facilities by the target dates in many schemes. Many colonists drifted back to their villages. The scheme of advanced alienation was abandoned.

The cost of settlement in colonisation schemes was considered to be very heavy. Traditional peasant agricultural practices were found to be followed in most of these schemes. The physical planning of the schemes was considered to be poor. The existing plans did not pay sufficient attention to soil patterns, to

irrigation of the highland allotment, to technological needs of modern agriculture like large scale cultivation and spraying operations, or to the need to aggregate the residential holdings in manageable clusters so that social cohesion would evolve. In order to overcome these shortcomings a Settlement Planning and Development Board at the central level and a Co-ordinating Committee at the field level were created. A programme of providing lift irrigation facilities to highland allotment was commenced in 1956.

To increase productivity per acre in the major schemes and to ensure an optimum return on capital, Special Projects were commenced in 1967. In these projects, the first objective was to rectify all irrigation defects prior to the introduction of new crops and cropping techniques as part of an intensive extension programme. The last phase in the implementation of the Special Project idea was to develop farmers' institutions such as Co-operatives, Cultivation Committees, Rural Development Societies, etc.

Colonisation in the Wet Zone :

In order to meet the pressing demand for land and employment, and to put to economic use the still undeveloped portions of the wet zone, highland colonisation schemes based on tea, rubber, coconut and cinnamon etc., were commenced in 1956. With these schemes, the peasants were being introduced for the first time to plantation crops in State Colonisation Schemes. Though these schemes were faring well during the first few years, they deteriorated under the impact of falling world prices for their products.

A further experiment in colonisation was attempted in 1966 with the establishment of Youth Schemes for persons between 18 and 27 years of age. The main purpose in starting these schemes was to wean the youths away from the idea of white collar jobs and to show them that in agriculture they could earn satisfactory income.

3.5 Report on Youth Settlement Projects F. de Jong and B.W. van Eersel, 1970 :

This report was prepared in June 1970 by two Dutch volunteers who worked as Project Officers in the Land Commissioner's Department from 1968 to 1970. It provides a useful assessment of the problems encountered and solutions proposed in the early years of the Youth Scheme programme.

It is suggested that insufficient attention was given to physical planning at the start of the Youth Scheme programme, and that more detailed surveys of soil and water supply are needed before selecting sites.

In view of the difficulty of clearing land by hand, it is suggested that before the youth come to a scheme the land should be cleared, stumped and levelled and irrigation supplies should be completed.

To ensure sufficient income, high value crops with modern agricultural techniques should be grown.

Strict water management is considered essential especially in lift irrigation schemes, and the presence of mature management is felt to be necessary to achieve this end. A scheme for levying water charges in the Youth Schemes is proposed, and a draft agreement form between the Government and a hypothetical Youth Scheme is included in the report.

Government Officers are felt to be necessary for running the Youth Schemes. The functions they must perform and the kind of qualities they should possess are outlined.

The importance of Co-operative Societies in uniting the members of the Youth Schemes and in promoting their interests is stressed, but it is noted that most of the existing Co-operative Societies are weak or inoperative. This is felt to be because the youth form a heterogeneous community, and because they receive individually land, food and subsidies, which do not promote co-operative endeavour. Suggestions are made for co-operative education, marketing and saving schemes.

Agricultural training through demonstration plots and practical courses is felt to be important.

To ensure that the Youth Schemes have suitable members, a six-month period of probation is proposed, during which the youth have to prove that they are willing to co-operate and to become good farmers.

3.6 Report on Youth Schemes,
Land Commissioner's Department, January 1972 :

This report on the Youth Schemes was prepared by the responsible section of the Land Commissioner's Department after the schemes had been in operation for five years. The Youth Schemes are assessed against their major objectives of :- employment generation for educated youth, provision of a minimum monthly income of Rs 250, development work done collectively by the youth with only guidance and essential support provided by the Government, and self-contained Co-operative Societies functioning as the mainspring of development activity.

The organisational structure of the Youth Schemes and the procedure adopted for progress control are described. The different types of schemes are outlined - those based on subsidiary food crops, fruit crops, plantation crops and vegetables with animal husbandry.

235 schemes were expected to be set up over the period 1966-1970, absorbing 20,000 to 25,000 youth. In fact by 1971 only 41 schemes had been established, with 2,534 youths.

Twelve 'problem schemes' which illustrate the major problems encountered are briefly described. It is considered that 13 of the 41 schemes have been economically successful, with the youth earning much more than the target income. These are mostly schemes based on cultivation of subsidiary food crops under irrigation. However, the objective of creating self-reliant Co-operatives has not been achieved. In most schemes the youth opted to have individual allotments after the development stage was over, and the functioning of the Co-operative Societies was not very different from that of similar Societies in the country as a whole.

The following factors are identified as contributing to the success of the good schemes :

1. Thorough preliminary investigation and careful planning;
2. Correct location;
3. Selection of the right type of allottees;
4. Cultivation of the right type of crops yielding a high return in a short time;

5. Adoption of new agricultural techniques;
6. Selection of the right type of supervisory staff at the project level;
7. Intensive supervision at Kachcheri level.

The schemes that failed were unsuccessful due to one or more of the following factors :

1. Lack of proper preliminary investigation and planning;
2. Undue haste in starting the scheme;
3. Bad location;
4. Settlement of a large number of youth in big schemes which became too unwieldy to manage;
5. Selection of the wrong type of allottees, who would not settle in the schemes or were looking for other jobs outside agriculture;
6. Selection of plantation crops which took a long time to mature and bring a return;
7. Lack of proper supervision at the project level;
8. Ineffective supervision at District Agricultural Committee level;
9. Weak co-operatives and their failure to serve the development needs of the settlements.

3.7 Reflections on the Concept and Working of Special Projects, By I. Samaranickrema, 1968 :

This paper describes the thinking behind the Special Projects, which originated in the recommendations of an IBRD Mission in 1967, and assesses their early achievements and shortcomings.

The objectives of these projects were to improve irrigation constructions and use of water, to diversify economic activities on

the Colonisation Schemes, to co-ordinate the provision of supplies and services, and to develop the colonists' own organisations like the Cultivation Committees and the Co-operative Societies so that the colonists could play a more important part in their own development.

The intention in the Special Projects was to introduce a 'project approach' to agricultural development, with a Project Manager co-ordinating all the services which had previously been divided between different Government Departments (extension services from the Agriculture Department, credit and production inputs from the Co-operative Societies, crop insurance and price support from the Agrarian Services Department, irrigation facilities from the Irrigation Department, etc). It was also intended that the activities of local level planning and implementing agencies should be co-ordinated in the Special Projects. These had previously been divided between different institutions such as the Cultivation Committees, Co-operative Societies, and village level officials of different Departments.

It is noted in the paper that the appointment of additional staff to the Special Projects was a move inconsistent with the objective of increasing people's participation and maximising utilisation of the normal staff. But it was assumed that the project staff would quickly delegate responsibility to the settlement members, and would gradually take a more secondary role or withdraw altogether.

The paper concludes with a plea for a new spirit in the implementation of the Special Projects. This spirit needs to be venturesome, exploratory and immune from bureaucratic obstructions. If the Special Projects are to serve as pilots for development in the dry zone, the co-operation of farmers and Government officers must be enlisted at various levels and in various fields.

3.8 Colonisation Schemes as 'Special Projects' for Pilot Development - By Rai and Schickele, 1969

This paper which is based on the findings of a socio-economic survey of 10 Colonisation Schemes describes the ways in which the productivity and income of colonists could be increased by means of Special Projects. There are 4 major aspects of colonisation schemes which need the attention of the Project Managers of the Special Projects in order to improve the economic and social conditions of the colonists

- a) **Water Management** : to initiate an irrigation rehabilitation programme in order to prevent seepage losses, to realign certain stretches of channels, to provide for drainage and to place sluices and control gates and water measurement devices at strategic locations, so as to make the best use of land and water with the assistance of Cultivation Committees and Irrigation Engineers.
- b) **Extension Services** : to use the available personnel (e.g. KVS) more effectively, to arrange for selected leading farmers to carry out demonstrations of specific practices, and to explain these to their neighbours.
- c) **Multi-Purpose Co-operative Societies** : to work out action programmes to upgrade the performances of MPCS along with the farmers and Government officials concerned.
- d) **Draught Power** : to arrange for a better organisation of draught power supply and its availability at specific critical times.

As the Project Manager is not given any administrative authority, he will have to use many management devices to get things organised and moving. One way to do this is to organise these programmes in such a way that the farmers realise and appreciate the objectives, activities and the difficulties of the Project Manager, and to involve the Government Agents and the Ministries concerned in the planning and implementation of these programmes.

Chapter 4

Description and Analysis of Particular Settlement Schemes

Reports are available on a large number of individual settlement schemes started between 1891 and 1975, which illustrate points or problems which were of particular interest at the time the reports were written. In this chapter a selection of some of the most significant of these documents is summarised.

4.1 Report on the Kalawewa Colonisation Scheme (Sessional Paper No IV of 1893) :

Kalawewa is one of the first State-aided Colonisation Schemes established in 1891-1892. This extract from the report of the Government Agent of the North-Central Province indicates already the emergence of problems which were to dog Colonisation Schemes for decades to come.

"26 Tamil families from Jaffna peninsula were brought to the scheme in 1891. They were reported to be good cultivators but it soon appeared that they had no heart or desire for work, and were under the impression that Government was to be 'their father and mother'.

They were quite unused to clearing forest. If one man got ill, all stayed away from work. By the end of the year, except a clearing of about twenty acres for which they got help, there was nothing to show for their labour.

The cost of this colonisation to Government, inclusive of all charges (transport from Jaffra, maintenance for six months, erection of houses, grant of seed, tools, hire of buffaloes and ploughs) was roughly Rs 1,000, which cannot be regarded as a good commercial transaction, except as regards its influence in bringing in other colonists. But of course from this expenditure recovery will later on be made of the advances for maintenance and seed, & c.

It must, however, be said that the season was an unusually sickly one, and several of the party - especially children - died of pneumonia and dysentery ... This undoubtedly disheartened these superstitious people, and made it more reasonable from their point of view to demand subsistence and give no work in lieu of it.

One colonist died from pneumonia. His wife and children are in his house and land, and I intend to marry the widow to some man who will take the land (with its encumbrances).

As a set-off to this unsatisfactory attempt at aided Tamil colonisation, may be stated that of the land adjoining that selected for the colony, Mr Silva, a low-country Sinhalese gentleman, has purchased 1000 acres, of which he opened up about 70 acres during the year, and will take 200 additional acres of highland in 1893. He has wisely refrained from settling his labourers on the newly opened land - for such is invariably unhealthy - but he sends batches of men to work for a month or so, and then replaces them by others."

4.2 First Report of the Pasdun Korale East Colonisation Board (Sessional Paper No. 37 of 1930) :

A Board was appointed in November 1929 to advise Government on measures to be taken to promote colonisation of undeveloped areas in Pasdun Korale East (close to the site of the future Ihala-Hewessa Youth Settlement Scheme, Kalutara District). This Korale bordered even then on heavily populated areas, and the demand for land was strong. The following extracts from the first report of the Board show an appreciation of many of the problems which face settlement planners even today :

"The rainfall in this area is good and much of the land is fertile. But the Korale consists very largely of broken country - detailed mapping out has revealed that the extent suitable for small holdings is comparatively limited. It is useless to allot to colonists, who are men with little or no capital, blocks of land on the tops or upper slopes of steep hills often far removed from perennial sources of water.

There is within a few miles of these lands a teeming population which has outgrown the land available for it to cultivate. There is every indication that many villagers are prepared to move in order to obtain the land they need.

We have carefully considered the question of future relations between the existing villagers and the colonists we hope will be planted in their vicinity. To ensure that such relations are good we recommend that in every case the needs of the existing population should be first considered and fully provided for.

We recommend that lands for colonisation be mapped out in definite blocks of a sufficient size to form the nuclei of new villages. The colonists will not be sandwiched in with the villagers, a system which might not always make for future peaceable relations, but will be able to establish and build up their own villages with further recruits from their old villages. The plan may be compared to the process followed in grassing a lawn, when little clumps of grass or turf are planted at intervals of a foot or two and left to fill up the intervening spaces, gradually growing together.

We have recommended that special attention be paid to the formation of suitable groups of colonists who are likely owing to family or localities or other reasons to live happily together.

It is not proposed to offer any financial assistance to the colonists in the shape of doles or loans. In other ways, however, assistance will be given to them.

Each colonist will be given to start with a small extent of land, generally about 1 acre. If he works this land well he will be able to get further land from time to time ... up to 3 or 4 acres or even more according to his diligence and ability and the size of his family.

When his holding has been improved up to a reasonable standard he will be registered as the permanent occupant, upon a tenure which will not permit him to alienate it without permission, will protect him from losing his land for debt, will prevent the land becoming subject to multiple ownership, and will secure that the land is not allowed to lie neglected and uncultivated.

The colonists will be charged Rs 50 per acre for this right of occupation.

The colonist will be charged no rent unless he neglects to improve his land.

Before a colonist goes into occupation of a holding he will be required to deposit Rs 10 per acre as a guarantee of good faith.

A colonist will be required to build a house and permanently settle on his holding.

There will be no restriction on the nature of the cultivation or plantation the colonist may choose. He will, however, be advised to grow a certain amount of food for his own use. The Agricultural Instructor will do his best to give the colonists any advice or assistance he can."

4.3 Report on the Minipe Yoda-ela Scheme (Sessional Paper VI - 1940) :

A Commission was appointed by the Ministry of Agriculture and Lands in 1939 for the purpose of drawing up a development plan for the Crown Land under this scheme. The history of the scheme, which goes as far back as 1890, is reviewed in this report and the following aspects of the scheme's development are discussed :- irrigation, general development, jungle clearing, housing, staffing, agricultural development, medical and sanitary services, surveys, co-operative stores, financial implications, schools etc. As results of its enquiries, the Commission made the following major recommendations :

General Development -

- (a) An economic unit for an allottee should be five acres of irrigable land and three acres of highland;
- (b) Irrigable land should be used exclusively for paddy cultivation;
- (c) A portion of the jungle should be cleared by Government by employing allottees. The other portion should be cleared either in the same way, or by employing labourers or on contract;
- (d) No water rate should be charged for the first three years of occupation;
- (e) No annual payments should be recovered for the first four years;
- (f) Recruitments should be restricted to the peasants of the locality. In selection of allottees, preference should be given to the villagers who worked on the channel from 1929-1931;

- (g) Temporary shelters should be erected initially. Permanent houses should be built after one year, with frameworks provided at Government expense;
- (h) The initial supply of seeds and planting material should be given free of charge. Rs 7.50 per acre should be paid to each allottee for ridging and stumping. One crowbar and one felling axe should be supplied on loan to each allottee. An advance of Rs 40 may be paid to each allottee for the purchase of a pair of buffaloes;
- (i) Co-operative stores, schools, recreation grounds, a dispensary, cemeteries and a post office should be established.

4.4 Report of the Committee appointed to draw up a scheme for the settlement of educated young men on the land through the medium of existing schools (Sessional Paper V - 1941) :

A Commission was appointed in 1940 for the above purpose, following a proposal made at a Ceylon Headmasters' Conference for setting up courses of agriculture in local schools and utilising the schools as organisations for settling young people on the land.

This proposal predates the Youth Settlement Schemes by some 25 years. The Headmasters' plan was to develop 325 acres of land per school, with labour provided co-operatively by groups of students, and with a central farm of 25 acres managed directly by the school. The Commission treated this as a practical method of dealing with unemployment. Consideration was given to the class of young men, type of settlement, layout and extent of land, selection of young men, development programme and management, health and sanitation, tenure of land, marketing and also the applications sent by various schools to come under the scheme.

The recommendations made by the Commission were as follows :

1. A mixed farming system involving both crops and livestock should be adopted, and those products should be raised which find a local market, i.e. chillies, green gram, dhal, turmeric, ginger and red onions.
2. Permanent crops should be cultivated only where annual crops are not feasible. Tea or rubber should not be grown. Not more than 2 acres should be planted with any single crop.

3. Every effort should be made to convert perishable produce into finished products with the aid of simple machinery.
4. Land should be leased out to the schools and no grants should be issued to the students till the completion of development.
5. All available crown land near the pilot projects should be brought under the scheme to provide land for further batches of students.
6. The people selected should be either those who recently passed out or those who are still school-going but over 17 years of age. The School Principal should have a free hand in selecting but should consider aptitude, perseverance, health, physique and the possession of sufficient means.
7. The instructions given to the youth should be of a practical kind. The training course should be of 3 years duration and should cover not only agricultural aspects but small agro-based industries, co-operative organisation and sanitary work.
8. When the students are settled on the land, the central farm should function as a Service Co-operative, through which training, loans, grants and marketing facilities are channelled.
9. The central farm should be developed within 3 years according to a programme approved by the Land Commissioner. It should act as a model and its programme should be on the same lines as that for the colonists' holdings.
10. There should be an advisory board consisting of the School Principal (Chairman), DRO, nominees of Department of Agriculture, Commissioner for Agricultural Marketing, Registrar of Co-operative Societies, and Medical Officer.

4.5 Report of the Gal Oya Project Evaluation Committee
(Sessional Paper No. 1 - 1970) :

The multi-purpose Gal Oya Project was initiated in 1949, with the objectives of constructing a large reservoir in the upper part of the Gal Oya Valley - (a) to irrigate and protect against floods already cultivated fields in the valley plus 42,000 acres of new land; (b) to generate hydro-electric power for the area; and (c) to provide treated drinking water for 20,000 people. The newly

irrigated lands would be allocated for peasant colonisation, while co-operative agricultural and industrial undertakings would also be encouraged among the colonists. A sugar project would be started with about 10,000 acres of cane and a factory operated by hydro-electric power from the Gal Oya dam, and various small industries would be established such as rice mills, tile factory, wood-working and machinery workshops, etc.

The Gal Oya Development Board was created in 1949 to oversee this work. By 1966, 35,728 acres had been supplied with irrigation water from the G.O.D.B. works (17,751 acres of which received enough water for a second crop also); some 12,000 families had been settled in the area; additional paddy to the approximate value of Rs 13.5 million per year and sugar cane to the value of Rs 3.5 million per year were being harvested. But this had been achieved only with a massive investment amounting to some Rs 911 million, divided almost equally between capital and recurrent costs, the latter averaging some Rs 36 million per year. There was a widespread feeling that a detailed evaluation of the project was needed, 'to ascertain the economic and social returns to the investments made, and to provide guidance for future development projects of a similar kind.'

Results of the Evaluation and General Conclusions :

The benefit/cost ratio for the project as a whole is calculated at 0.5, and the discounted costs are found to exceed the discounted benefits by more than Rs 277 million. The most striking feature is the massive outlay on irrigation, colonisation and land development. Even if capital had been available to the economy absolutely free, i.e. at zero interest rate, the project would not have been paying.

The cost consciousness of the G.O.D.B. is subjected to severe criticism. Almost Rs 40 million were spent on offices, housing and facilities for officials, while the Gal Oya dam itself cost no more than Rs 40 million. The costs of land development, roads, bridges and other items of infrastructure were extremely high, and between 1960 and 1966 some Rs 320 million were spent on an unplanned series of works which were only marginal to the project. The Committee calls into question the wisdom of diverting scarce resources to such costly schemes, in place of consolidating and developing existing schemes where production can be increased at relatively low cost.

The analysis illustrates the low productivity of the individual colonists in the Gal Oya Scheme. The poor yields to date, and the

failure to adapt cultivation techniques to local soil and other conditions, point to another significant conclusion - the failure of the Board's agricultural extension activities to make sufficient impact on the colonists' agricultural practices.

The selection of individual colonists from several districts proceeded in the paternalistic manner that has governed all such selection for decades. As a result the colonist population is an amalgam of landless peasants with large families, people rendered homeless by natural disasters, fisher folk in search of a new life, the odd undesirable exiled from his village, and more diverse types. No attempt was made to judge the agricultural skills or other aptitudes of the applicants, which are necessary to establish a viable community.

The experience in purana lands of the Gal Oya valley shows, however, that under the right conditions there are acceptable returns to be had on investments which raise the productivity of already asweddumised paddy lands through flood control and improvement of the existing irrigation system. In the Gal Oya case this did not involve high expenditure on infrastructure and overheads. There are probably many other similar areas in the dry zone where productivity could be raised by a relatively minor investment.

The Committee strongly urges that a continuing scientific evaluation of every aspect of the project - technical, economic and sociological - should be undertaken as a continuing and vital part of the project's activities.

Subsidiary Projects :

The Committee's analysis of the high costs and low returns of the Sugar Project shows that a share of the responsibility for its failure should also be borne by the G.O.D.B. management. Though there have been contributory factors such as poor soils and lack of equipment, the management cannot be absolved from its failure to carry out its proper functions such as cost control, effective supervision and the drawing up of targets.

The Committee's analysis of the performance of other secondary industries of the Gal Oya Project reveals faulty planning and poor management. No coherent analysis or evaluation of the specific needs and objectives of these projects was made before it was decided to establish these industries. This sad lack of pre-scheme planning left the Board 'holding the tiger's tail' of industries which had ceased to serve the project's objectives.

The Administration and Accounting System :

It is felt to be regrettable that few of the members of the Gal Oya Development Board had any professional competence in agriculture, irrigation or industry. In many instances capital assets were wasted by not being made use of until long after they were received at the project. Accounting arrangements were far from satisfactory. An effective control of costs was not possible without the establishment of a costing system, which, however, was conspicuous by its absence.

Objectives of the Project :

The principle objective at the outset of the Gal Oya Scheme was to settle the maximum number of families which the area could carry at a reasonable standard of living. The requirement of maximising the return on Government investment, and of minimising foreign exchange expenditure, became important only later.

The Committee recommends that the objectives of development projects such as that in the Gal Oya valley be reformulated to put emphasis on the maximisation of benefits in relation to costs. The net effect of each development project on the country's foreign exchange position should be carefully assessed and should influence the planning and execution of the project.

If such social objectives as the settlement of the maximum number of colonists is preferred, informed advice should be obtained as to the likely effect of such a decision on an alternative approach which would maximise benefits in relation to costs. The Committee is of the opinion that in future schemes the Government ought to secure rather more of the fruits of its development projects by way of revenue than it has done from either the Gal Oya Scheme or any other Colonisation Scheme in the past.

Planning of Future Development Projects :

There must be a thorough assessment of the natural resources in the project area especially of topography, soil and hydrological conditions. Proper regard must be paid to the results of these surveys when irrigation systems and areas for agricultural development are being planned.

Once a survey is available of soil and other relevant resources, the best possible pre-investment study must be made of the likely costs and benefits of each project, having regard to the reformulated objectives that will result from the implementation of recommendations already made and to realistic rather than optimistic assumptions.

All of these studies must be made well ahead of time, so that decisions can be made after consideration of a wide range of possibilities. This applies as much to a decision to embark on a multi-purpose scheme with many components, as to a decision to add new components to an existing scheme.

It is clear that the Gal Oya Project as a whole was not planned in advance in this way and some of its components seem to have been added without proper consideration of their physical possibilities, their costs and likely benefits.

Finally, there is much to be said for a periodic evaluation of a project's operation conducted at intervals of five years or so. The most carefully formulated projections can be falsified by actual events. Thus periodic appraisals will produce conclusions, even at a late stage in a project's operations, that can usefully be applied to the planning of other projects.

4.6 Socio-Economic Survey of the Elahera Colonisation Project, Faculty of Agriculture, University of Ceylon, Peradeniya, 1968 :

This survey was requested by the Ministry of Agriculture and Food at the time of introducing the Special Projects Programme to Elahera Colonisation Scheme in 1967/68. It was intended to provide a benchmark against which progress in improving production efficiency on the scheme could be measured, and also to reveal the obstacles which retard the adoption of modern techniques and to indicate measures for overcoming these obstacles.

440 farmers on the scheme were interviewed, and 51 individuals from Co-operative Societies, Cultivation Committees, and Government Departments. The following were the major findings :

(a) 95% of the asweddumised lowlands were cultivated in Maha season but only 45% were cultivated in Yala. The Yala yield per acre was only half the average yield in Maha. The basic cause is shortage of water. This could be rectified by improving the efficiency of water distribution in Maha, so that the level of water in the tanks would be higher at the start of the Yala season. Until such an improvement in water distribution is achieved, it would be economically advantageous -

- (i) to reduce the acreage to which Yala water is issued;
- (ii) to diversify the cropping system on the lighter soils of the lowland during Yala, planting subsidiary food crops which require less water and have a shorter growing season;

- (iii) to explore the feasibility of lift irrigation during Yala in certain highland areas, for intensive production of high value crops.

(b) The average paddy yield at Elahera in Maha 1966/67 was only 42 bushels per acre, 74% of the average for Polonnaruwa district. This was largely due to the fact that only 38% of farmers used fertiliser, certified seed was used only in 20% of the paddy lands, and transplanting was practised by less than 25% of the farmers. In Maha 1967/68, under intensive Government efforts at raising yields, the rate of adoption of various modern practices jumped up impressively (fertiliser use from 38% to 85% of farmers, transplanting from 25% to 60% of acreage, etc). But the resultant paddy yields were not yet known at the time of the survey.

(c) 60% of the highland allotments (3 acres per farmer) were not used at all at Elahera scheme; but nearly 25% of farmers cultivated chena land (averaging 2.5 acres each) at some distance from the scheme in addition to their LDO holdings. This is because continuous cultivation on highland plots requires heavy fertilising. Tree crops rather than subsidiary food crops are recommended for these plots, unless irrigation can be cheaply provided.

(d) Though not permitted by the Land Development Ordinance, many lowland allotments are leased in or out, sometimes to relatives of allottees, and sometimes to other allottees, generally with half the crop being paid as rent. Many holdings are also sub-divided among the allottee's children after or even before his death. It is hard to prevent this happening when population is rising, but it is important to reduce the negative consequences of the practice. Some flexibility in tenure relationships, allowing temporary leasing and sub-division of lands, may be preferable to rigorous enforcement of a fixed tenure and farm size pattern which often merely leads to hidden rather than open leasing and sub-division of land.

(e) Many farmers do not repay their loans, due to crop failure or low yields, use of credit funds on unproductive activities, or sale of paddy to private traders. Discipline in repayment must be promoted by a number of devices, through appeals by M.P.s, and through vigorous debt collection campaigns by Co-operative Societies, etc.

(f) An argument is made out for Co-operative Societies to give consumption loans for subsistence in addition to the crop production loans. The logic behind this is that such loans would be used to keep the family labour force in work. They can thus legitimately be classified as production loans.

(g) Co-operatives are heavily attacked by 75% of the farmers interviewed. The main complaints are of bad management and corruption. Ultimately the farmers themselves must correct these shortcomings by becoming more effective participants in the affairs of the Societies, and by electing better Committees. Meanwhile, the Government can help by providing more training for Managers and Book-keepers, making available necessary equipment, educating farmers, etc.

(h) Cultivation Committees are generally felt to have let the farmers down. There are many complaints of delays in effecting contracts, of favouritism and of lack of interest in the farmers' needs. Often the same people who run the Co-operatives run the Cultivation Committees also. Area representation might be a preferable way of electing Cultivation Committee members, with representatives being nominated by each section of the scheme to promote the members' interests.

4.7 Report of the Re-Survey of the Elahera Colonisation Scheme in Ceylon, 1971

T. Jogaratnam, Agricultural Economics Research Unit, Peradeniya :

Following the initial benchmark survey of the Elahera Colonisation Scheme carried out in 1967, a re-survey of the same scheme was commissioned by the Land Commissioner's Department in 1970. The objective was to assess the progress made in intensifying agricultural production following the introduction of the Special Projects Programme to this scheme in 1967-68.

The same farmers who were interviewed in 1967 (418 farmers or 40% of the total population) were re-interviewed in 1971. Information was sought on changes in farm size and tenure, land and water use, credit and indebtedness, incomes and living standards, and effectiveness of extension officials and rural institutions.

The survey indicates a decrease in farm size, due mainly to informal sub-division of holdings amongst allottees' children. Cropping patterns show hardly any change, despite the supposed concentration of extension effort and input supply. Farmers continue to rely on paddy production even in Yala season, despite problems of water shortage and poor distribution. The hoped for shift towards subsidiary food crops in Yala has not yet materialised.

A major aim of this Special Project was rehabilitation of the irrigation system. But there is little evidence of any improvements. The acreage cultivated in Yala is still less than half that

in Maha, and yields are very much lower. Water distribution and water shortage are major problems. Highland allotments are still not irrigated.

Farmers report greater reliance on family labour. Use of hired and exchange labour have decreased. It is not clear whether, because of rising wages, farmers are using family labour more intensively, or whether more family labour is becoming available because of a lack of alternative avenues of employment.

Farm incomes have increased despite the decrease in farm sizes. This is attributed largely to increased paddy yields, but the increase is not spectacular. It is no larger than in Polonnaruwa District as a whole. The rate of adoption of improved practices is also unsatisfactory for an area in which there is supposed to be a concentration of efforts.

Farmers are channelling their surplus paddy through the Co-operatives and using their services in purchasing agricultural supplies. But a smaller percentage are using the credit facilities available through the Co-operatives. Less criticism of the Co-operatives was heard than in the earlier survey, but the same cannot be said of the Cultivation Committees. Farmers saw little usefulness in them and a high proportion preferred a return to the old Vel Vidane system.

The number of field level extension officers per farmer is higher at Elahera than outside the scheme; but there has been a rapid turnover of staff and a good relationship between farmers and officers has not been built up. The extension effort is heavily weighted in favour of paddy; little information is given on subsidiary crops. Also the problems of poorer farmers tend to be neglected.

Three years is not sufficient time to judge the Special Project Programme at Elahera, especially as much of the time has been spent on organisational matters. But the early results show no evidence of the concentration of resources and co-ordinated efforts which are necessary if the Special Projects are to serve as demonstration and growth centres for the areas around them.

4.8 Socio-Economic Survey of Nine Colonisation Schemes in Ceylon 1967-68. Faculty of Agriculture, University of Sri Lanka - Peradeniya - 1969 :

As a sequel to the Socio-Economic Survey of the Elahera Colonisation Project (4.6), nine other Colonisation Schemes where Special Projects had been started were surveyed in a similar way, and with similar objectives. The nine schemes are Iranamadu, Padaviya, Allai, Mimmeriya, Gal Oya, Minipe (Government land), Minipe (Temple land), Hakwatuna Oya, Rajangana and Mahavilachchiya. A total of 1,568 farmers were interviewed in these schemes.

Part II of the survey report presents detailed information on each of the nine project areas, under the following headings : farm size and tenure, farm production and income, credit and indebtedness, farm labour force, cultural practices, farmers' appraisal of Co-operative Societies, Cultivation Committees and Government Services.

Part I presents a comparative analysis of the findings in the nine schemes, from which the following points of major significance are extracted :

a) Farm size : total allotment size ranges from 9 to 3 acres, with a range from 5.3 to 2.2 acres of paddy land and from 3.7 to 0.6 acres of highland. But the total land cultivated is higher, from 12.9 to 4.2 acres; this includes encroachments, rented in lands, chena lands, and land owned outside the project.

Output per acre is higher on the smaller holdings, where family labour is fully utilised and there is strong incentive to use intensive production techniques in order to achieve a satisfactory income level. On larger holdings output per farm may be higher, but output per acre generally falls off and this is not in the national interest.

b) Paddy production and water supply : paddy yields are generally low especially in Yala, mainly because of insufficient water and inefficient distribution. Chena paddy provides a form of insurance against low Yala yields, and it is recommended that measures be taken to raise the Yala yields before restricting chena cultivation. Measures are critically needed to economise Maha water use, to enforce a Yala water distribution plan, and to improve the irrigation systems in all schemes to reduce wastage.

c) Farm operating expenses : the major items of production expenditure are draught power (mainly tractor hire) amounting to some 40% of total costs, and hired labour. Draught power costs might be reduced if more use was made of buffalo. Dependence on hired labour would be reduced if holding size were smaller.

d) Modern production techniques : high yielding varieties, fertilisers and agro-chemicals are widely used in all schemes, but the amounts and timing leave much to be desired. More effort is needed by research, credit and extension agencies to maximise production efficiency.

e) Subsidiary food crops : the survey shows that farmers have barely begun to seize the opportunity of increasing income by growing higher value crops than paddy on suitable parts of the lowlands. This can be done without introducing severe competition, either for land or for labour. Research and extension efforts are needed to promote such crop diversification.

f) Paddy disposal : sales range from 36% to 69% of production; sales to the Co-operatives under the Guaranteed Price Scheme range from 92% to 5% of total sales. Sales to Co-operatives would be higher if they paid farmers on the spot, collected paddy from the farm, and accepted low grade paddy. Debts to private traders are another reason for selling to them rather than to Co-operatives.

g) Credit and indebtedness : about 50% of loans are taken from private merchants, despite the lower interest rate of Co-operative credit. The reason is that merchants give credit for consumption, without red tape or delay, and without security.

h) Co-operative Societies : these are felt to be inefficient, corrupt, lacking supplies and facilities. Government support is needed in training Co-operative staff and in providing storage space, transport and processing equipment.

i) Cultivation Committees : farmers are dissatisfied with the operation of these committees also. The problems of improving the irrigation system and controlling water distribution need thorough examination, in which farmers must be effectively involved as they are the immediate victims of the shortcomings of the Cultivation Committees.

j) Government services : these are not spared criticism by farmers. Extension, Irrigation and Colonisation Officers among others are strongly criticised. These unsatisfactory ratings refer to the period before the nine areas were selected as 'Special Projects'. Since then a Project Manager was appointed to each area to co-ordinate services, and the field staff were strengthened. The effect of these changes is yet to be assessed.

4.9 Youth Schemes in Galle District By P.A.T. Gunasinghe, 1970 :

This report by the then Government Agent of Galle district reviews in some detail the experience of three Youth Schemes started in Galle district in 1966-67. The Schemes are Mandalapura based on tea and passion fruit, Pituwela and Hiyare based on cinnamon. All three Schemes started with collective cultivation of land. At Mandalapura it was initially intended to divide the land into small holdings after the development phase was over, but this decision was later reversed by the Government Agent. In the other two Schemes there was never an intention of dividing up the land, and the acceptance of the co-operative system by the youth was greater.

A number of general conclusions emerged from the experiences of these three Youth Schemes -

a) The idea of co-operation was not approved equally by all the youth. The individualists, especially those who were physically stronger or better educated, felt that blocking out and working the land individually would lead to faster development.

b) In all Schemes the initial drop-out rate was high. But the authorities felt that it was better that those who had no faith in co-operation should leave, rather than remain as malcontents and individualists who would disrupt the spirit of unity found among the other members.

c) The variance in education of the youth led to difficulties, when those who were less educated could not easily understand the system of co-operative accounting, etc. Training in these aspects was essential.

d) The demand of the youths' families for allocation of individual holdings also acted against the co-operative spirit. This problem was worse after 1969 when some of the youths got married, and it was especially acute in Schemes where the youth were chosen from the nearby village itself.

- e) Constant meetings of the youths' Co-operative Societies were found to be necessary to iron out problems. Full and frank discussions and criticisms were encouraged; to allow this it was necessary to restrict the size of the Schemes to not more than 60-80 families. This is in contrast to the Multi-Purpose Co-operative Societies, where meetings of the General Body are rarely held.
- f) It was preferable for the youth to live in village clusters where they could meet regularly, unlike in the traditional Colonisation Schemes where houses were arranged in a linear fashion stretching along roads for miles on end, so that the colonists at the end of the road hardly meet those at the beginning.
- g) High value crops providing an adequate income in a short period were essential. Otherwise a major contradiction was introduced in regard to the size of holding : where this had to be larger than the youth could manage with their family labour, they were forced to depend on hired labour and to become exploiters of men.
- h) It was necessary to set physical work targets. Initially the youths themselves were given the task of ensuring that these targets were reached, but this introduced another contradiction arising from the very spirit of unity which was being inculcated. The supervisor, appointed from among the youth themselves, found it difficult to enforce discipline whereby a fellow member would be deprived of a day's wage. It was found necessary to cancel this system and to have work targets set and supervision done by Government Officers.
- i) A problem arose with different jobs of different degrees of hardship. Some jobs, e.g. tractor driving were considered as high status, while others, e.g. office work were considered as 'soft' jobs. Attempts were made to overcome this problem by training all members for the skilled jobs and introducing a system of job rotation.
- j) It was extremely important that the Public Officers supervising the schemes at the early stages should be of the highest possible standard. Prospective supervisors should be trained by Officers who themselves should be ideologically oriented to the objectives of the co-operative projects.

4.10 Socio-Economic Survey of Campbell's Land Youth Settlement Scheme - P. Ganewatte, Sociologist, Land Commissioner's Department, 1973 :

This is a case study of a youth scheme in Kandy District, based on cultivation of cardamoms. It started in 1966, with 120 youth and 240 acres of land which were communally farmed. There was a steady drop-out rate over the first few years, due to the hard labour, low initial income, poor living conditions and difficulty of adjusting to communal living. In 1970, there were 57 youth remaining : the land was then divided among them, 2½ acres each.

The estimated expenditure incurred by the Government to settle one youth in the scheme was Rs 11,421. The cost of maintaining one acre of cardamoms for four years till the first yield is obtained comes to about Rs 6,000.

A major cost over the first four years was the loss of mandays due to sickness, leave and bad weather. It is estimated that 20,967 mandays valued at Rs 31,300/50 were lost during this period.

The average income per youth in 1970 was Rs 696, in 1971 Rs 2,163, and in 1972 Rs 3,688. Capital costs were not deducted from this income : they were assumed to be given as a grant or written off.

While the economic objectives of the scheme - to provide employment and monthly incomes of Rs 250 to 300 - were clearly spelt out and were achieved by 1972, the social objectives were hazy and ambiguous. The lack of a clear philosophy reduced the commitment and understanding of both youth and officials, and was also partly responsible for the high rate of drop outs.

All the youth in the scheme were from similar social, economic and cultural backgrounds. They lived together without much tension or conflict. Communal living brought forth a spirit of friendship and cordiality.

Two castes, Goigama and Durawa, are almost equally represented in the scheme. Though caste is strictly observed in marriage, sharing of cooked food, etc., yet it has not hampered social interaction among the youth.

The study indicated that the youth had 'middle class' aspirations and values. Their motivation in joining the scheme was to obtain Government employment, security, land, and to support their extended family.

The allegiance of the married members of the scheme was divided between the extended family in the village and the nuclear family in the scheme. About 50% of the members' average annual expenditure in 1972 was on the extended family in the home village.

By 1972 a stable community had developed at Campbell's Land. It was characterised by an air of freedom compared to the traditional society. The new educated elite which is beginning to emerge is independent, ready to accept innovations, frugal in its living, and indifferent to the caste or political affiliations of others.

4.11 Ceylon-Japan Rural Development Project, Dewahuwa February 1972 :

This paper describes progress on the Dewahuwa Colonisation Scheme in Anuradhapura district where Japanese experts are helping the Sri Lanka Government to raise productivity of paddy lands through consolidation of small liyaddas (terraced strips) into larger ones.

The consolidation works cover an area of 771 acres of paddy land and are to be completed within 5 years. The effects of consolidation work will be in three fields :

- a) Economisation of water, enabling more intensive use to be made of farm land during both Maha and Yala seasons. Efficient water management, which is easier in larger liyaddas, is an indispensable precondition for adoption of modern agricultural techniques such as fertilising, weeding and pest control.
- b) Facilitation for agricultural mechanisation : Over-fragmentation makes it almost impossible to utilise even small machinery. It causes damage to equipment, rapid depreciation, wastage of time and labour, and heavy costs of land preparation.
- c) Intensification of labour application : The average size of farm enterprise at Dewahuwa is comparatively larger than elsewhere. (5 acres of paddy, 3 acres of highland, plus additional chena fields). This causes seasonal labour shortages and under-utilisation of labour in off-seasons. Four schemes have been

introduced to remedy the situation, namely, agricultural mechanisation, Yala cultivation, highland irrigation and agro-industries.

The cost of land consolidation is estimated at Rs 1,000 per acre. Assuming that the life span of the earth works is 100 years, the cost to be recovered from the farmer by the Government is Rs 10 per acre per year if no interest is charged, or Rs 18 per acre per year at 6% compound interest.

The net income to farmers after consolidation of holdings is estimated at Rs 5,600 per acre (production costs per acre Rs 4,300) as against an average net income before consolidation of Rs 2,250 (costs per acre Rs 2,800).

If ownership of the consolidated holdings is transferred to the colonists, the annual payment to be recovered from the farmers over a 10 year period would range from Rs 180 to Rs 450 per year, assuming that 40-80% of the capital cost is subsidised by the Government.

4.12 **Thannimuripu Paripalana Sabai : The Transfer of Administration of an Irrigated Settlement Scheme from Government Officials to a People's Organisation. A.O.Ellman & D.de S.Ratnaweera, Agrarian Research and Training Institute, 1973 :**

This case study of an irrigated settlement scheme in Vavuniya District examines the attempts made between 1970 and 1973 to transfer responsibility for administration of the scheme from Government officials to an elected people's organisation.

Thannimuripu scheme has 650 farmers, each with three acres of paddy land under the tank. Most of the farmers live in villages near the scheme rather than on the holdings themselves.

Three Cultivation Committees were elected in 1968, to take responsibility for maintenance of irrigation works and control of water issues in the three tracts of the scheme. Their performance was very unsatisfactory and the cultivators remained dependent on the Government for maintaining the irrigation system, settling minor disputes, etc.

In October 1970 the Thannimuripu Paripalana Sabai or Administration Board was elected by the cultivators, with representation of the three Cultivation Committees and of the ordinary farmers.

The Thannimuripu Paripalana Sabai was given no legal powers or source of funds. It was intended to co-ordinate rather than supplant the existing Cultivation Committees, providing a channel of communication between them and the Government officials.

Apart from the lack of legal powers given to the Thannimuripu Paripalana Sabai, and the method of electing the members, the objective and the approach adopted in establishing this organisation was similar to that behind the Agricultural Productivity Committees which were formed in 1972. The experience of the Thannimuripu Paripalana Sabai is therefore of interest with regard to an assessment of the problems which might be encountered by the Agricultural Productivity Committees.

Economically the Thannimuripu Paripalana Sabai had a rather limited impact, mainly because of its lack of communication with the Co-operative Societies and other economic institutions.

Socially the Thannimuripu Paripalana Sabai represented the interests of the cultivators fairly, but its acceptance and effectiveness were limited by the fact that it had authority only over the paddy land and not over land outside the scheme, and also by the fact that the farmers were not living together as one community,

Administratively the Thannimuripu Paripalana Sabai took some of the burden off the Government Officers, but it was hampered by its lack of legal powers, lack of funds, and by limitations both on the authority delegated to it by the Government officers and on the acceptance it received from the cultivators. The Thannimuripu Paripalana Sabai encountered some resentment from the Cultivation Committees, which saw it as an encroacher on their rightful territory. Clarification of the relationship between the two institutions was needed.

As an elected body the Thannimuripu Paripalana Sabai faced problems in enforcing discipline on the farmers who elected it. There was a need for precise definition and publication of the rules relating to scheme administration, and for public agreement by the farmers on the punishments for infringement of these rules. An impersonal authority seemed to be needed for the enforcement of the rules.

4.13 New Settlement Schemes in Sri Lanka
 A.O. Ellman and D.de S. Ratnaweera
 Agrarian Research and Training Institute - 1974 :

This study undertaken by the Agrarian Research and Training Institute in 1973-74 is a comparative study of four different types of Settlement Schemes - Youth Schemes, Co-operative Farms, Divisional Development Council Agricultural Projects, and Land Reform Co-operative Settlements. The report includes comprehensive case studies of 20 Settlement Schemes, 5 of each of the 4 types.

The settlements are evaluated against several criteria - their achievement in creating employment and increasing production at a low cost, maintenance of economic and social equality between the members, development of co-operative forms of organisation both in servicing and production, achievement of self-reliance and management of the settlements by the members, and integration of the new settlements with surrounding communities. Following the analysis suggestions are made for improvement of the settlements of each type, and guidelines are presented for establishing new settlements in the future.

The five Youth Schemes studied are Mandalapura, Mammampitiya, Kuda Oya, Yattapatha and Viswamadukulam. Those based on high value crops (chillies, passion fruit, vegetables) are shown to have achieved good results from an economic viewpoint, though the establishment costs in the initial period when land was collectively held were high. But the communities which emerged on the new schemes are highly individualistic, with heavy dependence on hired labour, little co-operative activity, and the beginnings of social and economic inequalities. The Schemes are for the most part still managed by Government officials rather than by the members, and they have tended to become isolated pockets of development, remote from and having little impact on the villages which surround them.

The report suggests that the Youth Schemes could be improved by more rigorous physical and financial planning; by taking settlers initially on 6 months probation and giving them intensive training and orientation, especially during the initial period of collective cultivation; by allocating holdings of equal size and quality laid out in a way which promotes co-operation between neighbours, by involving the members from the beginning in planning and managing their Schemes; and by providing finance in the form of loans rather than grants to avoid making the members a privileged sector of the rural community.

The five Co-operative Farms studied are Lassanagama, Baddegama, Meepilimana, Gilimale and Providence. Three of these farms were established on acquired estates which had previously been neglected for several years. Under collective management the rate of economic progress has been slow, except where levels of work inputs and finance have been strictly controlled. In many cases such discipline has been imposed from without by appointed officials in the manner of a private estate or State Farm, rather than by the members themselves. Economic equality between the members has been maintained, but in several cases significant social inequalities have developed, between the members and the management on the one hand, and between the members and hired labourers on the other hand. Some of the Co-operative Farms have become isolated pockets of development like the Youth Schemes. But where the members do not reside on the farms but come daily from their villages, better integration with surrounding communities has been achieved.

Many of the suggestions made for improving the Youth Schemes apply also to the Co-operative Farms. In addition the report emphasises the need for dividing the members into small work groups with elected leaders; for allocation of individual or group tasks for raising levels of work input; for more effective planning and progress control; for intensive training of members and officials; and for full participation of the members in management.

The five DDC Projects studied are - Middeniya, Thonigala, Arangala, Uppuweli and Yatinuwara. The first three are agricultural projects with individual holdings under a Service Co-operative Society. The last two are livestock projects, one a collectively operated poultry enterprise and the other an individually organised milk production scheme. Productivity on the agricultural schemes is reasonably high, and costs are quite low since no movement of population is involved. Management of the projects has not yet been delegated to the members, but has remained in the hands of Government officials or the local Multi-purpose Co-operative Societies.

To improve these DDC Projects better provision of inputs, technical services and marketing facilities are required; establishment of reserve funds for recurrent investment and maintenance or replacement of capital assets; formation of Special Co-operative Societies for management; and full involvement of the members in planning and managing their Schemes along with suitable training and necessary services.

The sample of five Land Reform Co-operative Settlements or 'Samuhika Janawasas' established on estates acquired after the Land Reform of 1972 includes Serapis, Dammulahena, Normandy, Yarrow and Farnham. Two of these are coconut estates, one a mixed plantation with cocoa, cinnamon, rubber and other crops, one a tea estate and one a rubber estate. Three of the estates were badly neglected at the time of takeover. The initial progress made up to the time of the survey was encouraging, with significant achievements in increasing employment and productivity, in developing a co-operative organisation, and in promoting self-management and integration with surrounding villages.

In response to the problems which some of these Janawasas were encountering, the following recommendations were made in the report for improving their operation: Immediate reinvestment of revenue from crop sales or Bank loans to overcome capital shortages; allowance of a 3-5 year moratorium on capital repayments including land value; transfer of legal title to the lands to the Co-operative Societies to overcome the members' feeling of insecurity; involvement of the members along with local Government officials in planning and management; replacement of the old system of management with a democratic system of work groups, elected leaders, work norms and tasks; and social and economic measures to break down the barrier traditionally existing between the estates and surrounding villages.

The study concludes with a comparative evaluation of the four types of new settlements, and with recommendations for future settlement policies which will be summarised in the appropriate place in Chapter 7 of this review.

Chapter 5

Specialised Aspects of Land Settlement Schemes

This chapter summarises a number of articles or academic theses which deal with particular aspects of settlement schemes in some depth. The first three papers discuss sociological aspects of settlements, the second three discuss economic aspects, the next three deal with geographical and planning aspects, and the last paper is concerned with management aspects.

- 5.1 Some Sociological Problems of Colonisation on a Peasant Framework - S.J. Tambiah
The Ceylon Economist Vol. IV No. 3 -
December 1958 - p. 238-248 :

The main objective of this paper was to examine the sociological implications of certain principles of colonisation policy which were operating at that time.

Two conditions laid down in the Land Development Ordinance of 1935 are contrary to local custom and at the same time ineffective in regulating certain inevitable economic processes. These are,
(i) that the colonist cannot lease, mortgage or sell his land, and
(ii) that the holding must pass to one successor only. In spite of the first condition, the 'ande' or share-cropping system of tenancy is widespread in many colonies. Some colonists would rather be passive landlords than active farmers, some who have made enough money want to change their status from cultivators to landed proprietors, and some want to lease out part of their land since it is more than they can manage by themselves.

The rule of unitary succession is patently contrary to the inheritance customs of all communities in Ceylon. This has led to severe conflicts in settlement families. In some cases passing the land to one son only has resulted in increased landlessness in the second or third generations, and in other cases various forms of concealed fragmentation or joint ownership have evolved in spite of the law.

The following additional factors hamper increases in productivity in colonisation schemes :

- (a) In the selection of colonists more attention was paid to family size and landlessness rather than to the agricultural ability of the applicants;
- (b) The size of allotments is generally too big to practice labour-intensive farming methods like transplanting;
- (c) The present colonisation framework virtually limits agriculture to rice growing, and therefore restricts experimentation with new and more profitable or more productive crops on an extensive scale;
- (d) The extension service in the colonisation schemes is very weak. Furthermore, no attempt has been made to utilise local leaders, neighbourhood groups etc., in extension programmes. The possibility of bringing about mutual co-operation through extension work was not thought of;
- (e) The income distribution among colonists is becoming more and more polarized due to the mal-functioning of co-operative societies and the emergence of a class of middlemen. As a result of this a class of poverty-stricken people who lack the tools to increase the productivity of their holdings is being created.

5.2 Chandrikawewa : A Recent Attempt at Colonisation on a Peasant Framework - Sarath Amunugama, Ceylon Journal of Historical & Social Studies, Vol. 8 Nos. I & II 1965 - pgs. 130-162 :

This is an anthropological study of a major colonisation scheme which was started in 1958 in the southern part of the dry zone. It is one of the first attempts to examine the nature of the community that is developing in the colonisation schemes. The study draws the following major conclusions :

- (a) Colonisation cannot be considered as a permanent solution to the problem of landlessness in the country. On the one hand the man-land ratio is continuously decreasing and land that is available for colonisation is not sufficient to settle all landless families. On the other hand, most people of the second, third and later generations in the original colonies may also become landless and unemployed - a tendency which may be aggravated by the provisions of the Land Development Ordinance which do not allow colonists to nominate more than one successor.

(b) Although communities in colonisation schemes are a little more "socially integrated" than urban communities, they are far less integrated than purana villages. Some social factors which are unifying influences in purana villages (e.g. caste, kinship, land tenure) have become the major cause of social tension between groups in the colonisation schemes.

(c) There are two main formal organisations in the Chandrikawewa Colonisation Scheme. The colonisation officers' unit is the major administrative unit, covering about 450 families. The most important official servicing agency is the Multi-purpose Co-operative Society which supplies marketing, credit facilities and consumer goods to the colonists.

(d) Neither of these formal organisations is functioning properly, partly because the members of the groups served by the organisations do not think of themselves as cohesive units, and also because of various alternative informal organisations which have come up in the colonisation scheme.

(e) The emergence of a group of middlemen (mudalalies) in colonies has been a major constraint to the successful functioning of the Multi-purpose Co-operative Societies. The mudalalies have wider and more intimate social and economic relationships with the colonists. They help the farmers in a variety of ways which the Co-operative Societies cannot do - for example they provide consumer goods on credit, mediate with Government officials on behalf of the colonists, give loans in emergency situations like weddings, funerals etc. without any delay. As result of this most of the colonists are dependent on mudalalies rather than on the Multi-purpose Co-operative Societies for loans and assistance in spite of the fact that the mudalalies charge a higher rate of interest. Again, mudalalies are in a better position to collect their debts as they are in close contact with the colonists. This results in only a small amount of the paddy produced by the colonists being marketed through the Multi-purpose Co-operative Societies while a larger proportion gets into the hands of the mudalalies.

(f) Most of the social activities in the Chandrikawewa colonisation scheme revolve around factions based on caste, locality, politics and some specific issues like encroachment, water distribution etc. These factions are guided by faction leaders who are chosen on account of their contacts with Government officials or politicians, or their ability to speak for the group and articulate the demands of the group. They operate in close liaison with the mudalalies, although there are some cases where conflicts exist between these two categories of elites in the scheme.

5.3 Patterns of Leadership in Colonisation Schemes - P. Ganewatte
Land Commissioner's Department, 1972 :

This is a socio-metric study of leadership in the Devahuwa Colonisation Scheme.

Although some writers have indicated that there is no effective and dynamic leadership in colonies, this study reveals that a clear-cut pattern of leadership is emerging after about one generation of colonists.

The factors affecting the choice of leaders in colonies are quite different from those in the purana villages. While factors like family position, caste, land ownership, level of education and age are very important in the selection of leaders in the purana villages, the colonists do not pay much attention to these characteristics in selecting their leaders. Capability of helping others, personal integrity, straightforwardness, good moral character, loyalty to followers are the major considerations in the choice of leaders in colonies.

If the emerging leaders in colonies are given more responsibility in the management of colonies, it would facilitate both the emergence of an effective and dynamic leadership pattern and increased economic and social development in the colonies.

5.4 A Study of Economic Resource Use & Production Possibilities
on Settlement Schemes in Sri Lanka - Nihal Amarasinghe,
Ph.D Thesis, University of London, 1973:

This is a micro-economic study which describes the high cost which has characterised Settlement Schemes in Sri Lanka in the past, and investigates the hypothesis that rather than start new schemes, there is considerable scope for intensifying agricultural production on existing schemes - Colonisation Schemes in general and Special Projects in particular. The hypothesis is examined in depth on one major Colonisation Scheme, the Minipe Special Project.

Three surveys were conducted on this scheme between September 1971 and October 1972. Production Function Analysis and Linear Programming are used to analyse the data collected, and this reveals that farm resources are under-utilised and misallocated. Those who have the land have shortages of labour, and those who have the labour have insufficient land. The study indicates substantial possibilities for increasing farm incomes and efficiency of resource use through introducing biological and mechanical innovations on

already cultivated land. The motivations and attitudes of farmers to innovations are investigated (particularly with regard to diversification of production on hitherto specialised paddy lands), and this reveals serious institutional as well as attitudinal problems.

The second major area of investigation focuses on the economic and social implications of the new seed-fertiliser technology associated with paddy production. A satisfactory level of adoption of the new HYVs and complementary inputs is observed, leading to dramatic changes in production levels. However, the benefits seem to be skewed in favour of large scale producers despite the theoretical scale neutrality of the new technology. Multiple regression analysis indicates that the productivity of large scale adopters is significantly greater than that of small scale adopters, who still have scope for further intensification.

The third part of the study uses parametric Linear Programming to determine the appropriate holding size to be allocated to prospective settlers. The results indicate that holding sizes based on income-employment criteria are considerably affected by the size of farm family, type of farm system and levels of mechanisation. The conventional practice of allotting mixed farms is found to be the least commendable in terms of costs and density of settlements. In terms of employment potential, paddy farms are found to be less attractive than specialised food farms and mixed farms.

5 Economic Aspects of Some Peasant Colonisations in Ceylon
G.M. Abayaratne, Ph D Thesis, Oxford University, 1972 :

This study examines the level of efficiency in resource use on two Dry Zone Colonisation Schemes, and the profitability of the settlers' farming enterprises. The evidence presented is derived from field investigations conducted at Rajangana Colonisation Scheme, which is based on paddy farming, and at Mutha-Iyan-Kuddu-Kulam (M.I.K.) Colonisation Scheme, where the settlers depend on high value 'subsidiary food crop' production, notably chillies, onions and groundnuts.

Random samples of 74 households at Rajangana and 20 households at M.I.K. were interviewed. Qualitative and quantitative evidence was recorded, including data on labour use, industrial inputs, production, marketing, transport, credit and indebtedness.

35% of the sample at Rajangana and 80% at M.I.K. had not brought all their household members into residence due to lack of housing,

inadequate transport, and lack of other services. This limited the available supply of family labour. At Rajangana 57% of the paddy allotments were under-utilised. At M.I.K. productivity was reduced by irrigation and drainage problems, which resulted from the fact that the scheme was originally planned for paddy production and was not re-surveyed or re-designed when it was decided to convert it to production of other crops.

Data on labour use recorded for 46 families over two seasons at Rajangana reveal that only 25% of the calculated working year of 297 days were utilised for farming (the extent of under-employment that this implies is exaggerated as the holdings themselves were under-utilised). Only 11% of total labour utilised was devoted to upland farming. Labour intensive methods were not universally adopted. In 84% of the settler households, the income per month from paddy farming is well below Rs.200 (298 kg paddy equivalent) which is treated as the 'poverty line'.

The influence of labour on productivity is tested using Cobb-Douglas production function estimates, and regression analysis. The evidence suggests that the combined use of manual labour and tractor power for land preparation is uneconomic. Additional labour using bullock power could be more profitably employed and could lead to higher yields.

Marketing, transport and credit facilities are found to be inadequate and poorly organised. Due to inadequacy of scheme roads and vehicles, high portorage charges are paid to middlemen for transporting produce from field to homestead, and from homestead to selling points. 77% of borrowings by settlers were obtained from money-lenders or boutique-keepers, at an average interest rate of 14% per month. Thus it is the middlemen or money-lenders and boutique-keepers who emerge as the main beneficiaries of the scheme.

Resource use and profitability of chillies, onion and groundnut production at M.I.K. are examined. Land allotments in this scheme are also under-utilised, due to shortages of capital and labour, and shortcomings in the irrigation system. Though costs of production are high, settlers have the opportunity to obtain high net incomes in view of the high value of the crops grown, compared to paddy.

5.6 Economics of New Land Settlement Projects in Ceylon
 A.S. Kunasingham, Ph.D Thesis
 University of Hawaii, 1972 :

The purpose of this study is to examine the economic performance of the existing land settlement projects with a view to (a) determining their contribution to national objectives of increasing production, incomes and employment, and (b) to assist the Government in deciding what kind of settlement projects should be continued, and to what extent funds should be committed to new projects or diverted to intensifying production on existing farms.

A primary premise of the study is that new settlement projects, particularly Youth Settlements based on high valued cash crops, are socially and economically desirable in themselves. The study considers a sample of eight settlement projects from the standpoint of costs and benefits, import substitution, employment generation and farmer income.

Field surveys were carried out in three Youth Settlements (Viswamadukulam, Thiru Aru, Ihala-Hewessa) while data on the other schemes in the sample were derived from secondary sources - departmental records, files etc. The data collected were analysed using regression analysis, production function analysis and benefit-cost studies. The eight projects are ranked on the basis of benefit-cost ratio, social marginal productivity of investment, output-investment ratio, net foreign exchange-investment ratio, labour-investment ratio and employment-investment ratio. An overall measure for each project is then obtained in relation to the macro-objectives of foreign exchange saving, increase in employment and increase in incomes. This ranking gives an indication to policy makers of the types of settlement projects that should receive high priority.

The study indicates that major Colonisation Projects are not profitable in terms of return on capital invested. At Nagadeepa the benefit-cost ratio using an estimated yield of 50 bushels of paddy per acre ranges from 0.42 to 0.82 according to the discount rate adopted (6-15%). It is suggested that temporarily at least consolidation of already developed lands should be given higher priority than opening new lands for paddy cultivation. However, new projects based on production of high value field crops and export crops should continue to be implemented.

Farm income analysis indicates that the net operating income obtained from an acre of chillies was four times that accruing from an acre of rice, while in the case of onions it was 2.5 times that of the income from rice.

In order to promote systematic crop diversification, (a) agricultural extension and education need to be improved; (b) exemption from income tax should be given for production of import substitutes; (c) supply of fertiliser and hired labour at the correct time should be assured.

The analysis suggests that the appropriate family holding size for paddy production is 4-5 acres and for other crops it is 2 acres. Residential holdings should not be more than $\frac{1}{2}$ acre.

The need for a comprehensive system of physical and social planning is emphasised and modifications to the land tenure system, giving more security of tenure to the cultivators, are proposed.

5.7 Uda Walawe Project, Ceylon - A Comparative Study of Two Regional Planning Alternatives - Prepared by Settlement Study Centre, Rehovot, Israel - February 1971 :

This study arose from a seminar on Development Strategy and Administration organised by the O.E.C.D. Development Centre in Colombo in 1966. It was noted that "farm planning, village planning and rural organisation systems in Ceylon are influenced by traditional farm structures and physical factors, and do not take sufficient account of the needs of social and organisational integration". A different approach to settlement planning on a regional basis was proposed, based on three basic principles :

- (a) that compact villages have certain advantages over settlements where the individual holdings are widely dispersed;
- (b) that it is advisable to link groups of six to eight villages to one rural centre where necessary services can be located;
- (c) that these centres have to be linked to a regional centre or town in order to obtain high level services and access to industrial facilities.

The case of the Uda Walawe region was chosen to test the application of these principles. It was found that under the existing plan houses were put next to the field crops, while the paddy fields were up to half a mile away. Thus the villages were scattered, with up to 200 yards between houses, and with houses on one side of the roads only. The planners had also dictated that service centres should be not more than 2 miles from the farms, which meant that

each centre serves only about 60 families. Centres supplying services to larger numbers of families are therefore even further away.

An alternative plan was prepared by the O.E.C.D. Team, with houses in village clusters and with all the services close by. This layout required separating the houses from the fields, but never by more than $3/4$ mile. It allowed the village sites to be chosen according to the suitability of the terrain, rather than being dictated by the network of irrigation channels.

Three modifications of this basic plan were considered :

- (a) one large village for the whole tract;
- (b) one large village and one or more smaller villages;
- (c) several smaller villages of equal size.

A rigorous methodology was used for comparing the alternatives, including both quantitative and qualitative assessments. The third alternative was considered preferable to the other two, in terms of allowing efficient production, egalitarian development, co-operative services and supplies, easy training and extension, and improved living conditions. Under this system detailed farm plans for the short and long range were prepared and are described in the report.

5.8 Report on a Survey of the Arid Zone of Ceylon Yehoshua Arbel, Department for International Co-operation, Israel -- May 1964 :

This is the report of an Israeli consultant who carried out a one-month study-tour in the Dry Zone in 1964, at the request of the Ministries of Agriculture and Irrigation. The objective was to examine why the Dry Zone Colonisation Schemes, although absorbing investment of Rs.15,000 to 18,000 per unit, produce a return of not more than 2% on capital, and contribute little to national food production.

The analysis shows that due largely to mono-cultivation of paddy, some 40% of the land area and 35-50% of the family labour is not used. Mono-cultivation of paddy is also one reason for the tremendous wastage of water.

The report suggests bringing more land into production by lift irrigation to the highland, and increasing incomes by introduction of new crops and improved cultivation techniques. Selection of agriculturally experienced settlers and layout of the settlements in a way which reduces the distance between houses, are proposed as necessary pre-requisites for these innovations.

The new enterprises proposed are vegetables, leguminous fodder crops, and dairy cattle. Farm budgets are prepared which show how farmers' incomes can be increased from Rs.2,700 to Rs.6,000 per annum, and return on Government investment can be raised from 2% to 10-12%.

A pilot project is proposed on one existing Colonisation Scheme. It should be planned by a team of experts in farm-planning, irrigation engineering, agriculture and rural planning; they should visit Israel for 1-2 months to study experiences there before returning to apply them in Ceylon.

5.9 Land Use Problems in the Peasant Colonies of the Dry Zone By H.N.C. Fonseka :

This analysis is based on the writer's study (carried out between 1960 and 1962) of the Agricultural Geography of 5 colonies, namely, Parakrama Samudra, Minipe-Ela (old), Kagama (new), Umnichchai, and Karachohi-Iranamadu. The major problems examined and remedies suggested are summarised below :

- a) Disapproval on the part of the allottees of the general land classification criteria adopted by the Government authorities. Allottees complain that only irrigability is considered, while little consideration is given to soils, and traditional land use patterns are ignored. The remedies proposed are that uneven allotments should be levelled, impoverished areas must be manured and a different approach to land use planning should be adopted in the future.
- b) Absence of forest reservations and insufficiency of pasture. The remedy proposed is the establishment of reservations to meet the allottees' requirements of firewood, timber and of maintaining draught animals.
- c) Under-utilisation of highland : This is due to unfavourable ground water conditions, excessive rains in Maha, soil erosion and gullying, and the need to reserve the land as rough grazing for buffalo. To solve these problems : drains have to be constructed, a system of crop rotation, manuring and soil conservation has to be implemented, and fodder should be intensively grown over a part of the allotment.

- d) Inadequate irrigation facilities in the lowland : This results from insufficiency of irrigation channels, inadequate control over water distribution, lack of social cohesion and resultant disrespect for each other's rights, and lack of authority of officers. To remedy the situation, greater control should be exercised over the distribution of water, and crops which need less water should be cultivated.
- e) Shortage of labour and draught animals and the inefficient use of mechanisation : This is due to inadequacy of family labour, difficulty of obtaining attan labour, rigid time limits imposed for field preparation, shortage of draught animals which have forced allottees to mechanise ploughing. But the fields are too small for 4-wheel tractors, which are in any case in short supply. The remedy proposed is wider use of rotary tillers powered by 2-wheel tractors.
- f) Declining trend in paddy yields and the resistance of allottees to adoption of better methods of cultivation. More extension work and training are needed.
- g) Poor communications and lack of proper marketing facilities for subsidiary crops. Funds should be made available to the local authorities to maintain roads etc. Marketing Department should buy subsidiary food crops through co-operatives.
- h) Lack of credit facilities and violation of Land Development Ordinance : Farmers are unable to get loans easily and so mortgage or pledge their holdings to private money-lenders. This can be remedied by provision of better credit facilities from institutional sources.
- i) Lack of social cohesion : Settling of people of divergent castes and sub-groups within a caste has resulted in a heterogeneous society with a strong sense of individualism. Settlements should be in groups united by some common element.
- j) Inadequacy of educational and medical facilities and non-recognition of the colony as the new home of the allottees : Practically oriented education is needed, and hospitals should be improved. Employment opportunities like small-scale industries should be introduced. If the other suggestions made in the paper are taken up, a sense of attachment to the colony will develop.

5.10 Management of New Settlement Schemes in Sri Lanka -
A.O.Ellman, Modern Ceylon Studies, Peradeniya, 1975 :

This paper examines the relative roles of Government officials and farmer leaders in the management of different types of settlement schemes started in Sri Lanka over the last 5-10 years. While the ultimate objective of all the new settlements has been to achieve self-management by the members, officials were put in charge in the early years to protect the Government's investment and to train the settlers to run their own affairs. Experience shows that :

- (a) Management by officials, apart from being expensive to the Government, has in many cases not proved to be an efficient system, since few of the managers were trained in the job they were expected to perform.
- (b) The presence of officials has made the settlers dependent on outside management, which many of the managers have been happy to encourage. This has delayed the time when the settlers are ready to take responsibility for themselves.
- (c) The presence of officials as managers of the schemes was initially quite acceptable to the settlers, who were happy to have their decisions taken for them by the officers. But in recent years the imposition of outside management, especially in schemes including educated youth, has become increasingly unacceptable to the settlers.
- (d) Self-management by the settlers is both economically and socially desirable, but it requires intensive training and guidance by leaders who are themselves experienced and trained for the job. A procedure for achieving self-management and an outline of the kind of training needed for such a scheme are outlined in the paper.

Chapter 6

Analysis of Land and Land Settlement Policies

Several of the documents reviewed earlier in this volume have touched on or proposed necessary modifications to settlement policies, though few comprehensive appraisals of land and land settlement policies have been made. Perhaps the most useful reviews which have been carried out at regular intervals are the Economic Surveys made by the International Bank for Reconstruction and Development, two of which are summarised in this chapter. An interesting analysis of land settlement policy in Ceylon made in 1969 by Rainer Schickele, a Visiting Professor in Agricultural Economics, is also included.

6.1 The Economic Development of Ceylon. Report of the International Bank for

This report has a chapter on Colonisation of Crown Lands, which is interesting in describing the thinking on land settlement policy in the early 1950s, and the kind of problems which were cropping up at that time.

Public ownership of land with settlers receiving long leases is cited as the general feature of the settlement schemes. The normal schemes and special development projects (especially Gal Oya) are examined separately. The report describes the pattern of land development, selection of colonists, finance of colonisation and other policy issues, and comes out with the following recommendations :

- a. Possibilities of more flexibility in the size of holdings allotted to colonists should be examined.
- b. The Government should consider very seriously leasing some larger blocks of land in the dry zone development areas to individuals or corporations willing to operate on a large farm or estate basis.

- c. Selection of colonists should not be limited to men now landless, as this results in most of the allottees being relatively inexperienced and unsuccessful as farmers.
- d. The cost of settlement per colonist should be reduced if possible. Reducing the minimum allocation of land, limiting the clearing work done by Government, reducing the cost of houses are among the measures proposed.
- e. Annual charges made to colonists for land should be increased, perhaps to 25% of the estimated gross yield.
- f. Care should be taken not to overload the administrative and technical services available by undertaking too large a burden of colonisation work at once. Pending the result of further studies, work should be concentrated on the smaller schemes and no new "special" or highly mechanised projects should be started.
- g. The possible rate of progress in the Gal Oya Development Scheme should be reviewed realistically in the light of a number of technical problems and dangers : if found necessary, the annual target of settlers should be reduced.
- h. The Gal Oya Board should organise a land-use potential survey of its own, including an aerial photographic survey and the preparation of large scale maps.
- i. The Board should also seek early outside advice to settle the controversial question of erosion and siltation dangers in the Gal Oya reservoir area.
- j. Regular use of tractors for early season ground breaking on colonists' land should be tried, possibly through co-operative societies.

6.2 Agricultural Sector Survey, Republic of Sri Lanka, International Bank for Reconstruction and Development, 1973 :

This report of the IBRD, in its section on Irrigation and Colonisation Policy, emphasises that, while irrigation development for Dry Zone colonisation has dominated public sector involvement in agriculture in the last two decades, the resultant productivity and incomes have been far below potential levels due to two recurrent themes :

- a. The enormous under-utilisation of irrigation water in Colonisation Schemes, mainly due to the practice of allowing water to flow through the paddy fields throughout the growing season, without attempts to match flow to crop needs or water availability.
- b. The almost total restriction of irrigated agriculture to paddy cultivation, resulting in both land, labour and water being inefficiently utilised.

Despite these two major shortcomings, a highly ambitious expansion of new irrigation schemes is proposed over the period 1972-76 (more than double the rate of expansion in the period 1966-70), while little attention is given to the improvement of existing schemes to make better use of investments already made.

The report suggests that much closer technical and economic evaluation of irrigation schemes should be made before committing further public funds, but points out that the information needed for such an analysis, with the major projects of Uda Walawe and Mahaweli still in the preparatory stages, does not yet exist.

Three immediate measures need to be taken with respect to developing irrigated settlement policies more in tune with the country's needs :

- i. Concerted attempts to improve the maintenance of existing irrigation systems, including a clarification of the role of farmers and cultivation committees in systems maintenance;
- ii. Determined efforts to enforce water discipline on farmers. The ideal method is through introduction of a water charge, but in view of the political and administrative problems involved in this, rationing of water on a rotational basis is suggested as an initial step;
- iii. Detailed economic analysis of investment alternatives in irrigation. This is needed to determine whether new tanks and colonisations are justified, or whether it is preferable to rehabilitate and improve existing irrigation schemes.

The objectives of colonisation policy in Sri Lanka need to be reviewed and clarified. Over the past 40 years policies have reflected an amalgam of conflicting objectives: to protect peasant farmers as a class, to create employment, to increase food

production, to provide a source of Government revenues, and (implicitly) to establish new settlements as dynamic growth centres. The first three objectives have met with some degree of success, but not the last two. Stimulation of economic growth, and so employment, should now receive prime attention, and should be viewed over a long period. Colonisation cannot be regarded, as in the past, as a static concept where only short-term costs on the one hand, and immediate impact on production and employment on the other hand, are evaluated.

The size of holding on colonisation schemes needs to be reviewed. Allotments of 'economic size', in practice interpreted as subsistence-sized paddy farms, have been given to all settlers regardless of soil and water conditions or the ability of the settler. Variation in farm size is desirable to maximise production.

To enable the above change to take place, modification is needed to land tenure policy. Settlers are unable to dispose of or acquire more land if they can cultivate it, and they cannot obtain clear, unrestricted title to their land (the positive features of these tenurial restrictions are not mentioned in the IBRD report). It is suggested that consideration be given to easing the ability to transfer land.

Rigid control of the settlements by officials, and the high levels of Government assistance - a hangover from pre-DDT days when considerable inducements to potential colonists were necessary - have combined to produce a passive attitude on the part of most settlers and a dependence on Government paternalism. While some assistance will always be necessary to new settlers, there is considerable scope for cost reduction through self help, and an urgent need for increased settler participation in administration and policy-making.

Selection of settlers who lack appropriate experience and agricultural ability, allied with the complete absence of training for new settlers, contributes to the poor response of most colonists to new techniques and attitudes.

Physical planning of colonisation schemes, emphasising development of the irrigated paddy land and neglect of the (often more fertile) highlands, is so similar to the pattern of holdings in the Wet Zone that it strongly favours the transfer of traditional systems of land and water use to the new environment of the colonisation schemes.

Social planning, with houses laid out along the irrigation channels in ribbon-type settlements, inhibits community development and raises the cost of providing services.

Provision of supporting services is insufficient to raise levels of production. Colonisation Officers are often not trained in agriculture or in rural development. Co-ordination between different servicing agencies - Irrigation, Land Commissioner's, Land Development and Agriculture Departments - is weak. Thus the tendency for traditional patterns of agriculture to be followed is very strong.

Colonisation policy needs to be fundamentally restructured if settlement schemes are to become growth centres and not just static transplants of traditional peasant agriculture.

6.3 Land Settlement Policy in Ceylon, by Rainer Schickele.
Ceylon Papers on Agricultural Development & Economic
Progress, 1967-1970 :

This article describes amendments to the 1935 Land Development Ordinance which were proposed in 1968, under which many of the restrictions on disposal of holdings would be removed. The author points out the dangers of the proposed amendments.

The Land Development Ordinance of 1935 includes certain restrictions on land disposal and fragmentation of holdings in the inheritance process. These restrictions are :

- a. the farmer cannot sell the land except with the prior consent of the Government;
- b. the farmer cannot mortgage the land;
- c. the farmer cannot lease the land to someone else;
- d. the farmer cannot fragment the holding in the inheritance process below a prescribed size. He must nominate a single successor except in certain prescribed cases.

The reason for placing these restrictions on land disposal was the feeling that, if they were not there, outside investors might buy up the land and lease it to tenants. Such tenure conditions would reduce production efficiency, make the many small farmers smaller and poorer and the few large farmers larger, and would also increase social and political tensions in the community.

The objective of the restrictions on fragmentation and designation of a successor is to protect the continuance of farm units of a viable size.

The essence of the policy amendment proposed in 1968 was gradually to abandon the restrictions on land disposal, mortgaging and leasing and to give settlers as well as investors access to the commercial land market for mortgaging, selling, buying and leasing land. The only important restriction retained in the 1968 Amendment Bill was that of prohibiting excessive fragmentation in the inheritance process.

These amendments were based on the recommendations of the 1958 Land Commission, viz :

- a. Land development and modernisation of farming require greatly increased credit, funds for which will be forthcoming only if land can be pledged as security;
- b. Transfers of land in a free market tend to move land from a lower to a higher class of farmer, as a good farmer can afford to offer an attractive price to a bad farmer and the land will be more efficiently used by the new owner;
- c. Colonists have the feeling that the land they are given does not really belong to them. Hence they hesitate to spend effort and money in developing their land.

Schickele maintains that unrestricted ownership of land is not a necessary condition for offering production incentives or for conferring on the farmer the status and satisfaction of being independent, self-employed, and self-reliant. All these admirable qualities can be obtained even though certain restrictions are placed on land disposal.

There are grave drawbacks in a free market for farm land, particularly in traditional societies. The right of a small farmer freely to dispose of his land, to mortgage it and sell it, makes him vulnerable to pressures from investors and money lenders to mortgage his land for any loan he may need, and to be forced to sell it when he is unable to repay the loan on time.

Although the proposed Amendment Bill is not designed to create a free market for farm land in the real sense of the word (one clause says that there are certain categories of people to whom land cannot be alienated or transferred), yet the criteria for granting approval of land sales are not specified and no mention is made of the necessary qualifications of purchasers. In view of the intent of the Amendment to move in the direction of freehold tenure, the author feels it is unlikely that occupation by the purchaser would be a condition for approval of a sale. Hence the way would be opened to absentee and speculative ownership of land in the settlement schemes, and thereby to tenancy and reduced incentive for increasing output.

The author makes the following alternative proposals for tenurial amendments on lands held under the Land Development Ordinance :

- a. Sale of farms should be allowed only when the purchaser is a farmer who wants to cultivate the farm and reside on it;
- b. Institutional lenders (i.e. Banks) should be given a priority lien on the major crop instead of a mortgage on the land. If the colonists are allowed to mortgage their land, it might ultimately go to the hands of outside investors;
- c. The colonists should be allowed to lease out their land only under the following circumstances :
 - i. The farmer wants to move elsewhere or give up farming for some time, with the intent of either returning or passing on the farm to one of his heirs for cultivation;
 - ii. The farmer wants to reduce his operations on account of age or lack of labour, but wants to retain his farm unit intact for his successor.

Chapter 7

Future Land Settlement Proposals

In this chapter documents dealing specifically with future settlement proposals are reviewed. The major area of settlement expansion for the 1970's is of course the Mahaweli Ganga Development Project. The Feasibility Report of this project is reviewed, along with three documents focussing on particular aspects of planning, settlement and economic analysis of the Mahaweli Project. The other area of settlement expansion is on lands acquired under the 1972 Land Reform Law. The Agrarian Research and Training Institute study of "New Settlement Schemes in Sri Lanka" (partially reviewed in Chapter 4) made proposals for settlement policy aimed primarily at development of the Land Reform Lands. These were discussed in a seminar on the report, the proceedings of which are reviewed in this chapter.

7.1 Feasibility Study for Mahaweli Ganga Development, Project 1, Stage II - Mahaweli Development Board, Ministry of Irrigation, Power & Highways, Sri Lanka, 1972 :

1. Objectives of the project :

The Mahaweli Project ultimately envisages the development of about 900,000 acres of land in the Dry Zone (246,000 acres of which are already cultivated), and the production of 970 Megawatts of power. The Master Plan is to be implemented in three phases. In Phase I there are three projects, only the first of which is covered in this feasibility study.

The study was prepared by Mahaweli Development Board (MDB) with the assistance of a French consulting firm, Sogreah. Plans are presented for the development of 71,000 acres of new land under this Stage of the Project, with irrigation water diverted from the Mahaweli Ganga; this includes 17,000 acres of land already cultivated under village tanks, rainfed or chena land. 15,500 farmers will be settled on the newly developed land, along with 8,000 farmers already resident in the area who will be integrated into the Project.

2. Type of farming proposed :

The cropping pattern proposed includes paddy and upland crops such as chillies, onions, soya beans, pulses and cotton. The paddy will be flood irrigated, while furrow irrigation will be used for upland crops. All crop land will be cleared and levelled prior to handing over to the settlers. Two-wheel tractors will be used in preference to manual cultivation or animal draught. One tractor per four farmers is considered adequate.

3. Land distribution and tenure :

Each settler will be allocated an individual family farm of 3 acres, including either lowland or highland or both. Resident farmers will retain their land up to the ceiling, or may be given land in exchange.

The settlers will be granted land use permits subject to certain conditions stipulated in contracts which they will be required to sign jointly with the Project Authority. The contracts set out the reciprocal rights and obligations of each party, and measures to ensure their enforcement. The provisions of the contracts include restrictions on the sale, lease, mortgage and sub-division of allotments, the attainment of a specified minimum cropping intensity each year, and the compulsory purchase of the allotments under the Sale of State Lands Law.

New settlers will have to buy their allotments at the rate of Rs.7,500 per acre in 25 annual instalments of Rs.300 commencing from the sixth year of settlement. Resident farmers will pay only for additional land given.

Encroachers at the time the Project starts will be given land in the same way and at the same cost as new settlers. Strict measures by police and farmers' committees will be taken to avoid further encroachments thereafter.

4. Land consolidation and acquisition :

Fragmented holdings in the Project area will have to be consolidated, and resident farmers' land may have to be acquired for certain purposes. Attempts will be made to do this on a voluntary basis, giving a fair deal to both owners and tenants.

5. Selection and training of new settlers and staff :

Improved selection procedures using collective and individual interviews will be used. Criteria for selection will include experience of growing the projected crops, homogeneity of settler groups applying collectively, age and working capacity. Attempts will be made to settle together people with the same geographical background, and to allow the settlers to choose with whom they will live in the new villages.

All new settlers will receive a one week preliminary training in groups of 30 in two training centres in the Project area. Their leadership ability will be studied there. They will be briefed on farmers' organisations and participation, community development, water management, agricultural practices, recommended cropping patterns and relationships with officials. Follow-up training will be given to keep the farmers up to date in cultural and irrigation practices and technological advances. The aim will be to train 15-20% of the farmers each year.

Officials at all levels in the Project will also be given pre-service and in-service training to ensure that they understand their jobs, and to convince them to work together with the farmers and to have respect for them. Promising farmers will be trained to hold positions of responsibility in farmer organisations, and gradually to replace extension personnel at field level.

6. Settlement procedure :

Land clearing, levelling, and provision of irrigation facilities will be completed before the new settlers arrive. On arrival they will build temporary houses, prepare for the agricultural season and set up Co-operatives. This will take 8 weeks during which they will receive daily allowances worth Rs.5 mostly in kind.

7. Pattern of settlement :

The pattern envisaged is a cluster of 4-5 villages or neighbourhoods of about 100-125 families each, with a common service centre. This corresponds to one irrigation block, or sometimes two. Where topography does not allow division into small villages, all 4-500 families in an irrigation block may be in one settlement, but the small village pattern is preferred because it allows easier integration of existing villages, reduces distances from field to village, preserves group homogeneity and provides a more socially manageable unit.

3-6 blocks form one sub-area with a township. The Project area will consist of 9 sub-areas, 47 clusters and 189 villages.

8. Project operation and management :

The Mahaweli Development Board proposes to set up a field organisation as a single authority, to overcome the current overlapping with a multiplicity of responsible Departments. There will be 4 field divisions : (i) Water Management, (ii) Agricultural Production, (iii) Community Development and Training, (iv) Marketing and Credit Co-ordination.

For this organisation to work efficiently it has to be geared to a farmers' organisation enjoying effective autonomy. Each village and cluster will manage its own affairs by means of elected village and cluster committees. It is suggested that all existing rural institutions should be integrated with the new farmers' committees : the elected representatives at the village and sub-area levels should be appointed to the statutory Cultivation Committees and Agricultural Productivity Committees respectively.

Links between the Farmers' Committees and the Administration will be on a contractual basis, to replace in the long run the present links of dependence. The commitments of each side will be stated, and sanctions will be provided for in case of non-fulfilment by either party.

9. Water management :

A major objective of the Project is to increase the efficiency of water use. The basic irrigation unit or turn-out area will consist of 10-15 farms. Water will be issued in rotation on the basis of a predetermined irrigation calendar. Initially distribution to the turnouts will be controlled by MDB staff; distribution within a turnout will be controlled by the farmers.

Payment for water is considered desirable though it is not presently Government policy. The design of the irrigation network allows measurement of water issued to each turnout; this can be used to control issues as well as to compute water charges if so desired.

10. Services, inputs and markets :

Co-operatives will organise the supply of inputs, credit, and marketing of paddy. Initial working capital will be supplied by

settlement loans of Rs 600 per resident farmer and Rs 1,200 per new settler to be repaid over 3 years, plus short-term loans in kind.

Service charges are recommended, covering the full cost of operating and maintaining the irrigation system and part cost of extension and other services. These are calculated at Rs 145 per acre per year, from the third year of settlement.

11. Social development :

Detailed studies have been made into social structures and stratification in the Project area, leadership patterns, values and behaviour patterns of purana villagers, colonists and Government officials. These are described, and their implications for social development in the Project are assessed, in Volume VII of the Feasibility Study.

12. Costs and benefits of the project :

The total cost of the initial investment is estimated at Rs 765.9 million including a foreign exchange component of US \$ 35.8 million. Operation and maintenance costs at full development are estimated at Rs 88.8 million per year.

Gross returns are estimated to have a farmgate value by the tenth year of Rs 236.5 million per year. This includes annual production of 8.5 million bushels of paddy, 170,000 cwt of onions, 113,000 cwt of chillies, 150,000 cwt of soya beans, etc. etc.

The net return to the individual farmers after 10 years is estimated at Rs 3,600 to Rs 5,800, with labour requirement ranging from 260 to 350 workdays per year.

The Project as a whole is estimated to show a positive balance in the ninth year. Internal rate of economic return is estimated at 10.6 to 12.4% depending on world prices and yields.

Social changes through employment creation, education and raised consciousness are added benefits.

7.2 The Mahaweli Scheme : Success or Failure?
 Rainer Schickele, University of Sri Lanka, 1970 :

This analysis of the economic feasibility of the Mahaweli Project was made by a Visiting Professor of Agricultural Economics in 1970. He draws the following conclusions :

1. Mahaweli Scheme is a Rs 6,700 million investment, spread over 30 years. It involves an investment of Rs 220 million per year, which is about 2% of the national income or 12% of the total annual investment. This is not out of proportion for a regional development project which will increase the country's acreage under irrigation by 70% and electric power output by fourfold.
2. Most of the big irrigation schemes in the world involve the largest proportion of the total investment in their first phase : e.g. Aswan Dam Scheme. But it is not so with the Mahaweli Scheme. The first phase will require only 26% of the total cost. The second and third phases will cost 19% and 55% respectively. The distribution is very favourable for making adjustments in the plans and the timing. Unlike in many other big irrigation schemes the Government does not have to commit itself from the very beginning on the financing of the whole scheme.
3. The economic return from the new irrigated land will be determined by the productivity of its use and not by the investment cost. It is obvious that at past levels of farm productivity, the scheme would be a failure, but at modern profitable levels of productivity it can be a success.
4. It is necessary to make farmers willing and able to modernise their farming technically and economically. It requires modern and effective extension services, marketing co-operatives, agricultural credit and organised farmer participation in these programmes.
5. The Special Projects policy of co-ordination of the various Government Departments by a Project Manager started in 1967 with one scheme and has since been extended to 10 of the major colonisation schemes. The main purpose of this policy has been to increase farm productivity among the colonists. The results so far have been promising. These projects could be treated as a series of rehearsals for the Mahaweli Drama.

7.3 The Planning Implications of the Mahaweli Development Project in Sri Lanka - M.W.J.G. Mendis, 1973 :

This study evaluates the project proposals made by the UNDP/FAO in 1969, which were later revised by the Mahaweli Development Board as outlined in 7.1 above. Those aspects of the UNDP/FAO plan analysed in this document have not been changed significantly following the M.D.B. reappraisal.

The paper examines the rural settlement hierarchy proposed in the Mahaweli plan and considers that while it may be a desirable proposal on paper, it may not always be feasible in practice. In particular problems are likely to be encountered in clustering the existing dispersed population in the project area, for the Mahaweli area is not a blank sheet. It is suggested that a single layout design may not be appropriate everywhere in the project area, and that flexibility should be retained in the design of settlement forms. Apart from the cluster design which has been proposed, a linear arrangement of sub-villages, and a consolidated arrangement of self-contained villages, may be suitable in certain areas.

Transport arrangements to improve communication both between village centres and the more distant fields, and between the villages and urban centres, will have to be examined. Otherwise productivity may suffer and also active participation of farmers in developing their own communities will be difficult to achieve.

It is noted that the major transportation network proposed in the Mahaweli Project links the area to Colombo. It is suggested that this is an undesirable feature since the south-western part of the country is already congested, and the possibility of developing alternative growth centres, such as Trincomalee, Anuradhapura, Polonnaruwa and Kandy should not be ignored.

It is suggested that growth in the Mahaweli region should be directed to polarise on Trincomalee which has the potential for acting as a counter-magnet to Colombo. Regional planning exercises to ensure integrated development of the different sectors in the Mahaweli Project are highly important.

7.4 Spatial Organisation of Agriculture in the Traditional Rural Settlements in the Mahaweli Development Area : Problems and Prospects. M.U.A. Tennakoon, Central Bank of Ceylon, Staff Studies - Vol. 4, No. 2 September 1974 :

This study describes the traditional rural settlements (purana villages) served by village tanks in the Mahaweli Development Area, and analyses the present efficiency of land use and the changes that will be (i) needed, and (ii) feasible when a reliable supply of water for irrigation becomes available.

Five zones are identified in the traditional settlement. Zone 1 is the village tank itself. Zone 2 (the Old Field) is the land lying immediately below the tank bund, where the water supply is most reliable, and the individual holdings are very small and fragmented. Zone 3 (Field Blocks) has larger holdings, but irrigation is less effective with the increased distance from the tank. Zone 4 (Parkland) is the communal grazing area. Zone 5 (Forest Zone) is increasingly used for chena cultivation with the high prices that can be obtained for subsidiary food crops.

Contrary to expectations average crop yields, cropping intensity and land values are lower in the Old Field than in the Field Blocks. This results from the small size and dispersal of holdings in the Old Field, and from the greater returns to labour which can be obtained from chena cultivation in the Forest Zone. Thus even when the tanks are full, many of the Old Fields in the Mahaweli Area are left uncultivated in some years. Nevertheless, strong social value is attached to holding land in the Old Fields, and however small or fragmented his holding, an individual is unwilling to part with it.

The solution to this problem lies in consolidation of holdings in the Old Fields, and in prohibition of subsequent sub-division. Acquisition and redistribution of uneconomic smallholdings or holdings over a maximum ceiling will also be necessary. As 654,000 acres of new land will be brought under irrigation by the Mahaweli Project, these changes will be physically possible. But the social pressures in the purana villages indicate that the reforms may not be easy to implement.

7.5 New Settlement Schemes in Sri Lanka -
Synopsis of a Seminar held at the Agrarian Research
and Training Institute, Colombo.
ARTI Documentary Series No. 10, May 1975 :

The first part of the study of New Settlement Schemes in Sri Lanka, reviewed in Chapter 4, described and analysed case studies of 20 settlement projects, and made recommendations for improving the operation of the Youth Schemes, Co-operative Farms, DDC Agricultural Projects and Land Reform Co-operative Settlements. The second part of the study compared the achievements and shortcomings of the four types and proposed a new settlement policy for the future, aimed particularly at settlement of Land Reform lands, but generally applicable to all types of new settlements. These recommendations were discussed at a two-day seminar held at the Agrarian Research and Training Institute, with representatives of all the Departments concerned and other interested bodies. The following points were agreed on at the seminar :

(a) Land Holding Policy : It was agreed that both collective and individual family holdings, and combinations of the two systems, have a part to play. Collective farming is most appropriate where large scale operation is necessary for economic reasons, and where the participants form a unified group. Where individual holdings are allocated, they should be of equivalent size and quality, and should be laid down in a way which promotes co-operation between neighbours. The land should be held on conditional lease. Security of tenure should be ensured under both individual and collective systems.

(b) Planning of Settlements : 3-5 year development plans should be drawn up and constantly reviewed. The participation of the settlers in planning should be encouraged. Holding size should be not more than can be managed by the labour available to the settlers and their families, either individually or collectively, excepting peak periods. In co-operative farms, production units should be small enough to operate as face-to-face communities; units for servicing can be larger. Farmers should live in village clusters, though provision must be made for guarding crops on the periphery of the farm.

(c) Selection and Training of Settlers and Staff : The usual selection criteria of age, education, experience etc. are satisfactory, but acceptance of the ideology on which the scheme is based should be an added criterion. It is important to explain clearly to the applicants what the scheme involves. An initial probationary period is desirable. Continuous training is essential for both settlers and staff. This should be given on-the-job wherever possible. It should include motivational, organisational and technical aspects. Settler leaders should be used as trainers wherever possible.

(d) **Management of Settlements :** The members should be fully responsible through their Co-operative Societies for work organisation, discipline, social and cultural affairs, and they should play a major role in planning, financial control, supplies and marketing. Trained officials and members of local institutions should give intensive guidance and support. Co-operative Committees should be elected by secret ballot. Their powers and responsibilities should be laid down in the Co-operative Rules. Work groups should be formed, especially in co-operative farming schemes, and tasks should be allocated to individuals or groups.

(e) **Financing of Settlements :** Investments should be kept to the minimum possible by use of labour intensive techniques. Funds should be given as loans rather than grants wherever possible. Critical financial appraisal should be made in project formulation. A uniform policy of finance and subsidies for settlements of all types is highly desirable. Regular supervision of co-operative accounts should be provided by Co-operative Inspectors and Audit Department. Accounts should be kept on the schemes so that members are aware of their financial situation. Rescheduling of loan repayments should be allowed only if the profits available for distribution are insufficient to keep the members on the schemes.

(f) **Integration of Settlements with surrounding areas :** The settlements must be developed as Growth and Demonstration Centres, integrated both socially and economically with the communities which surround them. Otherwise jealousies will result and the investments made will not bring their full return. Economic inter-dependence should be established through trade in produce between the settlement and the villages, processing of the village crops on the settlements, joint use of services, etc. Social integration should be promoted by selecting members from nearby villages, through joint representation on rural institutions, joint cultural activities and training programmes, etc.

(g) **Single Settlement Authority and Policy :** While it may be ideal to have a single authority responsible for all settlements, it is not considered feasible at the present time. However, it will be desirable to re-activate the Settlement Planning and Development Committee to ensure a continuing dialogue between the major settlement agencies, and to achieve some common thinking on settlement policy. The proposed Janawasa Act will also provide a legislative umbrella for all settlements which conform to certain criteria relating to co-operative production and self-management.

Appendix

BIBLIOGRAPHY OF DOCUMENTS AND WRITINGS RELATING TO LAND SETTLEMENT IN SRI LANKA - 1840-1975

This bibliography is divided into seven sections as follows :

1. Acts and Legislations
2. Reports of Government Departments, Corporations, Boards, Commissions and Official Committees
3. Reports and Papers of International Agencies (FAO, IBRD etc.)
4. Academic Dissertations and Theses
5. Books
6. Articles and Papers in Periodicals
7. Miscellaneous

The reference in brackets after each entry refers to the number of pages of the document (where appropriate and available) and to the library where the document can be found (where available).

The key to the libraries is as follows :

- A : Agrarian Research and Training Institute, Colombo.
C : Central Bank, Colombo.
D : Agricultural Diversification Project, Peradeniya.
F : Faculty of Agriculture, Peradeniya.
K : Ministry of Agriculture, Colombo.
L : Land Commissioner's Department, Colombo.
M : Mahaweli Development Board, Colombo.
N : National Museum, Colombo.

P : University of Sri Lanka, Peradeniya.

R : River Valleys Development Board, Colombo.

There are undoubtedly omissions or inaccuracies in the bibliography, for which the authors apologise. They would appreciate notification of any additions or corrections that should be made.

1. Acts and Legislations (in chronological order)

1. 1 Ceylon Legislative Council, Crown Lands (Encroachment) Ordinance No. 12 of 1840 (A.P.C.)
1. 2 Ceylon Legislative Council, Land Resumption Ordinance No. 4 of 1887 (A.P.C.)
1. 3 Ceylon Legislative Council, Waste Land Ordinance No. 1 of 1897 (A.P.C.)
1. 4 Ceylon Legislative Council, Waste Land Ordinance No. 5 of 1900 (A.P.C.)
1. 5 Ceylon Legislative Council, Waste Land Ordinance No. 6 of 1903 (A.P.C.)
1. 6 Ceylon Legislative Council, Waste Land Ordinance No. 16 of 1907 (A.P.C.)
1. 7 Ceylon Legislative Council, Crown Landmarks Ordinance No. 7 of 1909 (A.P.C.)
1. 8 Ceylon Legislative Council, Land Settlement Ordinance No. 12 of 1931 (A.P.C.)
1. 9 Ceylon Legislative Council, Land Settlement Ordinance No. 22 of 1932 (A.P.C.)
- 1.10 Ceylon Legislative Council, Land Settlement Ordinance No. 81 of 1933 (A.P.C.)
- 1.11 Ceylon Legislative Council, Land Resumption Ordinance No. 2 of 1934 (A.P.C.)
- 1.12 State Council, Land Development Ordinance No. 19 of 1935 (A.P.C.)
- 1.13 State Council, Land Resumption Ordinance No. 57 of 1942 (A.P.C.)
- 1.14 State Council, Land Development Ordinance No. 3 of 1946 (A.P.C.)
- 1.15 State Council, Irrigation Ordinance No. 32 of 1946 (A.P.C.)
- 1.16 State Council, Crown Lands Ordinance No. 8 of 1947 (A.P.C.)
- 1.17 State Council, Crown Lands Ordinance No. 9 of 1947 (A.P.C.)

- 1.18 Parliament of Ceylon, Crown Lands Ordinance No. 13 of 1949 (A.P.C.)
- 1.19 Parliament of Ceylon, Gal Oya Development Board Act No. 51 of 1949 (A.P.C.)
- 1.20 Parliament of Ceylon, Land Development Act No. 49 of 1953 (A.P.C.)
- 1.21 Parliament of Ceylon, Crown Lands Act No. 8 of 1954 (A.P.C.)
- 1.22 Parliament of Ceylon, Land Development Act No. 22 of 1955 (A.P.C.)
- 1.23 Parliament of Ceylon, Land Resumption Act No. 22 of 1955 (A.P.C.)
- 1.24 Parliament of Ceylon, Land Settlement Act No. 22 of 1955 (A.P.C.)
- 1.25 Parliament of Ceylon, Paddy Lands Act No. 1 of 1958 (A.P.C.)
- 1.26 Parliament of Ceylon, Land Development Ordinance (Amendment No. 60 of 1961) A.P.C.
- 1.27 Parliament of Ceylon, River Valley Development Board (Amendment) Act No. 6 of 1965 (A.P.C.)
- 1.28 Parliament of Ceylon, Land Development (Amendment) Act No. 16 of 1969 (A.P.C.)
- 1.29 Parliament of Ceylon, Mahaweli Development Board Act No. 14 of 1970 (A.P.C.)
- 1.30 The National State Assembly of Sri Lanka, Land Reform Law No. 1 of 1972 (A.P.C.)
- 1.31 The National State Assembly of Sri Lanka, Agricultural Productivity Law No. 2 of 1972 (A.P.C.)
- 1.32 National State Assembly of Sri Lanka, Agricultural Lands Law No. 42 of 1973 (A.P.C.)
- 1.33 National State Assembly of Sri Lanka, Sale of State Lands (Special Provisions) Law No. 43 of 1973 (A.P.C.)
- 1.34 National State Assembly of Sri Lanka, Land Reform (Amendment) Law, 1975 (A.P.C.)

2. Reports of Government Departments, Boards,
Corporations, Commissions and Official
Committees (in chronological order)

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- 2.1. 1 Report of the Kalawewa Colonization Scheme. S.P. No. IV of 1893 (M, N)
- 2.1. 2 Report of the Committee appointed to consider the terms and conditions on which Crown Land should in future be leased for agricultural purposes. S.P. No. II of 1917 (4 pp, P, N)
- ✓ 2.1. 3 First Interim Report of the Land Commission. S.P. No. XVIII of 1927 (5 pp, P)
- ✓ 2.1. 4 Second Interim Report of the Land Commission. S.P. No. XXXII of 1927 (8 pp, P)
- ✓ 2.1. 5 Third Interim Report of the Land Commission. S.P. No. II of 1928 (21 pp, P)
- ✓ 2.1. 6 Fourth Interim Report of the Land Commission. S.P. No. V of 1928 (7 pp, P)
- ✓ 2.1. 7 Fifth Interim Report of the Land Commission. S.P. No. XVI of 1928 (6 pp, P)
- ✓ 2.1. 8 Sixth Interim Report of the Land Commission. S.P. No. XXXV of 1928 (7 pp, P)
- ✓ 2.1. 9 Seventh Interim Report of the Land Commission. S.P. No. XLV of 1928 (5 pp, P)
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- ✓ 2.1.11 Ninth Interim Report of the Land Commission. S.P. No. XVII of 1929 (5 pp, P)
- ✓ 2.1.12 Final Report of the Land Commission. S.P. No. XVIII of 1929 (35 pp, A, P)
- ✓ 2.1.13 Decisions of Government on the Recommendations made in the Final Report of the Land Commission. S.P. No. XXXV of 1929 (6 pp, P)

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- 2.1.20 Report of the Committee of the Roda Bendi Ela Scheme.
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- 2.1.21 Kandyan Peasantry Commission Report. S.P. No. XVIII
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- 2.1.22 Interim Report of the Land Commission. S.P. No. XV
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of 1968 (121pp, A)
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2.2.2 Annual Reports of the Gal Oya Development Board, 1949/50 - 1963/64 (R, A, P)

2.2.3 Annual Reports of the River Valley Development Board, 1965/66 - 1968/69 (R, A, P)

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- 2.3 Reports of Studies or Proposals relating to Land Settlement prepared by Government Departments or Institutions
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- 2.3.10 ———, Resettlement of the people displaced by the Polgolla Reservoir (M)
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- 2.3.12 ———, Ukuwela Resettlement Study (M)
- 2.3.13 Ganewatte, P. Socio-Economic Study of Tract 2 Kagama Special Project. Mahaweli Development Board, Colombo (M)
- 2.3.14 Ariyaratne and Reverdy, J.C. Social Area and Problems of Settlement. Mahaweli Development Board, Colombo (M)
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