

# ECONOMIC REVIEW

1986  
September

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Upon the dewdrenched land  
The paddy is ripening  
The elephants who bring sorrow  
I drive away  
With God's protection  
My meals come from the field  
And because I am poor  
This vigil in a hut I keep

FOLK SONG  
(Paddy Farmers)

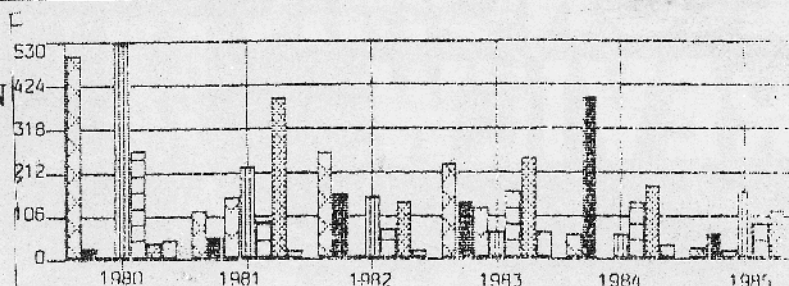
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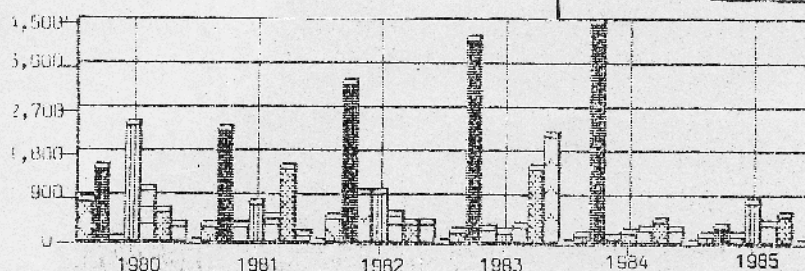
LAND SETTLEMENT



# INVESTMENT AND EMPLOYMENT IN FOREIGN AND LOCAL PROJECTS APPROVED 1980 - 1985

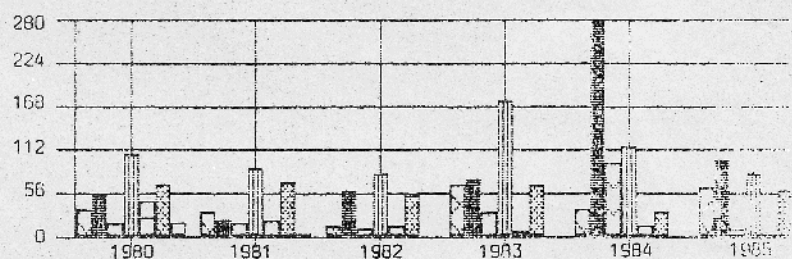


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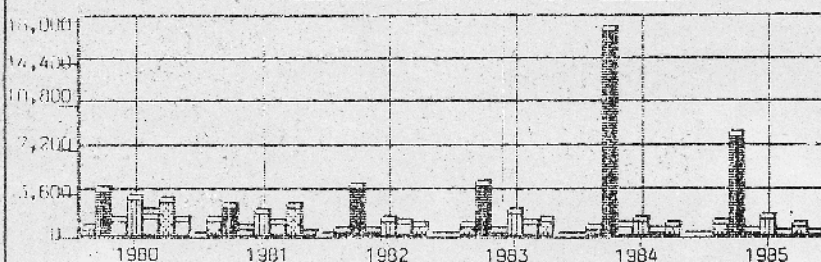


FIAC - EMPLOYMENT  
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Between 1980-1985, approved investment in industry totalled almost Rs 15.5 bn (GCEC Rs 7,773 mn, FIAC Rs 5,625 mn and LIAC Rs 2,132 mn). During these years approved foreign investments (GCEC, FIAC) reached a peak in 1980, totalling Rs 3.6 bn and declined steadily to a low of Rs 441 mn in 1983, recovered slightly in 1984 and dropped to Rs 388 million in 1985. A major share of local and foreign investments has gone into ready-made garments and textile production.



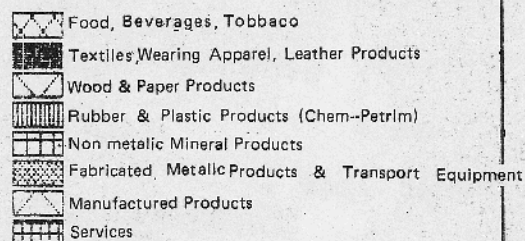
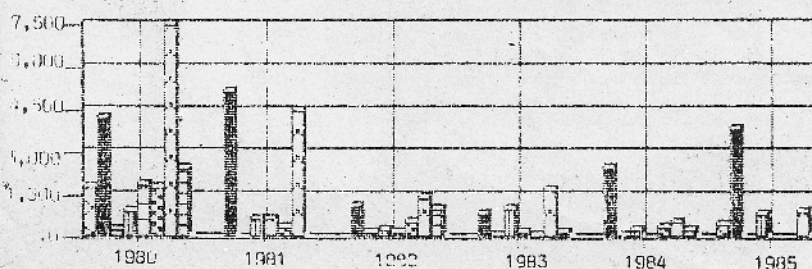
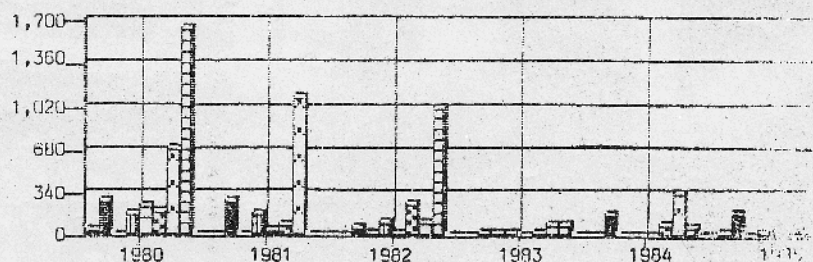
LIAC - INVESTMENT  
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LIAC - EMPLOYMENT  
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GCEC - INVESTMENT  
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GCEC - EMPLOYMENT  
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*CREDITS The Special Report in this issue was prepared by S.S.A.L. Siriwardena of the Research Department*

THE ECONOMIC REVIEW is intended to promote knowledge of and interest in the economy and economic development process by a many sided presentation of views & reportage, facts and debate.

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Similar contributions as well as comments and viewpoints are welcome.

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**COVER**

Photographs by Stanley Kiriwandala

The peasant farmer's ballad, on the cover, was translated from the original by P. F. Ariyananda

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- \* SUGAR: Sri Lanka's Consumption, Production, Imports & Distribution, — policies and trends
- \* Interest rate policies and economic development — the Sri Lankan experience
- \* Irrigation and water use in settlement schemes
- \* Sri Lanka's trade pattern— recent trends



## DIARY OF EVENTS

July

- 17 A US aid grant for scientific research will enable work on developing a high yielding variety of sesame seed (tela) at the Ruhuna University, according to an USIS news release. The agreement was signed between US Aid and (NARES) the Sri Lanka Natural Resources Energy and Science Authority providing US\$ 128,300 for this work.
- 18 The Mahaweli Development Authority has introduced a scheme to rehabilitate the entire irrigation canal system of the Uda Walawe reservoir project. The estimated cost for this project is around \$ 130,000. The Asian Development Bank has agreed to provide 90 percent of these funds to the Mahaweli Development Authority.
- 23 The interest rate on World Bank loans to developing countries has been reduced from 8.5 percent to 8.23 percent for the six months beginning July 1, 1986, according to an announcement in Washington.
- 26 The International Cocoa Agreement, 1986, was adopted in Geneva, marking the successful conclusion of more than two years of negotiations held under UNCTAD's auspices. The Agreement will be open for signature at United Nations Headquarters on 1 September and is due to enter into force on 1 October. (Also see page 20).
- 28 An agreement providing for an United States Agency for International Development (USAID) grant of US\$ 112,351 to the Postgraduate Institute of Agriculture in Peradeniya was signed in Colombo. The money will be utilized to design and test a low cost water level sensor for irrigation water management in Sri Lanka.
- 30 Approximately 1,000 million people in Third World cities are directly or indirectly dependent on odd jobs in the informal sector for their livelihood, but the sector's absorption capacity along a safety valve for urban unemployment is nearing saturation point. Its job creation potential is being strained to the utmost by the ever increasing rural-urban drift combined with restrictive policies and bureaucratic harassment. Constraints and discriminatory measures by Governments should be phased out, according to an ILO report from Geneva.

Aug.

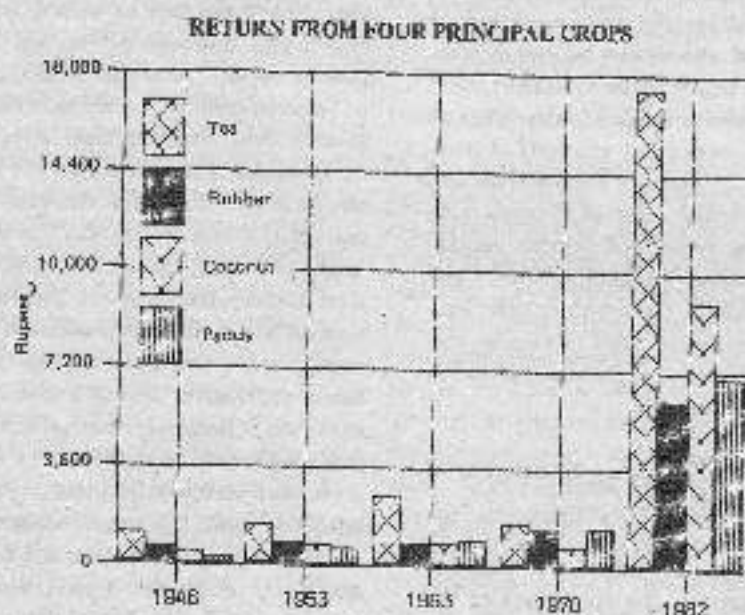
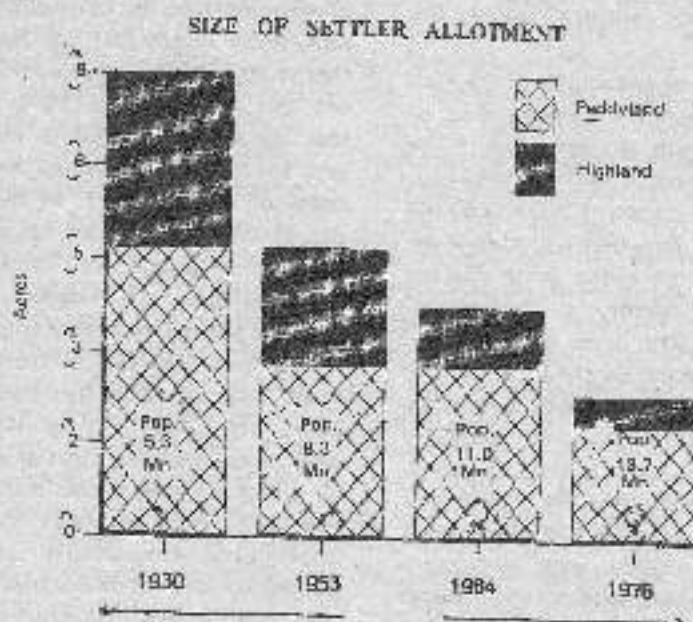
- 1 The Colombo Consumer's Cost of Living Index for August 1986 was 610.2 the Department of Census and Statistics announced. In July 1986 it was 606.3 and in August 1985 it was 555.6.  
The fourth successive MFA (Multi Fibre Arrangement) covering the International Trade in Textiles was extended for a further five years upto July 31, 1991 in Geneva by the Textiles Committee, the governing body of the Arrangement. Originally negotiated in 1973 and renewed in 1977 and 1982, it has currently 43 signatories representing 54 countries. In 1984, trade in textiles and clothing between MFA members amounted to US\$ 48.1 bn, or 48 percent of the \$ 100.8 bn. world exports of textiles and clothes.
- 7 The latest statistics from the International Rubber Study Group (IRSG) revealed that the world production of natural rubber during the first quarter of this year was 1,080,000 tonnes against 1,039,000 during the corresponding 1985 period, while that of synthetic ma-

terial reached 2,295,000 against 2,260,000 tonnes the previous year.

Cabinet approved proposals for Sri Lanka to enter into two loan agreements with Japan. The first provides for a project loan for the sum of 14,500 million yen with the Overseas Economic Cooperation Fund of Japan. This sum will be provided by the Japanese Government to meet the cost of the Samanawewa Hydro Electric power project. The other loan is for a sum not exceeding 2,500 million yen. Both these loans are provided by the Japanese Government, in fulfillment of the pledge made at the Aid Group Meeting held in Paris in June 1986.

- 18 The Plantations Ministry announced that a sum of Rs 55 million has been paid out as subsidies to rubber small holders for replanting under the World Bank aided Rubber Rehabilitation project. Most of these funds were disbursed in the project areas of Kegalle, Ratnapura and Kalutara - the three major rubber growing districts last year.
- 22 A Japanese joint venture to process and export granite slabs with an investment of Rs 7 million was officially approved by the CCEC. The CCEC announced that during the first five years of operation, this venture is estimated to earn Rs 50 million in foreign exchange and give employment to 80 workers. About 1,500 tonnes of cut and polished granite slabs and over 1,000 tonnes of semi processed granite slabs are expected to be exported to Japan by the third year in operation.
- 23 The Cabinet approved a proposal by the Lands and Mahaweli Minister under the Kirindi Oya Irrigation and Settlement project to provide irrigation facilities to 20,400 acres of new land and improved facilities to 11,400 acres of existing land. The Asian Development Bank which financed the major portion of the cost under phase I of the project has, in principle, agreed to finance the phase II.
- 26 The US and Sri Lanka governments signed a project agreement in Colombo for a six year Irrigation System Management (ISM) project. Total planned US Aid funding over the life of this project is \$ 18.6 million. The agreement provides an initial \$ 13.8 million, of which \$ 8.0 million is a loan and \$ 5.8 million a grant.
- 28 Cabinet approved a proposal by the Trade and Shipping Minister for a Counter Trade Arrangement between Sri Lanka and Poland. Fifty steel containers for the Ceylon Shipping Corporation are to be purchased in exchange for tea. The Ceylon Shipping Corporation has negotiated with the Polish manufactures for the hire purchase of the containers.  
Cabinet approved the offer submitted by M/S C. Itoh and Company Ltd. of Japan for the supply of medical equipment for ten rural hospitals at a total of yen 637,740,000 under a Japan/Sri Lanka yen grant.  
The Governments of US and Sri Lanka exchanged notes agreeing to increase the fiscal year 1986 PL 480 title Agreement by US\$ 7 million. This increase, which brings the total amount for fiscal year 1986 to US\$ 38 million, is an advance on the PL 480 title programme proposed for Fiscal year 1987. The Sri Lanka Government plans to use these additional funds to purchase approximately 68,000 metric tons of wheat, which will arrive here in November 1986.





## LAND SETTLEMENT IN SRI LANKA

Land settlement and land reform measures in most developing countries have attempted to improve the lot of their rural peasantry. In many such countries social unrest and inequities in their society are traced to landlessness or to the insecure and inequitable system of land tenure. Such situations have stirred the conscience of

their rulers to action and resentment among the majority of the rural population who feel that they have no stake in the land and are unable to receive a fair share of the fruits of their labour. It is in this context, in varying degrees of urgency, that land settlement and land development in Sri Lanka, over the last one and a half

centuries, have been concerned mainly with the need to raise the economic and social status of rural people, particularly the peasantry - the small farmers and the landless. The burden of implementing policies to achieve these objectives have rested with government sponsored settlement schemes, since the lands to be opened up for settlement were state owned and it was only governments that could offer the necessary incentives and supporting facilities for new settlements. Even today there is an abiding concern with 'small farmer policies' and the old notion of government sponsored settlement schemes continues to be regarded as the most acceptable method of implementation.

Many reviews of past land settlement policies have shown clearly that in several developing countries the same kinds of projects, containing on the surface at least the same kinds of 'mistakes', appear to have been steadily replicated time and again. An economist who visited Sri Lanka, David Dunham, in an analysis of this situation has shown that such land settlements are costly compared to many other agrarian policies, offering low rates of return on the capital invested; they often register disappointingly low output levels; they are administratively too heavy; they frequently suffer from internal social problems, and they often have fairly high rates of physical desertion. On the whole, the record of these schemes would seem to have been "bad". Dunham adds that "Sri Lankan experience, stretching back as it does to the nineteenth century, is in no real sense an exception to the overall pattern. Its settlement projects have in general proved to be costly, and in practice they have tended to be implemented without any rigorous means of financial control". To see the issues in proper perspective it is necessary to look back on the early attempts at formal land settlement and land development.

The earliest settlements in Sri Lanka, which began around 300 B.C.,



and extended upto the 12th century AD, were concentrated in the Dry Zone, where rice became the staple crop. By the first century AD large scale irrigation works were being built, and the first five centuries of this era are considered "the most creative and dynamic era in the history of irrigation activities in Sri Lanka". The response of the Dry Zone civilisation to the environmental conditions in this region is evident even today in the land use pattern it created. The number of tanks in the Dry Zone may be regarded as one index of the intensive land use in specific areas. For instance, agriculture in this area was determined, by and large, by the physical characteristics of the land.

In these early times it is true that the king had certain claims over most of the land in his kingdom and there is evidence of the "rights" of individuals with regard to land. The tank became an essential feature of ancient villages in Sri Lanka and the rights of villagers to the use of this land for cultivation came to be based on customs and traditional principles in Sri Lanka. This system of land use under village tanks ensured social equity through a fair and equal access to irrigation water and land. The principle in the ancient village system was to ensure a yield from the land and that every villager had the right to enjoy the fruits of cultivation. This system was a definite inducement for all in the village to engage in the development of land and the irrigation network. Around the 9th century, with the maturity of the hydraulic civilisation "private rights" to property seem to have been more clearly established. Dry Zone lands, however, were generally held and administered by the village society and absolute ownership of individuals in traditional villages and the issuing of title deeds of land began only at the end of the 19th century. The villagers formed their own village committees and evolved their own codes for the management of water and development of land.

This form of land use pattern in Sri Lanka was greatly affected by the policies that followed under Colonial rule.

From about the middle of the 13th century began the de-population of Dry Zone with the break up of the Sinhala kingdom at Polonnaruwa. During the period 1,200-1,500 AD there was a movement and shift of population to the wetter South Western part of the country, to the part adjoining the Dry Zone, called the intermediate zone. By the time the first European colonial power came into contact with Sri Lanka the Wet Zone lowlands had been settled. The three colonial powers, the Portuguese, the Dutch and the British, concerned themselves mainly with agriculture which was beneficial to their trade. Till the 1850's little concern was paid to the welfare and encouragement of traditional agriculture by the British. A change began under Governor Ward (1855-60) who initiated restoration of irrigation works and attempts at rehabilitation of the Dry Zone and his was the first British attempt towards mitigating the neglect of peasant agriculture. However, his programme of irrigation activity tended to convert irregularly cultivated land to regular cultivation; rather open new areas to peasant agriculture.

#### **The Crown Lands Encroachment Ordinance of 1840**

During British rule in the 19th and 20th centuries, the conditions of the peasantry in Sri Lanka underwent several changes. There were mild attempts at land development and settlement even before this, in the colonial period, when the Dutch restored some ancient irrigation tanks such as the Amparai Tank in the Eastern Province. However, formal land settlement, specifically settling title to land, was initiated by the British with the enactment of the Crown Lands Encroachment Ordinance No 12 of 1840. The enforcement of law and order and a control of the land

as a state owned resource was basic British policy at the time, though positive measures to develop the peasant sector clearly did not figure in this policy. In fact, the introduction of this Ordinance in 1840 meant that the state had begun to interfere with the traditionally owned lands and rights of the peasantry. In terms of this Ordinance all forest, waste, unoccupied or uncultivated lands were presumed to be the property of the Crown until the contrary was proved. This presumptive right of the Crown meant that most of the land in the Wet Zone, particularly in the Kandyan areas where land was used as chenas, for village pasture, forests and village expansion purposes was declared Crown Land. Possession of land was granted on the condition that it had been continuously cultivated for 30 years. Land deemed to belong to the crown was disposed off on an "application system" and this system came to be continued as "Land Kachcheris". It is evident that the Ordinance was designed for those who had the capital resources for land development, and particularly in the Central Highlands and Wet Lowlands it made a vital contribution towards the formation of the country's plantation economy. In the Dry Zone regions of the Northern, North Central and Eastern provinces, however, the effects of this Ordinance were different. These areas were comparatively sparsely populated and when the thousands of acres in these regions came under the Crown not many people felt it then. What in fact happened was that over hundred years later it was possible to make available all these vast extents of once fertile paddy lands for development on a planned basis, though the British never thought of it then.

Generally the peasants in rural Sri Lanka were greatly affected by this policy. Access to land in the villages had been based on tradition through generations, and the right to enjoy the benefits of the land were not dependent upon a title to property. Land which was traditionally culti-



vated by the villagers through birth right, was now suddenly referred to as crown land. Discontinuity in terms of legal rights for cultivation of the lands was a disincentive to cultivate for many peasants. This policy not only jeopardized the traditional modes of possession but also created disunity in rural communities.

The ancient village leader the 'Gamarsala' was replaced by a person in a newly created position namely Vel Vidane. The 'Gamabahawa' which was the most powerful village level body, was smothered by the centralized administrative machinery - the kachcheri system. To re-establish the irrigation discipline a complicated machinery of formal tribunals operating under provincial Government Agents was introduced.

The structure of the administration in rural areas was geared to serve the colonial needs of the British, that is, to gain control over the land and people. The set up was rigid and bureaucratic with a chain of command going right down from the top, that is, to the village headman and vel-vidane at the village level. The Government Agent was the chief government official, and he had the power to enforce rules and regulations.

The other measure was resolving the question of irrigation water by enactment of an Ordinance. According to the Irrigation Ordinance No. 9 of 1856 farmers themselves were required to do the earth clearing work and the officials were supposed to supervise each irrigation work. This step, however, was confined to the Ordinance. Instead of providing the necessary facilities and management for the cultivation of land under the irrigation system, it adversely affected the irrigation system in the Dry Zone. The irrigation water which was originally freely and equitably enjoyed by the villagers, was brought under rigid control under a set of rules and regulations. The reaction to these rules was negligence of their village tanks and irrigation system. The situation had been reported to the Governor, Sir

John Ward by villagers as follows:

"The irrigation system had been used in a destructive manner, there was no reconstruction of any tanks; the number of people forced into a state of misery in a degenerated economy had increased. The tanks were becoming shallow and their capacity to hold water was thus reduced. The peasants themselves had neglected the valuable principles of the past reconstruction and repair of the tank and maintenance of channels. They did not maintain tanks and channels in good condition and neither did they co-operate. Frustrated peasants began to cut down the tank bunds selfishly in order to ensure a supply of water. And when the location of anicuts was inconveniently located the peasants cut down holes at different places of the bund nearest to their paddy fields. The whole irrigation system deteriorated" (Baily 1952).

#### **Paddy Cultivation Ordinance of 1857**

The next step taken by the government to overcome this situation was the introduction of the Paddy Cultivation Ordinance of 1857 which provided for the take-over by the government of repairs of those systems where restoration was delayed. The cost incurred by the government in this connection had to be reimbursed by the villagers in instalments within 10 years. These efforts, however, were not as successful as expected. The peasants rejected this Ordinance and the revenue officers too asked the central government to modify it, on the grounds that even though restoration work was carried out, the peasants were unable to repay the expenses in instalments. On the whole, this Ordinance was not relevant to the areas inhabited by poverty stricken peasants. Therefore, in 1873 a new amending Ordinance in terms of which the peasants themselves could select a convenient method of repaying the cost of tank restoration was enacted. But still there was no improvement of conditions in most parts of the dry zone.

#### **Government Experiments in Irrigation Settlements**

One of the earliest government experiments in irrigation settlement schemes was the Kalawewa settlement in 1887. The British administrators tried to develop this scheme within the capitalist framework of the plantation agriculture in the wet zone. But, there were also other prototypes. According to the sessional paper of 1892 this settlement scheme was carried out as an experiment following the contemporary Indian experience in Punjab. The intention behind the project did not guarantee that proper concern was given to local conditions. Attention was for example, not given to the cropping pattern and irrigation practices of the Dry Zone peasants. Apart from the local population, settlers were selected from the people outside the area where there was a surplus of labour. The government provided them free transport, a means of subsistence for six months, a dwelling house, free seed materials and agricultural implements as aid. Jungle clearing was attempted by employing local labour. Tamils and low country Sinhalese were grouped in batches. With the emergence of this organization various kinds of disunity between different racial groups and disputes between colonists and villagers began to appear. Tamils brought down from Jaffna went back, leaving behind the facilities provided to them by the government. With the settlement of low country Sinhalese a type of society alien to the traditional social and economic order emerged. The ultimate result of this social conflict was that many who had reclaimed land in the colony returned to their homes. Others left the area due to sickness, and dissatisfaction from not getting the land free. When the Kalawewa experiment failed, the remaining land was alienated among private applicants according to the Ordinance enacted in 1840. Most of that land went to landlords and the poor peasants who were genuinely interested in cultivation became their tenants.



It is apparent that there were no genuine efforts at "aided" colonisation on a wide scale during this period. Those with capital were sold the land under the restored tanks, and this gave the peasants no chance of bidding for the land. Some peasants illegally squatted on Crown Land, which influenced the enactment of the Waste Lands Ordinance of 1897.

Government policy and its interest at that time was to expand plantation sector activities which was unswervingly devoted to the mercantilist ideology. Most of the construction work carried out by the British administrators during the 19th century were in some ways connected with upcountry plantation agriculture. A major part of this was on the development of highways between the upcountry and Colombo. Table 1 below shows the limited government expenditure on Dry Zone development.

they required in the Dry Zone to grow food crops. However, this new scheme of the government did not succeed. A project given to the Ceylon Mill Company in 1920 under the Kalawewa scheme failed by 1922. In 1919 about 9,100 acres from Minneriya were made available for cultivation. This too failed within a short period. In 1921 the Low Country Products Association started paddy cultivation under the Kirindi Oya scheme. Despite all the government encouragement this project also ended up in failure. The main reason for the failure of this project was the internal barriers to the new system of development leading to capitalist farming and industrialisation in Sri Lanka, which was a major contradiction of the government's agricultural policy. The agrarian structure and socio-economic characteristics of the rural Sector were not suitable for company based farming

peasants upon the land, development of markets for their produce, raising their standards of living and easing the pressure of population in the congested areas of the Wet Zone. It was around this time that the unique method of settlements, called the "peasant proprietor system" was established. Under this system, first tried out in the Eastern Province, peasants could obtain land for food production on conditions that enabled them to preserve the ownership of the land. But this gave speculators an opportunity of using the peasants to obtain land and the system failed to work satisfactorily and the peasants did not seem to benefit. The outcome was the appointment of a Land Commission in 1925, which submitted its report in 1929. This report proved to be a turning point in aided colonisation and all subsequent settlement projects were primarily based on its findings. (See Box on page 7)

Table 1

**PUBLIC EXPENDITURE ON MAJOR PROVINCES OF THE WET ZONE AND DRY ZONE PROVINCES (FIVE YEAR AVERAGE)**

Year	Wet Zone Provinces		Dry Zone Provinces	
	Value (Rs '000)	Percentage	Value (Rs '000)	Percentage
1875-1879	3019	61.8	1094	20.4
1880-1884	1676	65.6	471	18.4
1885-1889	1189	47.9	696	27.3
1890-1894	1936	50.4	793	20.5
1900-1904	2485	55.9	688	16.0
1905-1909	2635	56.0	877	18.8
1910-1914	4254	62.3	953	12.8

Source: *Ceylon Blue Books*.

During the first World War the export-import economy of Sri Lanka showed signs of collapse, and while the population increased the country faced a serious shortage of food. As a result the special attention of the government was directed to the Dry Zone as the only alternative to solve the food problem. Settlement of people on crown land in the Dry Zone was accelerated. Private entrepreneurs and companies were provided with facilities to obtain as much land as

because of the poor infrastructure, lack of transport, inadequate irrigation water, poor management and unsuitable methods adopted without proper planning. It was against this background that the 'state aided' peasant resettlement was strengthened.

The land policy formulated in the 1920's laid the foundations for future settlement projects in Sri Lanka. Around this time settlement policy was directed towards disposal of land on easy terms, establishment of the

**Government Sponsored Settlement Programme after the 1930's**

During the 1930s the Dry Zone of Sri Lanka became the leading area of the government's development programme and policies. One of the main strategies was the opening up of irrigation settlements. Government sponsored Colonisation Schemes and peasant families were given land by the government under different irrigation schemes. Several economic, social and political factors influenced the acceleration of this development in the 1930's.

- The situation within the plantation agriculture sector of the wet zone deteriorated with the rapidly declining trend in export earnings. The wet zone plantation economy which had contributed a large part of the GNP could no longer maintain its population properly and many were simply "pushed" out.
- Declining export earnings affected imports which created a severe shortage of food. The rapid increase of population and the growing demand for food stimulated migration to the Dry Zone.
- Comprehensive investigation of the government land policies and important recommendations for future changes of the



# COMMISSION 1929

The appointment of a Land Commission in 1929 and the Commission's Report (1929) was a turning point in the polarization of peasant farmers of the Dry Zone. The peasants' demands and protests are primarily based on its findings.

The Land Commission's main recommendations were as follows:

1. The main objective of the Commission should be the preservation of the peasant farmer.
2. The government should sponsor a settlement of Crown Land and a special office for the Land Commission.
3. Land should be transferred to the people who have a systematic system of cultivation and the demarcation of Crown Land for various purposes, e.g. village forests and pasture, large extensive public purposes, colonization and so on.
4. The process of removal of land should be carried out in a systematic manner, the land to be sold to be cultivated by the peasant farmer, where the land is held by speculators, creditors and others.
5. Leasehold and Peasant Proprietorship to be considered in the Eastern Province, and to be introduced in some other provinces.
6. Peasant farmers under such conditions as that they do not sub-divide their land, given a loan or mortgage etc.
7. The large and the medium-sized estates should be encouraged to give up the land and be usefully employed in agriculture rather than drift into vagabondage.

Land and irrigation programmes had been given in the Report of the Land Commission 1929. Suggestions were made to change government policies in order to protect the peasantry. The recommendation of this report were adopted as a policy guideline by the government.

In 1931 a separate Ministry called the Ministry of Agriculture and Lands was introduced, and power of policy formation had been transferred to the first Ceylonese Minister Mr. D.S. Senanayake who headed this Ministry. Since then attempts were made to implement a national development plan which had long term agricultural development as its basic objective.

As a result of the above factors, colonisation programmes in the Dry Zone were strengthened. There was a breakthrough of the colonisation policies in the 1930s and the settlement of people in large irrigation schemes were implemented to achieve the following objectives:

- a) Increase food production, particularly paddy, by opening up irrigable land.
- b) Relieving population pressure of the densely populated wet zone as well as the southern parts of the country by shifting the landless unemployed population to the dry zone areas in which land and irrigation water could be provided.
- c) Provision of employment opportunities to the increasing population.
- d) Protection of the peasant farmers as a class.
- e) Promotion of agricultural development in general.

peasants. However, it appears that this policy was influenced by the desire to promote general peasant welfare and the attention paid to its practical implications or to production requirements was not enough. This was reflected in the selection of settlers and the concern to solve some of the wet zone problems simultaneously. Even though the government's land policy had at times succeeded in removing some of the traditional features of the peasant sector and made proper physical arrangements, it failed to find solutions to the problems of peasants in terms of productivity of irrigation water and productivity of labour. The new policy was successful first and foremost in finding lands for some of the landless peasants but the procedures followed in cultivation had failed to take stock of the knowledge associated with a modern irrigated agricultural system.

The main reason for these defects was the absence of peasants representatives who could participate in discussions about the new policies and their implementation. Those in the higher positions of the administrative hierarchy were invariably drawn from the elite urban sectors of the community and even if they were supposed to have a rural background, their outlook and interests were based in the main cities. Their awareness of the reality of the rural peasantry was therefore limited. In the economic background of the 1930s the demand for land was very acute. But not every person who received land utilized it carefully and efficiently. This is, of course, logical since the basic consideration of the authorities in selecting people was population pressure, indebtedness and landlessness. A majority of the peasants selected for land alienation in the Malay settlement located in the Hambantota district, of the South of Sri Lanka, had their basic qualifications as salt collectors of the Hambantota salt pans. They did not have permanent jobs, a knowledge of agriculture and had hardly any interest



in agriculture although they were settled as farmers. In this settlement area there was also land which was owned by Muslims who were not engaged in agriculture but who rented it out to Sinhalese tenants. This happened despite all the regulations regarding transfer or sale of settler's land. Although the government reserved the legal right and power to eject any settler who did not cultivate his land, it was not an easy task to take over such land even if the farmer did not do well. Taking over of the land legally alienated under the peasant proprietor system had to be done through legal bodies which required satisfactory legal proof. It was not possible to take-over any land that was being cultivated by tenant cultivators since the agreement between owner and tenant was informal. The Minister for Agriculture and Lands Mr. D.S. Senanayake was unhappy with the situation. His strong and positive attitude towards the peasant proprietor system appeared to be one of the main obstacles to a fuller transformation of the land to peasants. He suggested that the first batch of settlers be taken as an experiment and that this experience be examined to find out whether those farmers were cultivating successfully rather than alienating all the land at once. If the land use by the first batch was not a success there was no need to repeat this alienation programme experiment. Allottees were to be selected on this basis. However, this method could not provide sufficient evidence for understanding the ability and interest of the farmers. This led to a strong commitment of more productive land to experiments. Secondly, in this type of checks and balance process, if further alienation was postponed or prohibited more capable farmers would also be deprived of land. This policy on the other hand was beneficial to the more rich and progressive farmers rather than the poor which was the main target of the settlement programme. Once the land was alienated there was no way of supervising the cultivation

work of the farmers. On the whole a widespread malaria epidemic added to the shortcomings of the settlement programmes during 1930-35.

In 1935 an attempt was made to bring the land use practices into a more systematic control, giving legal sanction to the land development and settlement programme of the government by introducing the Land Development Ordinance No. 19 of 1935. It was possible after the enactment of this Ordinance that the gap between tenants and owners of land could be reduced by providing legal protection to the cultivator. No land owner would have the power to deprive a tenant of his ownership to such land. This would encouraged the poor tenant farmers to continue their cultivation and unemployed people in urban areas also could be settled in agriculture. The process of land development was accelerated because after 1936 land alienation was made not only under the protected tenure, but also under the unprotected tenure system.

The government presumed that the middle class farmers would show considerable interest and made substantial investment in cultivating land. However, a middle class farmer was a privileged person who usually did not earn his living by cultivating land; he was a businessman rather than an agriculturist. When land was given to such a person he became a land owner who tended to have his land cultivated by tenant cultivators. It was very rarely that the middle class applicants cultivated land employing family labour. Looking at this trend, the State Council debates as well as other independent observers focussed attention on the question whether this land policy contributed sufficiently to the development of agriculture as expected and whether the actual achievements were sufficient. The major observation was that the rapidly increasing indebtedness and poverty among the settlers was contrary to the expected goals. This was the main reason why the Minister

Mr.D.S.Senanayake was concerned and he pointed to the experience of the peasants in the Dry Zone who had been experiencing numerous hardships for decades; he maintained that they wanted not only the land but also a fully equipped settlement. The heated debates that ensued when the Aided Land Colonization Bill was presented by D.S.Senanayake as Minister of Agriculture in 1939 in the State Council reveals a precedence of politics over economics in the concept of the whole idea.

Yet aided colonisation in the Dry Zone did not make much progress. In the Legislative Council criticism of members like Dr N.M.Perera and Mr Philip Gunawardena was harsh on the entire settlement policy. Whether it was the Minneriya scheme, or the Tabbowa scheme in Puttalam district or Pitigala scheme in the Galle district or Deranagala scheme in the Matara district it was found that the performance of most colonists was disappointing. An Economic Survey of the Ministry of Labour, Industry and Commerce, which carried out a detailed investigation into the Tabbowa colonization scheme maintained that there was no clear idea of what the scheme intended to achieve. In this context it stated "A colonization scheme should, as far as possible, serve one clearly defined objective. A mixture of objects is often fatal to success. We should make sure whether our aim is to increase food production or create a peasantry or simply relieve congestion of population in other areas, or do something for unemployed or ill-employed people of the country".

At Nachchaduwa a project where some families were settled on five acres of paddy land each with all the assistance failed for lack of interest among the settlers. Sickness and inability to repay the cash advance also contributed to the failure of the projects. A number of unassisted less ambitious survived but these could not be considered successful tests of land settlement.



## The New Policy in 1939

During the 1930's the involvement of the authorities in land and settlement activity broadened considerably. The take-over of the restoration work at a high capital cost—was of course a very clear indication that peasant labour efforts were not deemed good enough. But there were all types of interventions such as: the construction of irrigation channels, roads, soil research and the provision of engineering services. Subsidies were granted for jungle clearing and for the procurement of agricultural implements. Credit facilities and seed were also provided by the authorities. Hospitals, sales centres and co-operatives were constructed at government expense.

Following the expansion of welfare measures of the government, the farmers tended to become highly dependent on external assistance to carry out even the activities which they could perform with their own labour. With increasing welfare aid and assistance the settlers began to feel that a 'Ready Made Colony' with various kinds of facilities should be given to them by the government. Indeed, this entire policy came to be characterized as "spoon-feeding". With the increasing involvement of the Government, the cost of the irrigation settlement schemes increased faster than their benefits. And the heavy involvement was often coupled with a low discipline. The government had in fact to employ outside labourers. For example, at the Minipe settlement scheme the government employed about 1600 labourers for jungle clearing in the allotment of farmers, but only about 20 of them turned up. Most of them did not know how to handle an axe (Record of Colonisation Office 1948).

According to several estimates (B.H. Farmer 1952, The Agricultural Plan 1958) the Government spent about Rs. 12,000/- to 15,000/- to settle one family in a state sponsored colonisation scheme. When the financial aid

for housing and other forms of assistance were taken into consideration, the government's cost for a settler family was about Rs.25,000/-. But the return from these schemes was not at all satisfactory. As a whole the output ratio of the colonisation schemes was only 17:1. According to the Gal Oya project evaluation report (one of the largest colonisation projects with the highest government investment) capital outlay was only about 3 percent. Low efficiency of water use was considered to be the main cause for the low return in the government sponsored settlement schemes. Irrigation duty ranged between 16 to 20 ac.ft. This was much higher than the actual requirement, which ranges from 3 ac.ft. to 5 ac.ft.

In 1939 the report on 'Aided Land Colonisation' presented to the Legislative Council by the Minister of Agriculture and Lands recommended:

- 1) that farm size should be sufficient to make the settler economically independent,
- 2) specific planning of cultivation,
- 3) a liberal system of assistance,
- 4) systematic planning of projects.

Nine settlement projects covering over 14,000 acres of paddy land were established during the period 1935-1947.

The period 1948 to 1955 brought an accelerated disposal of land under the Land Development Ordinance of 1935. Over 80,000 acres of rice land were given to about 16,500 settlers. The scheme of assistance did not change. Farm size was reduced in 1963 to three acres paddy land and two acres of highland. The reasons for the reduction in farm size from five acres paddy land and three acres of highland were that:

- 1) family labour was not sufficient for the optimum cultivation of large farms,
- 2) a large number of persons could be given the limited resource of developed land.

The most important event that took place in this period was the development of the Gal Oya Project. It was designed for:

- 1) the agricultural development of 42,000 acres (32,000 acres in paddy land and 10,000 acres in sugar cane)
- 2) flood protection, and
- 3) provision of domestic water to over 20,000 farm families.

By 1965 the project had established over 30 villages and about 12,000 families in both village expansion and major colonisation areas. Farm size was four acres of paddy land and three acres of highland which was later reduced to three acres of paddy land and two acres highland.

## Settlement Schemes after Independence in 1948

In spite of several changes in the administrative set-up the main features of the settlement schemes in Sri Lanka were almost the same even after Independence. In the main, the welfare oriented approach continued. Both the administrators and the people began to enjoy their newly won national freedom during the 1950's, and it was therefore difficult to limit the privileges and facilities given to the settlers during the colonial time. The dynamics of the situation rather underpinned a strengthening of the welfare programmes. The government's generosity was especially extended to health and education aspects. Massive anti-malaria campaigns helped to eliminate one of the recurrent plagues of the dry zone. However, the administrative apparatus was weak and co-ordination was lacking. The system of central planning consisted merely of a synthesis of sectoral investment programmes for agriculture, education, transport and communication. There was no attempt either to study the projects in required detail or to co-ordinate them for the purpose of overall allocation of resources. There were only such general principles that high priority should be given to investments that fostered the development of the sparsely populated dry zone of the country. Finally, as a result of the national health programme



the population in the country began to increase more rapidly than ever before.

The situation was thus very complicated with three interlaced characteristics: an official policy which had to be welfare oriented and oriented towards a geographical area which was to a large extent previously underdeveloped and underpopulated but which was to accommodate a large number of immigrants and a growing population.

In such a situation it was natural that there should be unwanted deviations. The most obvious side-effect included encroachment of crown land, subdivision of allotments and tenurial practices such as lease, share cultivation etc. The sub-division, sale mortgage or lease of land was prohibited. But the legal aspects did not prevent the settlers from disposing their allotments. Especially among the children such division of the allotment was common. The cultivators who subdivided their allotments had difficulties in obtaining credit from institutional sources and were therefore dependent on non-institutional sources. As a result leasing of paddy land on the basis of mutual understanding between the cultivator and the person who was prepared to provide the finance became a common feature of the settlements. Finally, the actual holder of the land became the tenant on his own land and the operational landlordship was taken over by somebody else. This gave rise to an inequitable distribution of land and wealth within the settlement schemes. One reason for this illegal development was that the alienation process did not move fast enough to meet the increasing demand for land and the delay in alienation diminished the interest of the peasant in obtaining land in the "correct" way. When they could not lease any land and when there was no other means of livelihood the peasants rather than wait for government to alienate land, started to encroach on crown land. Thus by 1956 an extent of land totalling 30,000 acres had been

encroached on by 28,000 people. (Sessional Paper 1958). In some colonisation schemes the total encroached extents were higher than the total extents actually alienated to the settlers. The most crucial issue arising from this process was the serious problem of the availability and supply of irrigation water in the settlements. Water disputes increased as a result of the misuse of irrigation water for encroached land and it created social disharmony. Use of irrigation water for an additional extent, scarcity and wastage, evaporation and run-off losses and lack of proper management all affected the storage capacity and efficiency of performance of the irrigation system.

The enactment of the Paddy Lands Act in 1958 was one of the popular and important remedial steps taken by the Government to avoid many of the problems listed above. With this Act, small farmers were not only assured of a greater security of tenure and a more equitable share of production but they were for the first time in settlement history, after colonial rule, provided with an organisation to promote their interest. One of the objectives of this provision was to ensure the rights to land cultivated by tenant cultivators. The ejection of a tenant cultivator was made a punishable offence. Tenurial rights of the ejected tenant cultivators, if any, had to be resorted to.

A second step was the abolition of the monopolistic right of the land owner to reduce or increase the land rent in a manner detrimental to the tenant cultivator at any time. In terms of this provision the tenant cultivator was required to pay to the land-owner a fixed rent of only 1/4 of the total production or 15 bushels of paddy per acre, whichever was less.

These measures covering security of tenure and the regulation of land rent were not successfully implemented as anticipated by this Act. Ande (share) cultivation, indirect lease of land etc. even today remain important features

of the tenurial system in the Dry Zone. Even after the Paddy Lands Act, the "Ande" system was practised as before but in hidden forms in order to evade the law. The most fundamental defect of the Paddy Lands Act now appears to be the failure to recognize the strength of the traditional bonds that so closely tied the tenant cultivator to his landlord. It was therefore inevitable that tenant cultivators would not co-operate to implement the law, as they had a fear of losing the cultivation under the Ande system.

Under this Act an attempt was also made to introduce a village level body called the "Cultivation Committee", based on ancient villagers' own organisations, such as Gamsabhawas. This Committee was supposed to consist of representatives of all classes of cultivators for the purpose of attending to all matters of cultivation including planning, construction and maintenance of irrigation works and other village work. The Committee was given the power to investigate land disputes, the right to prosecute in case of cultivation offences and the authority to promulgate and enforce irrigation regulations and the annual cultivation calendar. Theoretically, members of the Committee had to be elected from all social strata, but in practice the involvement of poor farmers and tenant cultivators was very insignificant. Since the tenant cultivators often had a fear of being ousted by their patrons they were constrained from opposing the election of the landed gentry to positions of office in the cultivation committee. In many cases former vel vidanes (Irrigation Headman) (who were referred to as a "Colonial anachronism") and their subordinates continued to hold key positions in the Committees.

The disputes regarding irrigation, land and other issues were supposed to be settled by cultivation committees in the first place. Therefore, wealthy landlords who were in the Committee, determined to their own advantage and there was little chance to oppose such decisions.



Prior to the setting up of Cultivation Committees, the regulation of cultivation and control of water were carried out under the Irrigation Ordinance, which laid down the duties and obligations of every cultivator together with disciplinary procedures to ensure the observance of those rules. With the introduction of the cultivation committee system cultivation discipline and maintenance of irrigation works suffered a deterioration. Legal power of the Committee was poor because in many cases action taken by the Committee was not accepted due to the problem of legislation. On the other hand this Committee could not be legally constituted because of the non-cooperation of the cultivators.

Secondly, although the Committees had been turned disciplinary action for non-performance was still enforceable only under the Irrigation Ordinance. The Committee could not take action against cultivators. Therefore the misuse and mis-management of irrigation water and land could not be controlled as expected. The defects of the village level administration bodies also represented the defects of the entire administrative machinery. With increasing departmentalisation not only was the Government Agent's authority progressively eroded but also the officials who headed the district branches of large government departments were inclined to enforce their independence from the Government Agent's Office and establish their lines of communication direct with their departmental heads. It was difficult to maintain a satisfactory discipline on irrigation and land at the settlement level mainly due to the lack of co-ordination between the officials of the various departments. The Department of Agriculture was responsible for agricultural extension. The Land Commissioner's Department was responsible for administration of crown land and its disposal for agriculture. Agricultural inputs were handled by the Department of Co-operatives. The Agrarian Services Department controlled and administered the

Paddy Lands Act and cultivation committees. Administration and control of irrigation networks was the responsibility of the Irrigation Department. The impact of departmentalisation at the settlement level was inefficiency and a smothering of responsibilities, which were passed on to others and therefore the Departments blamed each other. Moreover, this system favoured corruption since officials were in a position to divert complaints and punishments.

The result of Government's attempts at colonisation within the above administrative set up was to provide irrigation water and land to the people together with other aid and assistance; but not to promote the skills of the peasant or the traditional irrigation and cultivation practices. This system left settlers with no choice but to cultivate paddy with irrigation water according to their own traditions and cultivation practices.

No provision was made for rearing animals in the large Colonisation Schemes, as complementary to their paddy cultivation. This resulted in the settlers losing their draught power along with the nutritionally valuable supplementary diets, such as milk and eggs. This situation indirectly or directly restricted the promotion of secondary activities within their settlements.

Inadequate pasture within the settlement areas caused problems for animal husbandry. Rearing of cattle was difficult at least for cultivation purposes in the settlement. Settlers were often forced to drive their cattle into the jungle due to difficulties in maintenance. Consequently there was an acute shortage of cattle and buffaloes during time of cultivation in the settlement areas, particularly since some of the animals driven into the jungle turned wild.

When the irrigable land was made available to the settler his main intention was to cultivate paddy (even though the land was not suitable) because of the marketability, income stability and security of paddy as com-

pared to other crops. Secondly, highland cultivation with rain water and subsidiary food crops cultivation in the irrigable lands were totally neglected by the planners. Furthermore, the identification of crop combinations, careful examination of available technology and other facilities, required guidance on relative profitability of growing different types of crops, ensuring availability of inputs, provisions and markets were the most important measures required in the concentrated efforts supposed to be taken by Government planners and extension officials; but an organised plan of action of this nature was not forthcoming.

The possession of a paddy allotment was a matter of prestige for a farmer and was supposed to reflect his standard of living. Much of the government assistance and subsidies were also given to the paddy cultivators and colonisation schemes were organised accordingly. Considering the low level of income and the labour requirements to cultivate between 3-5 acres of land a settler was able to cultivate only paddy since it required less labour and low investment compared to other crops.

Identification of the size of an allotment as a viable economic unit, was a crucial problem of the settlement process. An allotment consisted of 5 acres of paddy land and 3 acres of highland in earlier settlement schemes. But this was too large for most settler families to handle alone. Therefore, settlers were compelled to extensively cultivate the land, as well as lease out the land or give it on *anda* (share) cultivation or sub-divide it among their children. In 1955 the standard size of the allotment was reduced to three acres of paddy land and two acres of highland. By reducing the size of allotments the government was able to reduce the cost per settler and provide land to more people. At the same time, settlers could earn the same income without using hired labour or machinery by intensive cultivation methods. In the 1960's an allotment size was



reduced further to two acres of low land and one acre of highland. The main objective of this step was to provide allotments (whether it was sufficient or not) to the increasing population of the country. In the early 1970's the size was changed again because two acres of paddy allotment was not sufficient for a settler family.

However, all these measures were not sufficient to promote the cultivation practices and irrigation water use of the settlers. By reducing the size of allotment intensive cultivation was achieved to a certain extent; but the cropping pattern had not changed. This was mainly due to lack of physical and agricultural planning. While the cost of irrigation increased rapidly the management of such costly irrigation water remained a crucial problem of the settlement. Even now the engineering and technical aspects of the irrigation and settlement schemes play a dominant role while the agriculture and social aspects are given low priority. The land which could receive irrigation water from channels is being considered as paddy land whether the soil suitable or not. Various studies have found that insufficient attention is given to the quality of soil, local beliefs, land use and irrigation practices; while the long experience in settlement policies seems to be disregarded.

After 1956 a form of social revolution which gave the people greater confidence to participate in the political system also resulted in a demand for more resources. Land was the resource most in demand and the need for land now was much greater than in the earlier period. In the late 1950's and early 1960's the general view was that disposal of land should be further accelerated although the limiting factors were the lack of capital and manpower for the development of land. To meet this situation a major change was made in the timing of the arrival of colonists to the project. Under the new system the settlers participated in the construction work and earned wages; in areas with a shortage of

labour for construction of irrigation works and canal development, the settlers filled in the gap; the colonists were not only more acclimatised to their new environment (before bringing in their families) but also had a greater sense of participation and ownership in the projects; the new system of land disposal minimised illegal squatting in irrigation projects. There was rapid disposal of land; over 35,000 settlers benefitted under this scheme covering an extent of over 90,000 acres of paddy land.

During the 1960s and 1970s the Government in Sri Lanka further emphasised land settlement as the major strategy for creating employment opportunities for the unemployed poor segment of the rural population. The two leading political parties that came into power over this period considered land settlement policy as a stabilizer for their own power. While doing so they had to struggle with deep problems in achieving both economic and political goals at the same time. From the 1960s settlement strategy has been directed towards import substitution. Farmers were encouraged by being provided a guaranteed price for paddy a greater credit supply, introduction of high yielding varieties and fertilizer subsidies. There was an impact of these incentives on average paddy production. In major irrigation settlements such as Uda

Walawe, Parakrama Samudra etc, paddy production increased beyond the national average. In addition to the usual settlement programme, a concept of special projects was also adopted to increase food production. However, those projects showed progress due to a higher concentration of assistance and foreign aid support. With the introduction of the new technology package a large number of intermediaries began to play a leading role at the grass root level because market opportunities were increasing for the sale of inputs and purchasing of farm products.

From the beginning of the 1970's however, economic problems began to increase much faster than the achievement of land settlement and development.

Of a 4.1 million work force in the country about 0.55 million were estimated to be unemployed. Among the unemployed population 67 percent were male and 33 percent female. More than 75 percent of those unemployed people were in the rural sector. The employment opportunities in the urban sector were greatly limited and about 14,000 graduates and 112,000 G.C.E. A/L qualified youth were without jobs because the Urban Sector could not absorb unemployed people due to non-industrial development tendencies in the country. In 1970 and

A package programme of integrated development to maximise production was recommended by an I.B.R.D./E.A.O. mission that visited Sri Lanka in 1966. The objects of this programme were:

1. to maximise production through improved methods of cultivation;
2. to strengthen institutional arrangements in respect of marketing, credit and farm management;
3. to rehabilitate irrigation facilities for better production; and
4. to encourage development whereby the community would grow into a self-sustained one.

A pilot project implementing the package programme was first initiated at the Elehara Colonisation project in 1967. A farm management survey carried out in this project in 1970/71 (Maha) had revealed that the yield of rice per acre had increased by over 50 per cent of the figure in 1968. In 1972 the yield per acre at Elehara had increased further to 79 bushels. By 1975 the package programme was extended to over 22 colonization projects which were referred to as special projects.



The growing food crisis was further accentuated by all those factors, with

11. Major Colonization Projects
12. Highland Cash Crops and Projects
13. Village Expansion and Services
14. Dispersed Youth Settlement Projects
15. Village Chief Settlement Projects
16. Co-operative Farms (Semi-subsistence Colonization)
17. Regional Development and Community Projects
18. Forestry
19. Special Leases and Managed Bush (Leases school)

(a) animal husbandry (Jungle sleeping sickness, bovine spongiform);  
(b) forest and agriculture (forest clearing machinery, fertilisers, agro-chemicals);  
(c) infrastructure and commercial facilities (roads, power supply, credit, educational facilities);  
(d) facilities for housing, shops, latrines, permanent roofing.

A revolution in land policy took place in 1977 with the enactment of the Land Reform Law, which in principle confirmed in 1973 with the State Land (Suelo) Law (Ley de Suelo) and in 1975 with the Law of Urban Law Amendment (Ley de Enmienda de la Ley de Urbanismo).

According to the first survey conducted by the Census and Statistics Department in 1972, 77 per cent of the paddy lands were less than 5 acres and about 18 per cent of the agricultural holdings being 10 acres; only 4.6 per cent of the paddy lands were 25 acres and over.

It is therefore obvious that Kandi District has to have a wider impact on ceiling on paddy lands. 2000 ha should be reduced to 600 acres. A two phase program is an alternative one, where so if a portion of the land is cultivated during the first season either in paddy or other field crops. Such a plan should give the farmer a minimum monthly income of Rs. 4800, which puts him into the group of high income earners. At present, only 20 percent of the population is cleared A.S. 500, although 14 per cent of the population lives in the districts of Andhra Pradesh and Orissa.

The Five Year Plan of 1972-78 recognised that paddy still remained the crop with the largest potential for import-substitution. Paddy, therefore, received very high priority in this Plan too, but the Plan emphasised that the 'modernisation of peasant farming cannot be accomplished on the basis of mono-crop agriculture'.

The five year Plan thus included a programme of assistance and extension for the cultivation of subsidiary food crops which upto then was a neglected



area in the agricultural sector. Accordingly a considerable part of the agricultural land was to be used for the growing of such crops. However an important place was assigned in the Plan to paddy cultivation which still could play a vital role in import substitution. One major feature of the Plan was the very high investment on irrigation. About 200,000 acres of new land area which could be provided with irrigation facilities through irrigation schemes such as Mahaweli, Walawe and Lunugam Vehera were expected to be developed during the Plan period (1972 - 1976). In addition, irrigation facilities were to be provided to 200,000 acres of land then under cultivation. The government, however, did not expect this to be used entirely for paddy cultivation.

As shown in Table 2 a new land area of about 300,000 acres was to be developed and provided with irrigation facilities. The question was whether such a vast extent of land could be developed and made suitable for settlement and cultivation within four or five years. The Government, under its action programme, however, made an attempt to grow new crops, and expand particularly the programme of growing crops like chillies and onions. But there was greater social and economic attraction to rice production for a variety of reasons such as the insufficient progress made in crop diversification and crop rotation and other skills, lack of organization in production and marketing, unstable incomes and inadequate provision of facilities to meet the future aspirations of smallholders. About 80 percent of the increased paddy production during the Plan period was estimated to be received from the land already under cultivation and the balance from 100,000 acres of paddyland expected to be developed for paddy cultivation. Settlement schemes of the Dry Zone were to have over 75 percent of their total extent of land made suitable for paddy cultivation. However, at the last stages of the Plan period it was found that achievements were far below the expected goals.

The programme took three years to get off the ground although the development of 300,000 acres of new land was expected to be completed within five years from 1970.

The use of paddy land was unsatisfactory after 1970 due to unfavourable climatic conditions. In 1972 of the land capable of being made suitable for paddy cultivation in the Dry Zone only 72 percent and 22 percent was cultivated with paddy in the Maha and Yala seasons, respectively. Of this too, 46,000 acres during Maha season and 9,000 acres during Yala were subject to crop failures. The fact is that though the land area under cultivation had increased during 1973/74, there had not been any increase

in real production as shown in the Table. Compared with the previous year 1972/73, paddy production in the Dry Zone during 1973/74 had declined by 9.3 million bushels. The position in 1974/75 was worse. Only 57 percent of the cultivable land could be cultivated due to severe drought and unfavourable climatic conditions. Of this too, no harvest could be collected from 163,000 acres due to crop failures. On the whole paddy production in Sri Lanka decreased by 530 million bushels. (Central Bank Report, 1975); which was a drop of 57% and 16% respectively in Maha and Yala seasons. The fact that this deterioration was observed throughout the country could be seen from the ex-

Table 2  
UTILIZATION OF IRRIGABLE PADDY LAND

	Asweddumized (‘000)	Cultivated (‘000)	Harvested (‘000)	Production Acreage (‘000)
	1	2	3	4
1972/73 Maha	380	349	327	11,768
Wet Zone Yala	380	272	262	8,978
Dist. TOTAL	760	621	589	20,746
Dry Zone Maha	864	624	578	41,605
Dist. Yala	864	190	181	7,567
TOTAL	1,728	814	750	49,172
Other Maha	250	216	189	6,151
Dist. Yala	250	151	131	4,347
TOTAL	500	367	320	10,498
1973/74 Maha	381	364	360	14,590
Wet Zone Yala	381	306	294	10,470
Dist. TOTAL	762	670	654	25,064
Dry Zone Maha	866	724	708	30,860
Dist. Yala	866	231	226	9,002
TOTAL	1,732	955	934	39,862
Other Maha	250	226	220	7,180
Dist. Yala	250	171	161	5,213
TOTAL	500	397	381	12,393
1974/75 Maha	388	369	360	14,273
Wet Zone Yala	388	312	301	9,547
Dist. TOTAL	776	681	661	23,820
Dry Zone Maha	878	540	377	16,127
Dist. Yala	878	168	164	6,913
Other Maha	235	187	138	4,325
Dist. Yala	255	143	153	4,412

Source: *Census & Statistics*



Table 3

NEW LAND TO BE DEVELOPED UNDER NEW IRRIGATION PROJECTS  
1972 - 1976

Scheme	New Land Acreage
1. Mahaweli Scheme	80,000
2. Uda Walawa	50,000
3. Major Minor Irrigation (Mainly for Paddy)	77,000
4. Cashew Farming	25,000
5. Other permanent crops	35,000
Total	268,100

Source: Five Year Plan 1972 - 1976

tents of land cultivated in the Wet and Intermediate Zone (See Table). The dramatic drop in paddy cultivation caused a set-back in economic growth. Thus it is clear that the growth rate during the five year period of 1971-1975 reached low levels when compared with the minimum growth rate of 8 percent expected in the Five year Plan. The average growth rate during the 5 year period after 1970 was 2.4% compared with an average rate of 5.8 percent during the 5 years preceding 1970. The Five Year Plan based its high growth rates on development levels reached during years free of economic disasters and hopes of increased production in significant sectors such as agriculture. Although contemporary observers had expressed doubts about these targets.

For instance, an ILO study team had their doubts about raising the level of rice production to 8 percent in the Five Year Plan, in the light of an average rate of a 4 percent increase achieved through a period of 20 years. They also pointed out that it was more dangerous to place such high hopes on the yield level of 1970 which was fattened by the casual rainfall of the Maha monsoon. Their estimate was an annual rate of increase of production of only 4.5 percent (ILO, 1971). It was difficult to reach even this level in 1970s.

The most serious problems that arose from the above adverse economic condition in the 1970s was decreasing capacity of settled farmers to carry out intensive farming with

modern technology due to heavy indebtedness and lack of credit facilities. Various credit schemes were tried out by the State banks but they failed to liberate the farmer from the grip of private money lenders and village traders. A system of granting credit in a more generous way to meet the production cost without supervision came into operation. Since their output was not adequate to repay those loans, the farmers borrowed money which was spent on inappropriate techniques, consumption needs, weddings and repayments of village money lenders. On several occasions the loan defaults were re-scheduled as a political gesture and this led to further default in repayments and as a result the lending capacity of the banks began to decrease. Consequently it was not only the defaulters but also their innocent neighbours who were deprived of institutional credit. Good farmers were reluctant to be guarantors for others fearing that they also would not be able to obtain loans. Those who were in need of credit were in search of guarantors. When it was difficult to obtain credit from banks to meet the high costs of farming these farmers had no alternative but depend on private sources of finance. The only way out for them was either the mortgage or leasing out of their plots of land which created a gap between real ownership and nominal or operational ownership of land.

A resolution on land policy took place in 1972 with the enactment of the Land Reform Law No. 1 of 1972.

This process continued in 1973 with the State Land (Special Provisions) Sales Act and in 1975 with the Land Reform Law Amendment Act. The objects these reforms had been to impose well determined ceilings on land ownership in order to improve the legal and economic status of settlers and thereby to distribute land among landless villagers and reduce the inequalities in land ownership and income distribution. These expectations were fulfilled to some extent in regard to tea, rubber and coconut plantations in the Wet Zone but the results achieved in regard to paddy lands in the Dry Zone were limited. This reform in fact affected mainly the up country plantations which had only about 18% of the total land area and 20% of the total population in the country. Further, the paddy lands formed only 3% of the total extent of land vested in the Land Returns Commission by the end of 1974. This amounted to 16,270 acres. These reforms were not an adequate remedy for resolving the problems connected with paddy lands in an area which had nearly 82% of the total population.

Dr. Vrooy and Shanmuganathan who reviewed the Dry Zone resettlement policy maintained that these reforms were only an alternative land reform which were inspired by class interest on the part of the policy makers to preserve existing property relations. It is also significant to note that a re-distribution land reform was not present in the political manifesto of any party in Sri Lanka. In other words, land settlement policy could be used to avoid or postpone radical land reform.

In the late 1970s, diverting Mahaweli waters into the Dry Zone of Sri Lanka and the settlement of people became the major rural development activity of the Government. Under the first stage of this irrigation scheme which was the largest concerned in Sri Lanka about 6000 families were expected to be settled. This area consists

Michel De Vroey and N. Shanmuganathan in a study (1984) on "Peasant Resettlement in Sri Lanka".



of several villages within System H-1 under the Kalawewa. By 1976, the farmers were able to cultivate only a small part of the irrigable lands during the Yala season. About three quarter of the cultivated lands were subject to crop failures due to lack of water during the time of cultivation. This was because the water level of the Mahaweli river reached its lowest due to the severe drought gripping the entire country at the time. The farmers were discouraged because their hopes in a stable supply of water were shattered.

### Present problems of land settlement

After the new government came into power in 1977 land settlement in Sri Lanka was undertaken on a massive scale under the Accelerated Mahaweli Development Programme. During five decades of peasant re-settlement in the country only about 100,000 families had been settled whereas under the Accelerated Mahaweli Programme about 250,000 families were expected to be settled within the short span of six years. This government saw a large scale family farm settlement programme as an effective solution to the problems of increasing poverty, unemployment and landlessness in the rural sector. The settlement planners of the Mahaweli Scheme maintain that the new settlement policy has been evolved after detailed study and pilot project experiments. While it has been enriched by the past experiences in colonization, care has been taken to avoid the mistakes of the past. But the weaknesses of the Mahaweli settlement that are being discovered are not much different from the major weaknesses of the past settlements.

This was mainly due to the replication of an unaltered land settlement policy of providing small parcels of land to the poor peasant families. However, a dominant feature of the strategy of land settlement and rural intervention under the Mahaweli Scheme it seems has emerged which entails the establishment of an institutional structure aimed at organizing and closely supervising a system of small scale production units based on a new type of family farming. Some research studies have reported that this has frequently entailed the setting up of a settlement administration with large bureaucracies and a massive injection of foreign aid and technical assistance leading to the increasing encapsulation of family farms and to the erosion of independent decision making in the field of agricultural production. The government has set up a settlement authority to co-ordinate the system of services such as credit, fertilizer and marketing, and to control access to basic resources (eg. land and water). Based on the assumptions of these authorities the settlers cannot be allowed to produce for themselves. They have to produce a marketable surplus to cover the heavy investment in these areas by using modern technology and inputs and diversifying from paddy to cash crops. This could best be achieved according to settlement planners by a one hectare allotment which was theoretically considered as an economic unit for a family to work with family labour.

But, in reality this is not what is actually happening in the Mahaweli Settlement, according to many observations. In fact the size of allotment was subjected to heated debates in the past and even today the allocation of a small parcels of one hectare to a family has led to a serious problem among the young people who belong to the second generation in settlement areas. The second generation problem already exists throughout the settled Mahaweli areas. Unless new job opportunities are created soon the first generation settlers will be compelled to do

what settlers have done in the older settlement schemes. Maintaining their day to day subsistence living may be a rational decision but it might have adverse development implications due to increased emphasis on staple crop production for subsistence purposes, reduced sales, lower net income and less employment generation over the long term.

Land settlement is generally meant for the poorer segment of the rural population. However, their choice is not to remain poor; their efforts have to be substantially advanced by the government policies with regard to land. However, one of the weakness of settlement policy was that the economic viability of small allotments tended to be judged on the advanced urban based assumptions rather than the social adaptability and capability of poor peasants. Two leading experts on Third World settlement involved in evaluation and monitoring Mahaweli Settlement implications revealed that many of the assumptions on the small family farm in the Mahaweli Scheme were incorrect. The other argument is that the economic viability of a small farm does not depend very much on its size but rather on the improvement of adaptability and capability of poor farmers through well organized training, extension, community development and other input deliveries. However, in the new settlements the planned social change is increasingly directed by monthly wage earning urban based officials who are more exposed to urban values. They perform duties rather than effectively work with weaker groups. This often leads to an unequal access to the common services and reduces the capabilities of settlers. A recent expert study on the settlement problems in the Mahaweli Settlement described these conditions of new settlers as follows:

The major conclusion of our present assessment is that net incomes of the large majority of settlers households in even the oldest Mahaweli Settlement areas have not yet moved beyond the subsistence level. Indeed in

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Volume IV Nos B + D, Nov/Dec 1978 and Volume XI Nos 4 + 5, July/Aug 1985 of our Economic Review gives more detailed information on various aspects of the Accelerated Mahaweli Programme. Our concern with this issue is to provide an overview on the current problems of settlement.



a significant number of cases in both Systems 'II' and Zone 2 of System 'I' living standards actually appear to have dropped at the very time in the settlement process that they should be going up, if the settlement component is to catalyze development....

Less than 20 percent of the settlers in the project area have been able to complete the construction of their permanent dwellings. Many farmers defaulted on low interest government loans primarily due to crop failures in successive drought years, making them ineligible for future loans.

These observations indicate the possibilities for discontent with the peasant proprietor system which is emerging under the present land settlement policy. The situation is such that in many areas settlers do not have the ability, knowledge and capacity to own and improve their land. They lack good housing, good living conditions, self respect and a say on public questions. As a result of such factors the possibility of their getting organised as a group and mobilising opinion in their favour is limited among these poorer settlers. However, their problems are being taken into consideration and new attempts are being made to improve their conditions.

This kind of policy involved slight changes of the administrative system, without any alteration in the basic approach. This was a fairly consistent feature of the land settlement policy.

It has been argued that this policy of settlement management has involved only slight changes in the administrative system, without altering the basic approach of the existing policy. This basic approach has been maintained since the 1930's, with only slight modifications. De Vries and Shanonagarsen in their study (1984) have explained these trends of recent land settlement in the country as follows:

"In the light of those theoretical considerations, what lessons can be drawn from our empirical survey? Three features can be pointed out.

1. The study reveals an increase in the importance of commodity production for trade and of monetization, along with a relative decrease in importance both in domestic and in

collective goods (the narrowing of effects of the Welfare State).

2. It also confirms the idea that an independent producers system is unviable. Differences in performances among farmers leads to income discrepancies and to a split between well-performing farmers and those who are bankrupt or on the brink of bankruptcy.
3. However, despite this monetization and the failure to maintain the conditions for a stable independent producer system, no significant development of the wage relationship has emerged.

These two researchers make the following comment regarding the absence of development of a real wage relationship in this situation, "In agriculture phases of peak activity are followed by phases of waiting. This makes agriculture unfit for the utilization of regular wage labour, since during the peak periods the required amount of labour exceeds the normal length of labour time while between peaks it would be quite low. Therefore, the utilization of seasonal wage labour seems more adequate but this implies that such wage-labourers do not have the full status of wage-earners. Furthermore, the structure of circulation within which the agricultural production is integrated, makes the introduction of a full wage relationship unnecessary. Farmers who are dispersed, numerous and who control only a small amount of money, face a small number of big intermediaries. Market power usually leans strongly in favour of the latter. They have no interest in changing this structure and in introducing the wage relationship. The prevailing situation is more beneficial to them for two reasons. On the one hand, through circulation of profits, they can obtain the same or greater monetary surplus than they would get from an exploitation profit in a wage relationship. On the other hand, they do not have to bear the entrepreneurial risk which is entirely supported by the farmers.

The situation in the resettlements raises certain issues that are of relevance to the problematic of agrarian transition in an economy that has gone

through a very long process of commoditization under conditions of underdevelopment. Peasant resettlement has been going on in Sri Lanka for over fifty years. The state has been the main agent in the creation of resettlement schemes. With time the scale of state investment has also been growing. But when we look back at the whole experience it looks like an endless exercise in extending petty commodity production which has neither given way to large scale capitalist farming nor solved the problems of landlessness and rural poverty it set out to tackle.

This has brought about a physical limit to the extension of peasant resettlement. After the much publicised Mahaweli project, Sri Lanka will not be left with any major river basins or vast stretches of uncultivated but potentially arable land for future development. But landlessness and rural poverty will remain.

In answering the question of what went wrong, their interpretation is that: "It was the belief of the policy makers that the solution to rural poverty and landlessness was to resettle poor and landless peasants on lands developed by the State. But as Sri Lanka approaches the extensive margin of land for resettlement the problem remains as intractable as ever. The lesson is that resettlement by itself is no solution to landlessness. The easy explanation for the situation is population explosion, but that explanation could only further confound the misconception that the solution to the problem is land. Population growth within the given context would certainly compound the problem but cannot be the cause in any way.

The causes of rural poverty and landlessness are to be found in the basically untransformed structures that have perpetuated underdevelopment. The strategy of land colonization has failed as a solution to the problem of landlessness and rural poverty not through its two demerits alone. The primary cause of the problem lies in the inability of Sri Lanka's economy to generate a capitalist dynamic of industrial transformation. The strategy of land settlement is not only a pro-



duct but a victim of this incapacity which is the final result of the political and economic actions of the class/classes which wield power".

Contrary to what the above analysis advocates those responsible for planning and implementation of settlement policies have given greater emphasis to their original goal of regenerating a self-sustained and independent family farm economy through the equitable distribution of land, water and other resources. The success of this programme is being proved through statistics on the progress of land development and settlement. According to this data more and more people are becoming proprietors of land and overall production is on the increase. Social unrest in urban areas and other overpopulated districts had also been reduced by settling more people on the land. Therefore to this extent land settlement has had an impact on Sri Lanka's society and economy. However, contrary to the popular notion of egalitarianism which was expected from the policy measures and legal protection introduced over the last five decades, growing inequalities leading to social differentiation has become more apparent in recent settlements. This aspect too is reported on in the study by Michal De Veroy and N. Shanmuganathan as follows:

"The legalistic approach ignores certain basic laws that operate due to inequalities in physical, financial and intellectual resources within a community.

In this instance the concrete manifestation of those inequalities, even when land is assumed to be equal, are found in the individual economic strength, access to water and other inputs and institutional sources of credit, marketing and technical know-how among the settlers. The process is more clearly present in the colonization schemes in the entire country. The upper levels of those communities include members of non-settler origin who have usurped land by illegal means. Thus the law has become a dead letter and statistics of size and ownership based on official documents are bound to be misleading".

Another viewpoint specific to settlers in the Mahaweli project was

put out by Thomas Krimmel in his study on 'Social Differentiation and Peasant Colonization', where he quotes Kapila Wimaladhama, the former Additional General Manager of the M.D.B. (Settlements and Operations), who portraying the image of the future Mahaweli society wrote:

"with the progress of time, Mahaweli settlements are expected to advance from traditional to modern society, from subsistence to commercial farming, from bureaucratic to participatory management. The Mahaweli settlement policy aims at an elimination of economic disparities through an egalitarian land tenure and an uniform ownership pattern. Mahaweli settlers are aided by the state to become affluent farmers relative to their fellow-men elsewhere in the island".

These statements are an expression of the expectations deriving from basic theories of the dominating ideas on settlement policy and settlement planning current at the time. Earlier in this discussion attention was drawn to how inequalities in peasant 'colonization' schemes tend to emerge as a consequence of the current design of such schemes. Typically, these schemes are based on the principles of modern farming relying on new technology, an 80 percent probability of success in irrigated agriculture, and on small peasant freeholdings. The former two factors are apparently not possible because of the high costs involved in implementing such projects. The third factor corresponds to the political commitment of most Third World governments to encourage small producers to become modern agricultural entrepreneurs.

A fact not often taken into consideration is that a combination of factors such as those applied to these peasant colonization schemes lacks economic and social viability. Agricultural production in these schemes, when the new technology can be supplemented by irrigation water, has in fact become highly profitable. However, this applies only to the few who can afford

to participate in this kind of agricultural production. The majority of the small producers cannot bear the risk involved in such a high input/high-yielding technology that has to be employed in order to comply with the requirements of irrigated agriculture. The risk of production is further emphasized by the rate of success calculated for the irrigation system. It is evident that a theoretical 80 percent success does not necessarily secure large profits for every settler in four out of five years. Rather, it means that, on the whole, the total output in the project area will prove the scheme to be a success. As can be seen from the performances at the individual farm level, this pattern varies considerably from one settler to another. The disaggregated analysis highlighted that there are always a few who manage to reap profits, no matter whether the whole area suffers a drought or produces a bumper harvest. Simultaneously, there are also those who always lose or at least profit much less—not enough to keep on sustaining themselves. This is because they are either unable to economize on costs of production or because they are unable to achieve profitable yields. Of course, this latter aspect is considerably dependent on the design of the irrigation system and on factors such as the quality of the soil. But success is also influenced by power, influence, knowledge and material resources. As a result of the highly uneven resource endowments among settlers differentiation continues in spite of a formal equalization. The individual allotments, originally distributed evenly among the settlers, rapidly change hands. A few are able to accumulate land and wealth, whereas in the long run, the majority of the poor allottees are condemned to lease their plots—with only few exceptions. Employment prospects for those however who, in the course of this process, are marginalised do not look too rosy; as they cannot be easily integrated in urban-industrial society.



It seems unlikely that a livelihood can be found from casual agricultural wage labour, either since there could be considerable underemployment prevailing throughout the year, with only a few concentrated periods of peak labour demand during field preparation and harvest.

Whether it is the tenorial conditions, or choice of suitable settlers or irrigation and farm management practices there are laws and regulations governing each of these for particular land settlement schemes. Apart from the structural constraints these various features face there is also often the lack of political will which prevents the legal provisions from being fully applied. For instance, the "minor" deviations in the pattern of holdings of equal size in a major settlement project were looked on as a kind of self-adjusting mechanism or a reward for the pains of those who could acquire a little more. A key official of this project is reported to have responded thus to a question on this issue:

"Of course, we are aware that some people are cultivating more than their 2.5 acre plot. There are always some who are more alert, who take the initiative and who work harder than others. Why not? Let them accumulate".

But as observed in the earlier analysis on this process of accumulation, permitting this type of social differentiation encourages polarisation of a few better off farmers and the majority of poorer ones. It finally amounts to the failure of the peasant colonization scheme in so far as it does not solve the problems for which these schemes were originally intended, namely, to improve the lot of the landless and rural poor. As maintained at the outset of this Report land settlement and land reform measures were intended to improve the lot of the rural peasantry.

To quote from the publication "Development and Change", David Dungan raises the question why such schemes must continue to be promoted despite limited results. He states: "Sri Lanka is a particularly useful illustration of the kinds of contradictions that lie at the root of government sponsored land settlement schemes. As one observer aptly remarked of the Sri Lankan experience: settlement schemes which aim at equal peasant holdings have seen the twin tendencies of fragmentation of land and growth of hidden landlordism, both being the product of an individualised approach in an unequal economic climate".

"Even so, there seems little to be gained by illustrating the fact that there is differentiation. Because settlers rarely have quite the same assets or the same experience, because of differences in the location of their farms and soil fertility and because of the goal of commercialized farming embraced by officials, it would be more surprising, if differentiation did not occur. Indeed, it may very well be an integral part of the conventional 'model'".

"The list of woes that commonly afflict these settlement schemes can be extended further to the much-quoted cases of 'faulty selection', problems of encroachment, the frustration of tailenders, the misuse of funds, and a whole series of other 'pitfalls' as well. A far more relevant point, however, is that more often than not there would seem to be a number of basic contextual factors which explain why so many of these smaller elements 'go wrong'. Clearly, technical errors and faulty judgements have played a role, but far more important in the majority of cases has been the nature of the political support....."

"Settlement policy in Sri Lanka has to be seen in relation to the country's

structure, the nature of the state and the pattern of capital accumulation within which it was promoted. Control of land has always been a source of power and status in Sri Lanka society (especially in rural areas), and the acquisition of land has often proved to be vital in consolidating the new positions achieved through upward mobility. Granting them land has been a way of rewarding loyal supporters, and the control of land in itself has been very important in securing and in maintaining political power". . . ."

The socio-economic problems prevalent in present land settlement projects are far more complicated than they appear to be. The changes and developments occurring in these settlements cannot be understood or explained through study of only a particular set of features. It needs to be accepted that a central feature of the current settlement strategy of heavy capital investment and overhead costs incurred by the state, is that the government has to achieve a satisfactory economic return. Thus, even though the goals of the settlement programme are described in terms of equity and participation ideals, the primary motivation must remain that of securing a sufficiently high level of production for the market to offset the high infrastructure and administrative costs and to meet conditions imposed by the external lending agencies. In order to achieve this, it is necessary to develop various organisational measures designed to stimulate the "commodification" of production. This process entails the increasing dependence of the settler and his family on external agents, including both government and servicing institutions that handle such questions as agricultural extension, water management and various technical inputs, as well as private interests involved in trading and money lending. The functioning and survival of settler households should be understood within this framework.

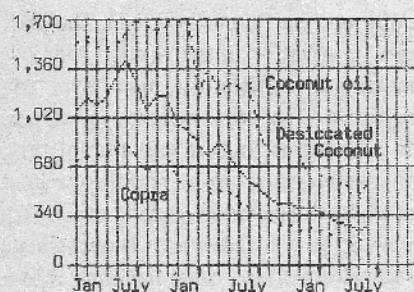


## COCONUT: Prices, Earnings Decline Production, Exports Increase

### Market Prices

The prices of coconut products in the international market continued their decline over the first six months of 1986. (The decline is seen clearly in diagram 1). Average prices of copra and coconut oil during this period were US\$ 193 and 291 per metric ton respectively, a decline of 60 percent comparative to prices in the same period in 1985. The price of Desiccated Coconut declined by 55 percent and its average price was US\$ 559 per metric ton. In June 1986, however, prices of all three kernal products indicated a slight increase compared with May, with copra prices going up from US\$ 153 to US\$ 65; and coconut oil prices going up from US\$ 233 to US\$ 254. The price of Desiccated Coconut increased from US\$ 450 to US\$ 576.

INTERNATIONAL MARKET PRICES  
(PRICE US\$ PER MT.)



In the local market, the prices of coconut products indicated similar trends. The average price of copra in the first six months of 1985 was Rs 12.40 per kg; while in 1986 in the same period, it was Rs 4.89. Coconut oil prices averaged Rs 19.12 in the first six months of 1985, but in the same period of 1986 it came down to Rs 7.48. Both products' prices declined by 60 percent approximately. The declining trend in local market prices is also illustrated in figure 2. Prices

have kept declining due to the heavy stocks of vegetable oils released on the vegetable market. This trend, however, was expected to be reversed in the latter part of the year following the Chernobyl Nuclear incident in Russia, which has threatened supplies of sun flower oil and other vegetable oils.

COLOMBO MARKET PRICES  
(PRICE PER KG.)

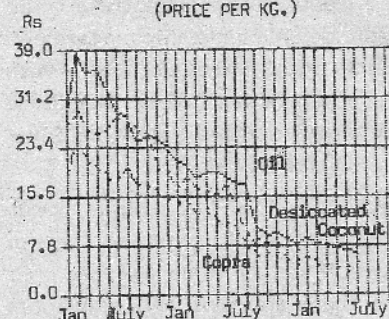


TABLE 1  
INTERNATIONAL MARKET PRICES (US\$ per M.T)

Jan.-	Copra	% Decrease	Coconut	% Decrease	Desiccated Coconut	% Decrease
1984	774.81		1207.83		1547.13	
1985	481.33	38	742.50	39	1238.00	20
1986	193.00	60	290.67	61	558.48	50

Coconut Development Authority

TABLE 2  
COLOMBO MARKET PRICES (Rs per Kg)

Jan.- June	Copra	% Decrease	Coconut	% Decrease	Desiccated Coconut	% Decrease
1984	20.31		33.21		27.19	
1985	12.40	39	19.12	42	16.40	40
1986	4.89	61	7.48	61	8.00	51

Coconut Development Authority

TABLE 3  
EXPORTS

Jan.- June	Coconut oil	% Increase	Desiccated Coconut	% Increase	Copra	% Increase
1984	40		5,599		461	
1985	19,554		23,748	325	1,480	221
1986	56,157	187	25,566	8	3,693	149

Coconut Development Authority

TABLE 4  
PRODUCTION

Jan.- June	Fresh nuts (Mn)	% Increase	Coconut Oil (MT)	% Increase	Desiccated Coconut(MT)	% Increase
1984	874		14,299		5,821	
1985	1,296	48	49,957	249	24,074	314
1986	1,587	22	82,831	66	27,050	12

Coconut Development Authority

TABLE 5  
EXPORTS OF KERNAL PRODUCTS

Jan.-June	Total Exports (in M.nut equivalent)	Total FOB value (Rs Mn)	Avg. F.O.B.Value (Rs)
1984	40.93	217.57	5.32
1985	328.84	1,202.74	3.66
1986	647.17	950.31	1.47

Source: Coconut Development Authority



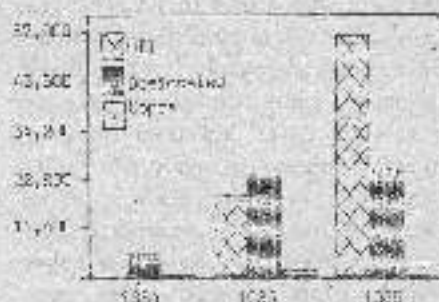
During the first half of 1986 better coconut harvests were obtained due to the favourable weather conditions. A 22 percent increase in coconut production was recorded during the first half of this year compared with the first half of 1985. Production of coconut oil increased by 66 percent and Desiccated Coconut by 12 percent.

## Exports

The volume of kernal products (copra, coconut, desiccated coconut, fresh nuts and seed nuts) exports increased by 97 percent in 1986 compared to the same period in 1985. In the 1986 period the volume of kernal products exported went up to 647 million nuts equivalent, from 329 in million nuts equivalent in the first half of 1985. But in value terms movement of export earnings indicated a negative trend. In the 1985 period foreign earnings from kernal products were Rs. 1,232.7 million, while in Jan. June 1986 it came down to Rs 950.3 million, a decline of 20 percent, the main contributory factor being the decline in the average F.O.B. value per nut equivalent. The 1986 period F.O.B. price per nut equivalent was Rs 1.47 compared with Rs 3.66 in the 1985 period.

The volume of Coconut Oil exports increased sharply in the first six months of 1986, while that of Desiccated Coconut and Copra increased marginally. (See figure 3).

EXPORTS OF COCONUT PRODUCTS  
(VOLUME IN MT)



## International Commodity Agreements

The fifth round of negotiations between cocoa producing and consuming countries in Geneva finally concluded successfully after nearly two years of negotiations. The new International Cocoa Agreement, 1986, is due to enter into force from October this year, and will remain in force for 3 years with possibilities of further extensions. After the accord UNCTAD Secretary General Einarth Dadré described the Agreement with optimism as the first of a new generation of ICA's (International Commodity Agreements), and he concluded "the adoption today of this new Cocoa Agreement with full economic provisions will undoubtedly give a further impetus to the efforts of producers and consumers of other commodities to work together to find realistic and mutually beneficial solutions to the problems besetting the commodity sector".

Sceptics were of the view, however, that there was mounting evidence that the era of the North South co-operation on commodity pricing may be drawing to a close. Rubber trading nations had failed twice earlier to negotiate a new accord to stabilise the market and a third round of talks was also collapsing with producers and consumers unable to agree on the currency to be used in a new price level trigger support mechanism and also on the procedure for revising its level.

Talks on a new Sugar pact also remained stalled, with an inconclusive meeting held in London in May 1986 between producers and consumers. The International Tin Agreement was one pact that collapsed and is due to be wound up next year. Meanwhile, the chances of a Coffee accord were also uncertain with no final agreement regarding quota shares for producers.

The UNCTAD Secretary General however, hailed the new Cocoa agree-

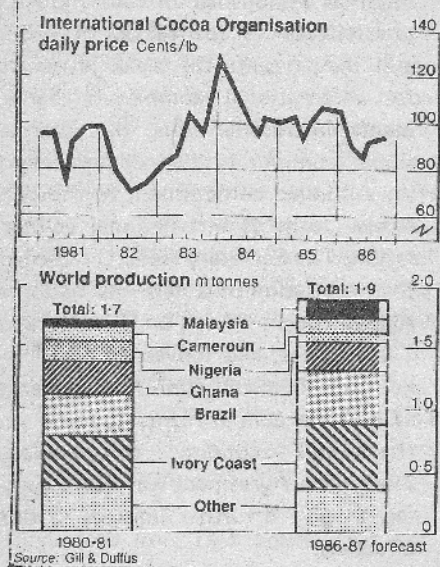
ment as "an important turning point in the history of producer-consumer co-operation within the framework of international commodity agreements".

He stated on this occasion that co-operation between producers and consumers was one of the main pillars of the Integrated Programme for Commodities established in resolution 93 at UNCTAD IV (in Nairobi in 1988) and that, despite the bleak prospects for international commodity agreements in recent years, the international community had demonstrated its continued commitment to this particular form of international co-operation. The Secretary General regarded the negotiation of a new International Agreement on Wheat; on Olive Oil and Table Olives; and moves for new Nickel and Tropical Timber agreements as positive commitments towards international economic co-operation. The Cocoa Agreement was now expected to give a further impetus in this direction.

The negotiations for the new cocoa accord provides a typical example of the apprehension of commodity producers who are at the mercy of international cartels that wield a major influence over the price mechanism of commodities. At the negotiating sessions on Cocoa in March the Ivory Coast's Minister of Agriculture charged that prices were effectively set in the commodity exchanges of New York, Chicago, London and Paris by anonymous speculators not subject to international control, and refused to join the new agreement on the grounds that it could not guarantee a fair price for producers, taking into account increased costs of production. It was only after Ivory Coast (the world's largest producer) was persuaded to return to the negotiating table that producers and consumers agreed on key issues of price structure, price levels, and price adjustment mechanisms.



**THE ECONOMIST COMMODITY PRICE INDEX** First estimates of the 1986-87 world cocoa crop suggest it will be little changed from last year (around 1.9m tonnes), resulting in a surplus for the third year running. Output in Brazil will be 20% higher, at 440,000 tonnes, and Malaysia will also have a record crop of 150,000 tonnes, double the output five years ago. However, the Ivory Coast's crop will fall by 55,000 tonnes because of dry weather, and Nigerian cocoa production may be only 80,000 tonnes, the lowest for nearly 40 years.



As in the existing Cocoa Agreement, buffer stocking constitutes the main mechanism for price stabilization. The overall size of the buffer stock remains unchanged at 250,000 tonnes, with the possibility of an additional 100,000 tonnes. The Minister of Agriculture of Ivory Coast - (which is not a member of the present Agreement) gave his country's explicit endorsement, of the new Agreement. He termed it a "dynamic compromise" and said that, with the increased resources now available to it, its potential effectiveness for stabilizing prices had been greatly enhanced. UNCTAD's Deputy Secretary General, Alistair McIntyre, however, had a far more pessimistic prognosis on possibilities of better prices for primary commodities.

### Malaysia sees grim future for commodity producers

The cocoa Agreement was obvious-

ly timely as this was one of the few primary commodities that has escaped the falling price trend over the past few years. But even here a firm of commodity analysts in London forecast that prices were likely to decline before long as the high price of cocoa butter made it a prime target for biochemists searching for a synthetic substitute. There was also the possibility that suppliers would soon overstep demand as new production areas were harvested. More gloomy, however, were the prospects for certain other commodities. A 'HINDU' correspondent, S. Ramachandran, who was recently in Kuala Lumpur reported that low prices for commodities like rubber, palm oil and metals would persist because of a basic change in the link between the economies of commodity producing countries and the richer industrial nations, according to economists and political circles in Kuala Lumpur.

"Whenever prices dipped to reflect falling demand during a recession over the past 40 years, commodity producers could look forward to an eventual price rise as the industrial world returned to better growth rates". But Alistair McIntyre, Deputy Secretary General of the United Nations Conference on Trade and Development (UNCTAD - which promotes better trade conditions for developing countries) has warned that "the trend will not continue".

"The traditional link between cyclical fluctuations in economic activity and demand for raw materials has been broken", he said in a letter to senior bankers of raw material producing countries.

The price fall has been dramatic in the case of palm oil, the staple Malaysian export which had dropped steeply to MS 440 from MS 1,205 a tonne at the beginning of 1985.

Among Malaysia's other exports, tin had lost half its value in the same period. Rubber had been ruling weak around 180 sen (Malaysian currency) a kg as compared with 330 sen in early 1980.

Malaysian Prime Minister Mohamed Mahathir has said that "a constellation of forces have driven down the prices of virtually all primary commodities produced and exported not only by Malaysia but by the whole world. "He said the recent total collapse of all commodities was a new phenomenon. There seemed little doubt that for some commodities the end was near. Commodity producing countries were expected to be put on the "chopping block".

Economists blame rapid technological change for the lower prices. Better irrigation, seeds and fertilizers had all increased production to the point where today's yield of rubber is ten times that of the original trees found in the Amazon forests.

Technological progress had produced synthetic substitutes for natural materials, according to M. Sakamoto, Chief Economist at Japan's Institute for International Trade. He said copper was being rapidly replaced by cheaper glass fibres in the communications industry. Glass, plastics and aluminium were all replacing tin in food packaging.

To compound the problems, industrial countries, notably the U.S. and Europe, had become large food exporters because agricultural subsidies had led to greater production. As a result, U.S. rice exports now threaten Thailand's lucrative rice trade in Asia. E.E.C. sugar exports had the same depressing effects on the developing country sugar exporters.

UNCTAD's Deputy General Secretary was of the view that developing countries should diversify export products or face a grim future. "Far reaching changes are occurring in patterns of demand and supply for most major primary commodities, which are bound to affect profoundly development prospects in many developing countries", he said. Such countries access to markets in developed countries for their new products but they faced a strong protectionist sentiment.



## PLANNING PERSPECTIVES FOR SRI LANKA

Sumath Wickramasinghe

*Chartered Architect and Town Planner*

The city as it exists today is a consequence of certain historical processes that include rapid population growth, industrialisation and migration from rural areas to further employment opportunities and better living conditions. This trend commenced at the turn of the century. As recently as 1971 urban population constituted about 16 percent of the world's population. In 1980 it rose to 41.3 percent. It is envisaged that at the end of the century a phenomenal 50 percent will live in cities. Between the years 1980 and 2000, the third world will approximately double their population from 972 million to 2116 million, whereas in the case of the developed world the increase will be from 834 million to 1093 million which represents an increase of 31.1 percent.

In accordance with the 1981 Census the urban population of Sri Lanka is estimated to be around 22 percent of the total population. In this connection, the urban population is confined to the Municipal and Urban Council areas only. Considering the situation in Colombo, the 1981 Census indicates a population of 602,000. However, the Colombo urban area could be considered to have extended to a radius of approximately 10 miles from the City Centre to include Town Council areas such as, Maharagama, Battaramulla, Thalawathugoda, Hendala and Wattala; thereby effectively increasing the population to approximately 1.4 million. Similar increases in the urban population could be applicable to other cities such as Kandy, Galle, Matara, Negombo and other urban centres. On this basis we could estimate the present urban population of the country to be around 30 percent of the total (i.e. 4.5 million).

The main factors that could be attributed to the increase in the population in urban areas are the location of government offices, major commercial establishments and the opportunities for employment, schooling, hospital and other service facilities.

Although we notice a considerable increase in the urban population the facilities available in the urban areas in regard to schools and hospitals have not shown a significant improvement. Moreover, the existing services are being allowed to deteriorate due to reasons such as lack of finances and a comprehensive plan for development.

In trying to meet these demands the extent of prime land suitable for commercial development and land suitable for parks and open spaces are being reduced due to construction of buildings. There is an alarming tendency for house builders in the city to utilise 5-7 perches of land at exorbitant rates and locate them back to back and side to side purely to be within easy access of the leading schools, hospitals, government offices and their services; as result of which the land values in Colombo and its environs have increased twenty fold in the last ten years.

The direct consequence of the desire to visit the cities from the neighbouring areas is the problem of traffic congestion. There is no doubt that the existing road network in the cities are inadequate to accommodate the present flow of traffic from the suburbs. The improvements to these facilities that are being carried out at considerable expense will not be adequate to meet demand if the present growth of traffic and increase in urban population is to continue. This situation will be more dominant in the case of Co-

lombo where the catchment area will extend to a radius of approximately 20 miles by the turn of the century, at which stage the improvements required for strengthening the infrastructure services would be of a formidable scale.

The Victoria Project has stimulated the growth of the Digana Town Centre and the resultant demands on facilities existing in Kandy are subject to increasing strain.

Negombo has had a similar impact as a result of having to cater to the needs of the nearby Free Trade Zone. Thus the over-urbanised cities constitute serious problems and require radical thinking when considering planning perspectives for the 21st Century.

It is noted that similar problems have existed and continue to exist in several major cities of the world to a scale much larger than what we experience in Sri Lanka.

#### Shanghai

Prior to the planning element being introduced, Shanghai was growing at an abnormally fast pace, with the influx of impoverished peasants from the countryside, resulting in the population increase from one million in 1930 to 5 million in 1949, an increase that imposed a severe strain on the existing facilities.

Subsequent to order being restored with the liberation of the Country in 1949, an appreciable increase in the standard of living took place as a result of the improvement to facilities and the levelling off of population increase through various means, one being family planning. Orderly development made it possible for the industrial production in 1979 to increase 23 times over the level that prevailed in 1949. A noticeable increase in agricultural production was also recorded. This increase in production went hand in hand with the provision of welfare facilities such as public health, medical care, social security, and the care of the sick, old and the disabled. This resulted in the dramatic increase in life expectancy from 43.5 years in 1951 to 73 years in 1979.



## Hanoi

As in other Asian cities the population increase in Hanoi was very marked during a period of instability. Since conditions were stabilised, Hanoi has managed to restrict population increase to 1.9% per year (inner city rate is lower) through family planning means.

## Moscow

The orderly development of one of the biggest cities in the world (Population in 1981 - 8,099,000) had been made possible by means of a Master Plan. The vast problems that are seen elsewhere in similar agglomerations had been avoided by the adoption and efficient implementation of the Master Plan on a long term basis. The provision of scope for cultural appreciation and leisure activities is a key element of the Master Plan.

## Cairo

Of the Egyptian population of 42 million in 1980, as much as 21 percent lives in the Capital City of Cairo. Devices such as family planning and disincentives to migration and the provision of facilities in the surrounding areas are being adopted to reverse this trend.

## Rome

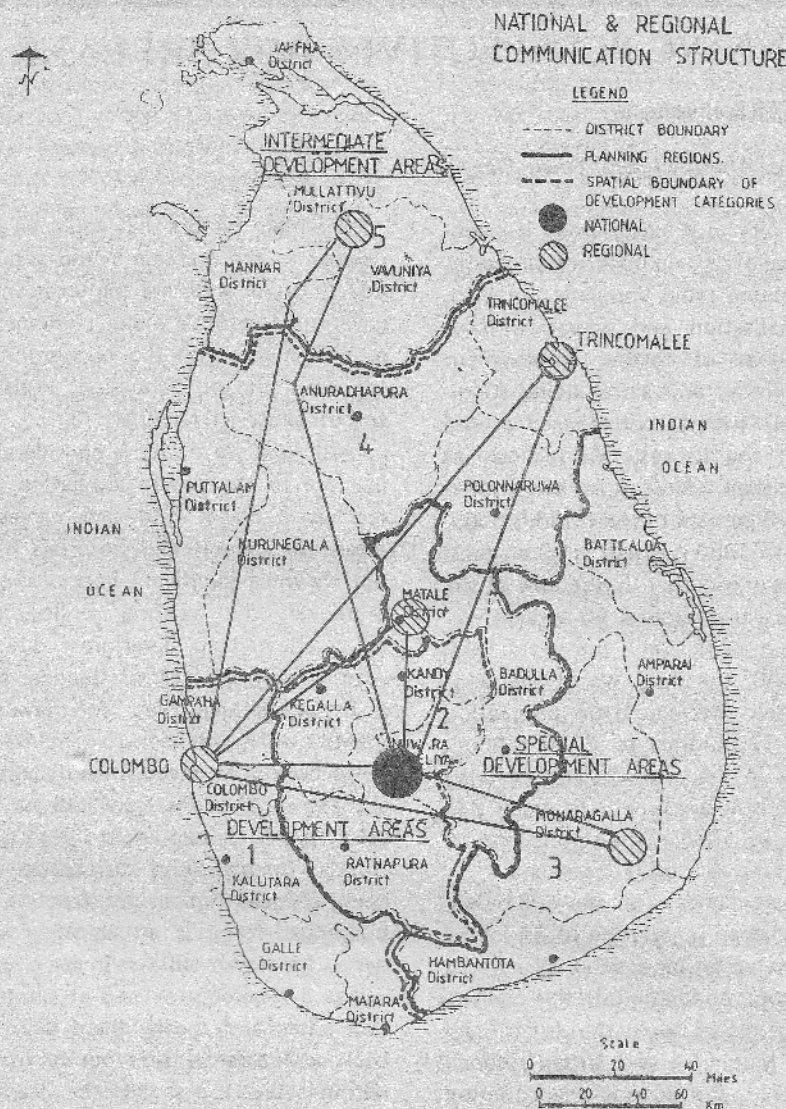
Rome's population in 1982 was 3 million. Its growth had been mainly due to the absence of controlling legislation thereby creating an 'illegal' Rome alongside a 'legal' Rome. The remedy now sought is to build satellite cities and to prevent the growth that was like an oil spill in concentric circles.

It could be seen from these instances of abnormal growth that it is the planning element together with stable political conditions that had been in a position to check and redress the ugly features of over-urbanisation.

Having discussed the need for change, I shall in the next part of this paper examine what the patterns of change should be.

## Patterns of Change

The patterns of development since Sri Lanka gained independence, upto



1977 could be categorised under: (1) change due to ad-hoc planning and development; and (2) incremental. There has not been a comprehensive or systematic approach to planning since the priorities had varied with successive Governments. Subsequent to 1977 the pattern could be classified under the third category—Leal Forging, with development being more dynamic and result oriented.

The Mahaweli Development Scheme which was originally programmed for a thirty year period was eventually scheduled to be completed within a period of 6 years. In the field

of urban development, almost three million sq.ft. of office space has been built. In the Hotel Industry 3,000 additional rooms have been provided. The target of 100,000 houses has been achieved and the million houses programme is now in progress. Similar progress has been achieved in exports too.

In the meantime there has been infrastructure improvement in communications with the introduction of subscriber trunk dialling, international direct dialling, telex, facsimile, computers and colour TV. These developments have been accepted by the peo-



ple and have tended to change their outlook within a very short period. The level of unemployment in the country has also been reduced significantly from 22 percent in 1977 to 12 percent in 1985. A large measure of technological transfer was also possible. Future development should therefore take into consideration the continuity of this pattern of change, since these changes were made possible with the financial assistance received in the form of Aid, Grants and Special Loans from foreign countries and lending institutions. It should be realised that assistance of this kind cannot be expected to continue ad infinitum.

It is therefore necessary to alternate sources of financing in order that the development activity may continue at the same or accelerated pace so as to achieve an appreciable increase in the per capita income from a figure between US\$ 250 and US\$ 300 to US\$ 10,000 within the next four decades. In this connection a parallel could be drawn from the South Korean experience wherein the per capita income rose from under US\$ 200 to US\$ 5,000 within a period of 18 years.

If one were to look into the shortcomings that exist today, the following could be highlighted: (A) Over-urbanisation in and around Colombo and its environs as previously described, (B) Transportation, (C) Communications (D) Educational facilities (E) Health Care facilities, (F) Employment (G) Housing and Sanitation (H) Social activities.

The regional development function by itself could bring about a substantial improvement in the above-mentioned areas. For this purpose the country should be divided into five regions as indicated in Map No. 1. The policy in this regard should include: a) Commitment to a gradual decentralisation of public administration/privatisation b) Evolution of a degree of decision making power to regional administrations initially in the fields of housing, education, health, employment and transport systems.

The planning should also consider

the technical and financial feasibility of regionalisation of certain state utilities such as, Telecommunications, Electricity and Water Supply.

One source of these functions could be by diverting funds that would otherwise be utilised for improvements to already urbanised areas. This should be supplemented by other means of raising funds.

One of the most important features of the system of regional planning should be the setting up of a Regional Development and Planning Authority for each administrative region. The main tasks of such an Authority should include the preparation of a Master Plan taking into consideration the available resources of the region and the monitoring of the implementation of these plans to stimulate the social and economic development of the region.

The composition of the Regional Development Authority should be multidisciplinary by nature. The Chairman of the Authority should be a Minister overlooking the region, who will co-ordinate action between the regions and the central government. The Authority has to be autonomous with powers to formulate policies and implementation procedures in respect of each of these regions. The objectives of the Regional Development Authority should be: a) To encourage and foster the economic development of the region, b) Widen and strengthen the base of the economy of the region, c) Encourage and foster the establishment and development of Agriculture, Industry, Commerce, Education, Housing, Health care etc., d) Administer affairs of the region through co-ordinated implementation units for: 1. Human settlements 2. Education and Health care 3) Highways and Transportation 4) Agricultural and Industrial development, 5) Social and Cultural development, 6) Explore and exploit untapped mineral and industrial resources of the region including research and development functions. These functions are to be similar to the functions of the G.C.E.C.

## 21st Century Perspective

I would like to commence by quoting from Alvin Toffler's "The Third Wave (1980)"

*"A new civilization is emerging in our lives, bringing with it new family styles changed ways of working, loving and living, a new economy, new political conflicts beyond all these and altered consciousness. Humanity faces a quantum leap forward. It faces the deepest social upheaval and creative restructuring of all times." It is now necessary to devise ways and means of accelerating the implementation process to meet the demands of the 21st Century. Technology should be the basis for the generation of income, knowledge and providing for the overall well-being of the people. The technology so relevant is now broadly called Information Technology. This involves the gradual introduction of micro electronic devices which are daily becoming less expensive and thereby affordable to many in Sri Lanka. These devices include satellite communications equipment, TV, computers, robotics, facsimile, data transmission etc., They will accelerate the pace of development with a view to rapidly improving the standards of living of the people.*

One will not imagine a person in any region in Sri Lanka in the 21st century not having the use of Telephones or TV or even a Computer for his productive use. Our challenge is to find the resources to make these available initially at least at the community level if individual facilities cannot be provided at the commencement.

I would now indicate how Information Technology can assist in the integrated planning and development process which will permit a comprehensive development of Sri Lanka.

In planning for the future, integrated development efforts would involve the initiation of a communication and information system that would co-ordinate between the Rural, Regional and National needs. Rural Development has hitherto suffered as a result



of the absence of reliable communication thereby isolating itself from the field of information. Besides skills acquisition and the provision of basic and continuing education, health services and other social services too have been neglected as a result.

The advantages in these innovations is their low cost reduced power requirements and the use of simply constructed earth stations with ability to reach remote locations in undeveloped areas and difficult terrain with the minimum of infrastructure facilities. The Information Technology and their applications have the capacity to evaluate the implications of changes in supply, demand, production, consumption, poverty levels, affluence etc., and has access to the knowledge that identifies the best possible means for the development of policies, programmes and measures in this respect. In order to reap the maximum benefit from the Information Technology at the grass roots level, it is necessary to have links with the national and regional levels.

Information Technology systems of increasing capacities from the village to the National Centre that form the hierarchical order will then be the medium of communication and information to the masses.

At a village level, these installations shall initially be accessible on a collective basis (Community Command Base) and gradually extend to individuals (Home Command Base). With the general improvement in living standards the home will undergo a vast change with increased use of appliances.

With further advancements the same information technology will make it possible for individuals to operate from their home bases and have access to the Global Network enabling them to purchase products, manage financial affairs, communicate with business concerns, have personal contacts and learn and work from home.

The physical impact will then be flexible place location, independent working, with the home as the supreme

command base providing housing, working, consuming for the individual and thereby creating a new economic sector.

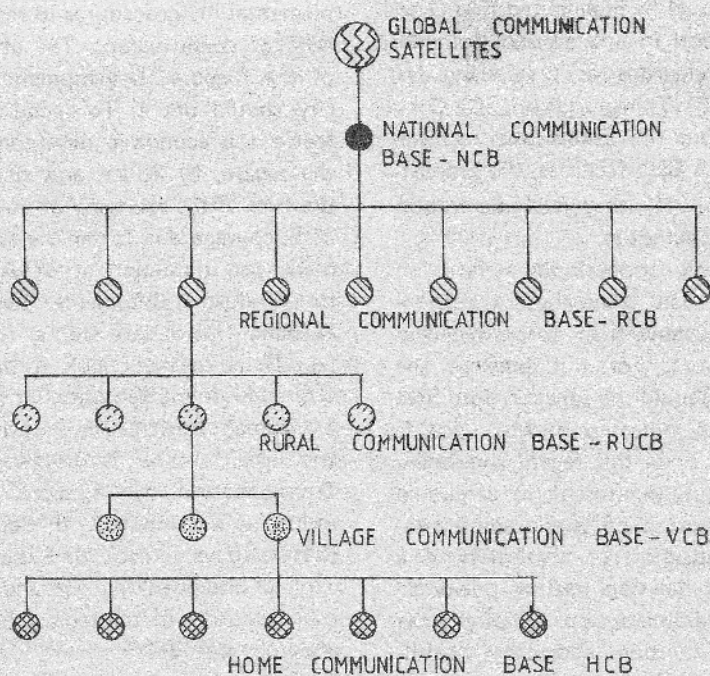
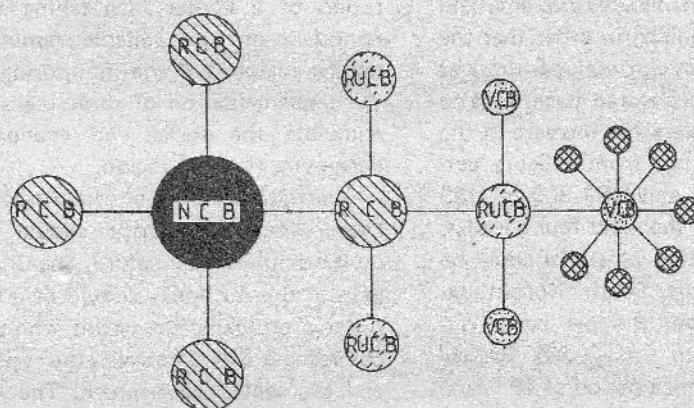
The first industrial revolution resulted in migration to urban areas. The 21st Century will reverse this trend with the de-urbanisation becoming inevitable. Further impetus in this direction will emanate from a change in the corporate structure and the need for location diminishing with communications becoming almost obsolete as distance will then no longer be a hindrance.

In this emerging pattern, the 21st

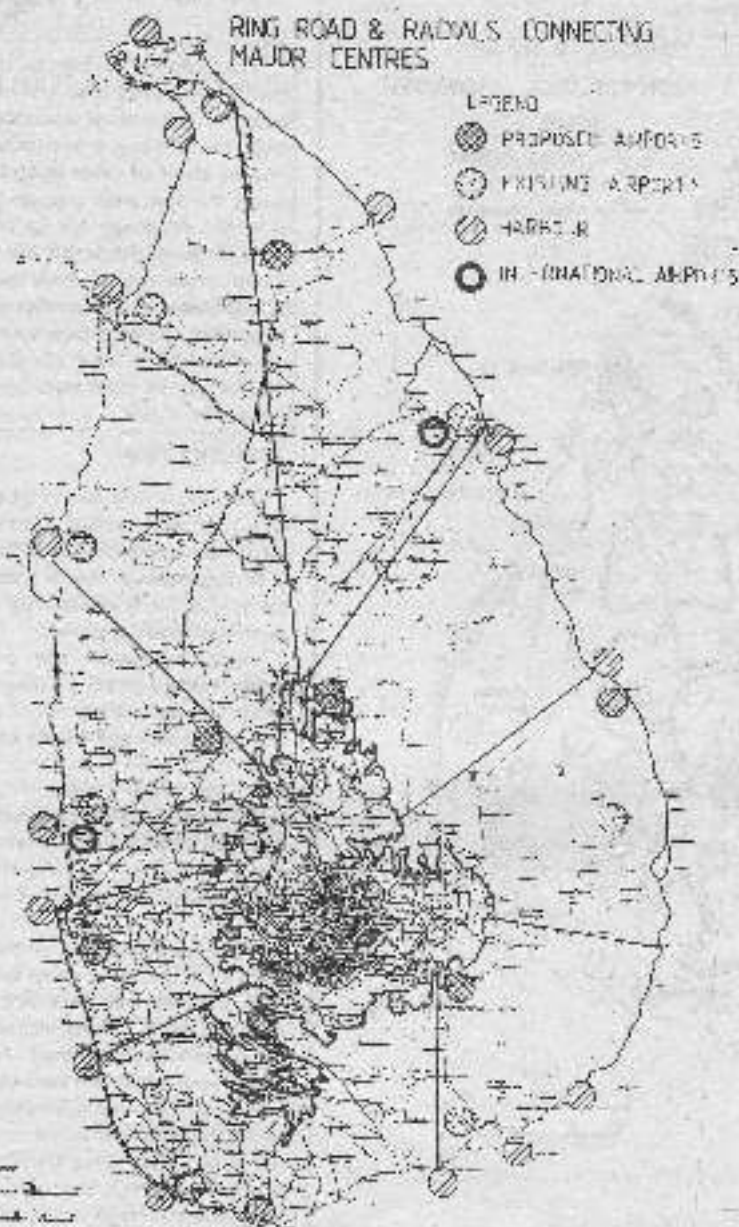
Century will witness a radical change in the structure of National, Regional and Rural settlement irrespective of locational or proximity determinants and the resultant settlements pattern would be clusters of predominantly electronic villages in a nuclear development order of built form as shown in Plate 1.

### Recommendations

Having looked into the reasons as to why a change is necessary and in what direction we should change, I would now set out some recommendations of particular activities to be undertaken to meet the demands of the 21st Century.







1. In planning the future road network system, it is desirable to have rapid transit motorways linking the major cities. However, it would not be economically feasible to provide links only between one or two cities in implementing such a programme. I would therefore propose a Ring Road at about 1,000 MSL elevation which would connect locations such as: Eboliyagoda, Kuruwita, Uggakalthota, Weelawaya, Bibbia, Mahiyangana, Pubbenawela, Nalanda and Mawatagana.

1.1 Radial roads emanating from this Ring Road could be provided to connect other cities not covered

by the Ring Road in a structure that is similar to a "COBWEB". Refer Map No. 2.

1.2 Colombo by-pass from North and East to divert traffic to the South to be carried out as early as possible. Similar approach to be adopted in other major cities such as Kandy, Kurunegala, Galle, Matara.

1.3 Construction of fly-overs or overhead bridges for the road network at Railway crossings.

## 2. Rail Net Work

Whilst laying emphasis on the development of the road network,

it would be necessary to supplement this with an efficient rail and air transport system.

### 2.1 Rail Network

Development of the rail network should include the electrification of the system within the Colombo Region.

2.2 Introduction of underground railway network within the city which would be a surface railway system in the suburbs. The underground network system should be ideally located beneath the major roads, for example, Galle Road, Highlevel Road, Butler's Road, Reclamation Road etc.

2.3 To relocate the existing coastal railway lines from Colombo to Matara by moving it inland by approximately 5 miles from the coastal line.

## 3. Air Strips

The location of air strips should be outside the Ring Road at points close to Pelmadulla, Wellawaya and Nalanda. In addition, air strips could be located at Welluwa, Kurunegala, and Mullaitivu. These would serve to supplement the existing domestic air strips at Weerawila, Amparai, Batticaloa, Chinabay, Pallali, Mannar, Puttalam, Negombo, Ratmalana and Koggala. The pressure now felt at the International Airport at Katunayake could be relieved by the location of a second International Airport in Trincomalee. See Map No. 2.

## 4. Harbours

Harbours for coastal transportation should be provided at Arugam Bay, Batticaloa, Trincomalee, Mullaitivu, KKS, Poomeryn, Mannar, Puttalam, Negombo, Colombo, Beruwela, Galle, Matara, Hambantota and Kirinda.

5. Over the past 50 years the City of Colombo has been transformed from the Garden City to a highly congested urban situation as we observe today. This is a result of the inadequacies in the planning function that have been carried out and the resulting ad-hoc development over the years. We should therefore learn from this experience



## DRUG TRAFFICKING AND

The National Dangerous Drugs Control Board have found in several of their recent studies that the easier availability of certain drugs has become a key factor in the increasing abuse of drugs in Sri Lanka. In this report the drug most expansively dealt with is heroin as its use has become comparatively wide spread in Sri Lanka. One conclusion from this study is that drug trafficking generates vast profits which tend to undermine the economic and social order, spreads violence and corruption and endangers the political stability and security of some countries.

### INTRODUCTION

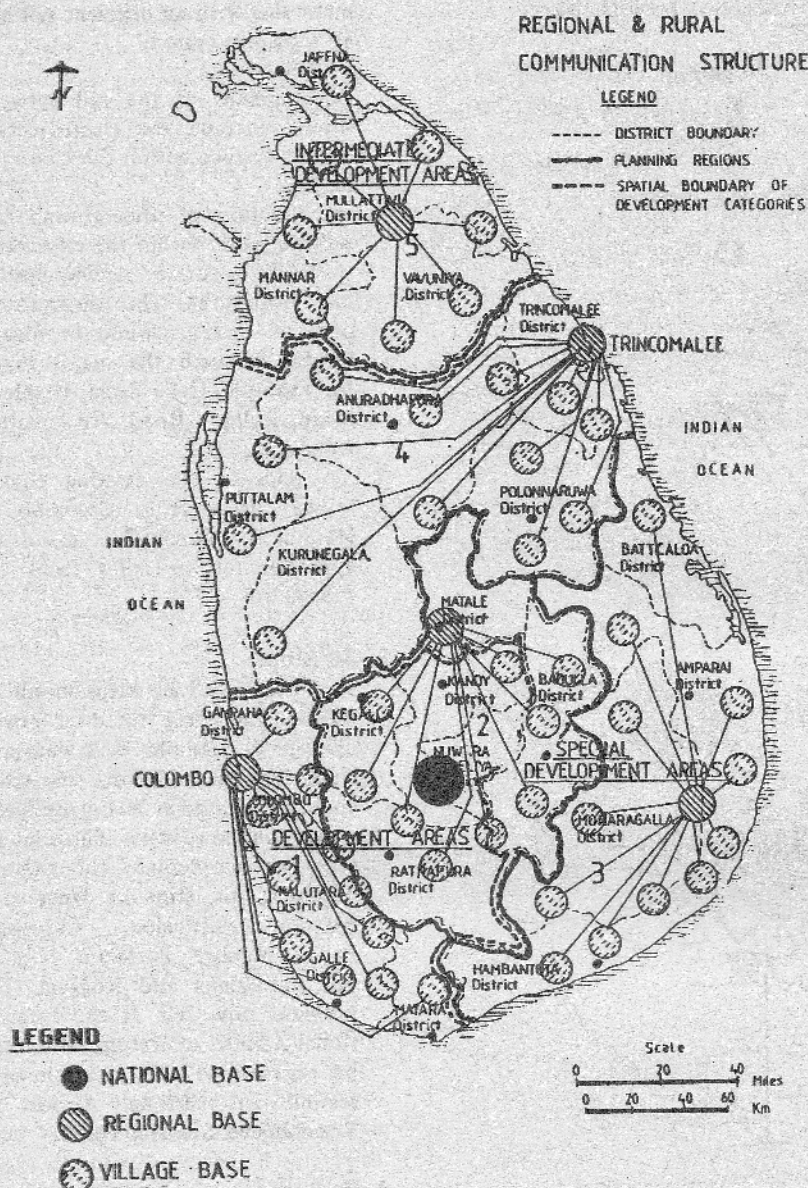
The abuse of a variety of drugs remains at a high level in most parts of the world and in some countries, including Sri Lanka, is on the increase. Health hazards are being aggravated by multiple drug use often in combination with alcohol.

Illicit cultivation and production of drugs involve a growing number of countries located in several regions of the world including the Near and Middle East and South-Asia. It has been found that illicit cultivation, production and trafficking in the above areas has inevitably led to abuse by the local population; the abuse increasingly affecting young people and thereby presenting a danger to the future of such countries.

Illicit activities are financed and operated by organised criminal syndicates often with international links and a dangerous development in several regions is the close connection between drug trafficking, the proceeds of which are used to finance other major criminal activities including the illegal traffic in fire-arms; subversion and international terrorism. Drug trafficking generates vast profits which tend to undermine the economic and social order, spreads violence and corruption and endangers the political stability and security of some countries.

The international community has already launched comprehensive counter attacks against illicit drug trafficking and abuse and stronger political commitments are being made at the highest levels of Governments. New initiatives regularly taken to promote effective and co-ordinated action and improving inter-regional co-operation, particularly at the operational level, is leading to a measure of success. The joint counter actions all proceed from the common conviction that effective and lasting progress can be made in any one affected country only if all countries co-operate.

The large quantities of opium and heroin which are being seized in neighbouring countries indicate the existence of extensive



and avoid similar mistakes when planning for the 21st Century. The proposed Regional Development Plans should therefore include effective controls in the allocation of land for different purposes such as Residential, Commercial, Educational, Industrial, Agricultural and so on at Regional/Urban/Rural and village levels. For example, the residential development areas should be confined to small units with 200-400 housing units together with common infrastructure facilities. This will not only result in better utilisation of land but will also bring about economies in pro-

viding infrastructure services. In addition, this will assist in the setting up of the electronic communication network planned for the 21st Century as referred to in Plate 3.

6. Establish communication centres at village, rural and regional levels linking to a national centre through which access can be gained from village to a global level. In this respect reference should be made to Map 3 and Plate 1.

(Excerpted from a paper presented at the annual sessions of the Sri Lanka Institute of Architects).



## ABUSE IN SRI LANKA

illicit opium cultivation and a substantial heroin manufacturing capacity. The increasing traffic in heroin and its easy availability has led to an escalation of the abuse of this drug in many parts of the Asian region including Sri Lanka.

### DRUG ABUSE

No nation has managed to avoid the negative consequences of drug trafficking and drug dependency which is jeopardizing the health of citizens and undermining economic and social institutions. The abuse of cannabis, opiates and other dependence producing drugs continues at epidemic levels resulting in both drug related deaths and crime. It particularly destroys the young, and thereby weakens the future strength of many nations. Continued production leads to an abundance of supply, and availability being accepted as a key factor in the abuse of drugs; heroin use in particular is certain to become even more widespread.

### DRUGS OF ABUSE IN SRI LANKA

#### Cannabis

Cannabis is cultivated mainly in the Southern and South Western regions of the country, in jungle tracts at Theroendivile, Hambantota, Monikewila, Wellawaya and Bibile. The total area under cultivation at present is estimated to be 200 acres. The harvested cannabis is invariably transported to Colombo and its suburbs by the fishers and individual buyers. Transport is by road, concealed in vehicles conveying regular merchandise such as vegetables from these areas.

The undermentioned table indicates the quantities seized and the number of persons arrested from 1980 to 1985, for cannabis related offences.

Year	No. arrested
1980	6,009
1981	6,015
1982	4,977
1983	3,883
1984	4,801
1985	3,058

Special eradication campaigns launched in 1980, 1981 and 1983 resulted in a reduction of the total area under cultivation. However, due to other national priorities, enforcement action since 1983 has considerably decreased.

There was an estimated 18,000 chronic cannabis users in 1981. It is now established that the quantity of cannabis produced in this country is in excess of the amount re-

quired for local consumption. Recent detections especially in the United Kingdom revealed that locally produced cannabis is illegally exported, mainly by sea, concealed in regular exports such as coconut oil drums and tin chests.

Detections also reveal that Karala ganja which is of a higher potency than the local product is being brought into Sri Lanka

Year	No. arrested
1980	148
1981	145
1982	166
1983	148
1984	152
1985	68

from India, mainly by illicit transportation by sea, both for local consumption and in transit to Europe and North America.

During the past three years the wholesale price of local cannabis in Sri Lanka has ranged between Rs.10/- and Rs.120/- per kg. at about Rs.100/- to Rs.250/- per kg. in Colombo and Rs.500/- per kg for better quality, meant for export.

#### Hashish

The greater proportion of hashish in this country originates from either Pakistan or India and is usually brought in by non-nationals. The following table shows the detections from 1980 to 1985.

Year	No. arrested	Quantity seized
1980	59	79 kg
1981	98	126 kg
1982	98	28.2 kg
1983	61	2.5 kg
1984	47	18.5 kg
1985	25	1.2 kg

#### Psychotropic Substances

There have been few detections involving

<u>ted</u>	<u>Quantity seized</u>
	360,227 kg
	433,777 kg
	11,532 kg
	70,548 kg
	7,398 kg
	11,238 kg

the abuse of psychotropic substances. However, substances abuse is believed to be prevalent, mainly due to diversion from illicit sources.

#### Opiates

Illicit opium is smuggled in for distribution locally, from India, mainly by sea across the Palk Strait. Figures show a decrease in availability of opium in recent years. This reduction is due mainly to a

switch-over to heroin by opium abusers and new user preference for heroin due to its higher potency. The presence of security forces in the traditional landing areas in the North has also contributed in some measure to curb the smuggling of opium. The following table gives particulars of the arrests and quantities seized from 1980 to 1985.

<u>Year</u>	<u>Quantity seized</u>
1980	188 kg
1981	28 kg
1982	11.3 kg
1983	6.3 kg
1984	1.4 kg
1985	4.6 kg

During the period 1975-1978, of 3,000 persons who sought assistance in overcoming drug dependence, 40% were chronic users. In 1980, it was estimated that there were about 5,800 opium users in the country. The mean age of a hospitalised group of opium dependents was found to be 55 years and 95% of them were married. Between 1980 and 1985 there was a decline in the abuse of opium, which coincided with the rapid increase in the number of heroin abusers. Availability of opium is presently at a very low level.

Except for one clandestine heroin laboratory which was detected in 1981, there has been no evidence of conversion of opium into morphine and heroin in Sri Lanka.

<u>Year</u>	<u>Quantity seized</u>
1980	79 kg
1981	126 kg
1982	28.2 kg
1983	2.5 kg
1984	18.5 kg
1985	1.2 kg

#### Heroin

India and Pakistan are the sources of almost all the heroin brought into this country. This drug originates in the "golden crescent" region which is the area within the boundaries of Afghanistan, Pakistan and Iran, where the opium poppy is illicitly cultivated, and where it is claimed, enforcement of the law is difficult due to the terrain and lack of government control in tribal areas. The majority of traffickers are Sri Lankan couriers who travel by air and arrive in this country from ports in India and Pakistan. There has also been limited illegal transport of heroin by sea into this country by Sri Lankan merchant seamen. There have also been a few instances of non-nationals smuggling heroin into Sri Lanka, mainly by air travel originating



again from ports in India and Pakistan. These couriers have been Pakistani nationals and West Europeans. Given below are the figures of arrests and quantities seized from 1980 to 1985.

Year	No. arrested *	Quantity seized (in kg.)
1980	N11	N11
1981	08	0.277
1982	33	3.000
1983	263	5.260
1984	1,794	38.700
1985	3,339	18.250

\* Includes non-nationals

Sri Lanka has been used as a transit point for movement of heroin especially to Western Europe. However, this trend has noticeably declined during the last two years, as couriers find it more convenient to move the drug direct from Pakistan or India. In both instances, whether for local consumption or in transit to Europe, heroin is usually smuggled in false bottoms and compartments of passenger baggage or concealed in articles carried by the passenger. Sri Lankan couriers have also been known to resort to concealment in body cavities.

An increasing number of Sri Lankans, the majority of whom belong to the Tamil ethnic group, have been arrested abroad for trafficking in heroin. The following table gives the number of Sri Lankans arrested for trafficking offences abroad.

Year	No. arrested
1980	42
1981	82
1982	128
1983	231
1984	301
1985	315

When compared to the increase in arrests of our nationals abroad, the arrests of foreigners in Sri Lanka for drug offences, shows a marked decrease, partly attributed to the stringent penalties stipulated by the amended law. The following table depicts the number of foreigners arrested in Sri Lanka for drug offences from 1980 to 1985.

Year	No. arrested
1980	88
1981	147
1982	139
1983	123
1984	54
1985	34

The ready availability of heroin in Pakistan and India has attracted a large number of Sri Lankans to act as couriers. Payment for the purchase of heroin is in foreign currency and there are instances

of gold being used as a barter commodity or sold to obtain funds for the purchase of heroin. Gold is smuggled out of Sri Lanka for this purpose.

### HEROIN ABUSE

The abuse of heroin in Sri Lanka was detected for the first time in 1980. Heroin availability has increased since then and with it, the numbers abusing this dangerous drug.

#### Increasing availability/use

At the outset, heroin use was detected in the city of Colombo and a few tourist resort areas. There is recent evidence that its use is occurring in other urban, semi-urban and in a few rural areas. Of growing concern, is a suspicion that heroin dependence has begun to spread to new developmental areas of the country.

During the latter part of 1985 the Board conducted a study on the drug abuse situation in the Hikkaduwa Assistant Government Agent's Division, in which many major tourist resorts of the area were located. The objectives of this study were to identify and assess the nature and extent of the current drug abuse situation in this affected area and also to assess the impact of tourism on the problem of drug abuse.

Some of the major findings of this study were:-

1. The population density is relatively high in this area and a household consisted of an average of 6 to 7 persons. The educational standards of the people were relatively low: 29 percent were found to have terminated their education at Grade 8 and only 8 percent had proceeded up to Grade 10. The land and other resources available for agricultural activities are relatively low. The more lucrative tourist industry

in the area occupied vast stretches of land traditionally used for beaching of fishing craft. This industry has also attracted the younger fisher-folk from their traditional occupation; which has contributed substantially to the decline of the fisheries industry.

2. Tourism is the major source of income of the majority of the people living in the Division. In addition to the income derived from lawful occupations connected with tourism, people engage in unlawful activities such as female and male prostitution and drug trafficking to increase their earnings. Since the Hikkaduwa economy is mainly based on tourism, the objective of the people is to maximise their earnings, especially during the tourist season by providing services legal or otherwise to this industry. In Hikkaduwa the drug abuse problem cannot be viewed in isolation since it is inter-connected with other social problems.
3. The most widely abused drugs in the area are heroin and cannabis. Association with tourists who are drug users have often led local youth to take to the drug habit, although many at present are being introduced to drugs by their peers. Heroin peddling in the Hikkaduwa area is almost totally in the hands of Sri Lankans.
4. There are a number of tour-guides who are themselves involved in male prostitution and the abuse of drugs, mainly to avoid losing a foreign client to a competitor.
5. As estimated 2,000 drug dependents reside in this area. Many drug dependents from neighbouring areas such as Ambalangoda and Galle visit Hikkaduwa to purchase heroin due to the relatively lower price prevailing in Hikkaduwa.

#### Recent trends

Until recently opiate use was a phenomenon mostly prevalent among the middle-aged. It has now shifted towards the youth. Several surveys have indicated that heroin dependence is commonest among young people. Enforcement statistics indicate that persons most often involved in drug related offences are between 18 and 30 years of age. Experience with dependent persons who have sought treatment points to an involvement of an even lower age group.

A survey designed to assess knowledge, attitudes and practices regarding non-medi-



cal use of dependence producing drugs among 6205 students in Grades 8 to 12 in the Kalutara Education Circuit was conducted in 37 schools during the first quarter of 1986. This survey was centred in the National Institute of Health, Selanera at Kalutara and reasons of accessibility and ease of operation led to the selection of this district. Besides, the Kalutara district shares several characteristics of Sri Lankan rurality and the urban zone. An added reason was the proximity to Colombo and the influences from tourism. This survey revealed that 1.2 percent had used dependence producing drugs at least once. The current users are all male students. Of the students who have used any drug at least once, 63.9 percent had used cannabis, 33.2 percent had used heroin and the balance 2.8 percent had used balm. The study also revealed that 38.7 percent of the students who have used drugs have done so out of curiosity and another 49.3 percent due to pressure by friends.

2.7 percent of the users had their first experience before the age of 12; 13.3 percent between the age of 12 and 16 and the balance 84 percent after they were 16.

Of the total number of students surveyed 11.7 percent had used alcohol and 8.0 percent had used tobacco.

#### Extent of heroin abuse

Since 1980, about 6,000 persons have been arrested annually for drug related offences in Sri Lanka. Since the introduction of heroin to the drug scene in 1980, heroin related cases have increased almost tenfold between 1984 and 1985, to the extent that heroin depictions which consisted of only 16 percent of the total number of all drug related depictions in 1984 increased to 51 percent in 1985 during which year approximately 3,000 heroin related offenders were detained. In keeping with the internationally accepted figure of 80 users per 100 arrests, approximately 2,400 of those arrested would also be heroin users. Using the W.H.O. index of 1 identified to 100 as 1:10 the estimated number of heroin users for the year 1985 would be 24,000.

The average daily consumption of a heroin dependent is presently in the region of 600 mg. On this basis the estimated 24,000 heroin users who require a total of 12 kg. of heroin each day to maintain their habit. Daily expenditure on heroin by users in Sri Lanka exceeds Rs.2.5 million. Statistics indicate that the total quantity of heroin seized by Enforcement Agencies i.e. Police, Customs and Excise in 1985 is less than 1 percent of the estimated total quantity of heroin smuggled into the country

that year. Studies at international level prove that drugs seized world wide represents only 7 to 10 percent of the amount actually smuggled.

#### Social consequences

Sri Lanka is presently faced with problems experienced by many other countries associated with the illegal traffic and abuse of heroin. Heroin dependence is now known to be a factor responsible for social, family and personality disruption.

Many users had lost their jobs as a result of their dependence on the drug.

The average daily income often being less than what was needed to maintain the heroin habit, many dependents resorted to the sale of personal and family belongings resulting in adverse family relationships and circumstances.

Some of the dependents were involved in both petty and grave crime and 14 dependents of a sample of 100 were known to have past criminal records. A considerable number of addicts in employment had experienced inability to cope with their occupations, functioned at a lower level of effectiveness which was usually attributed to impairment of ability, a loss of interest, lack of motivation and sluggishness caused by the drug.

#### NARCOTICS-TERRORISM

An increase in the involvement abroad of Sri Lankan nationals in drug related cases was first observed in 1982. Since then there has been a progressive increase of Sri Lankans arrested in foreign countries.

The number of Sri Lankans arrested in 1984 was 301 of which 80 percent were Tamils and in 1985, 215 persons have been arrested according to the data available at the Police Narcotics Bureau. Of these over 90 percent are Sri Lankan Tamils. Sri Lankan Tamils have been arrested for drug trafficking mainly in Italy, France, Spain, West Germany, Switzerland and the United Kingdom. Investigation have established a definite link between heroin trafficking and the Tamil terrorist movement in Sri Lanka. This connection has been established both by documentary and other evidence gathered here and abroad during investigation, and on admissions made by those arrested. Most of them have been persons claiming political refugee status in countries of Western Europe whilst a few had claimed political refuge after arrest.

Sri Lankan Tamils are well established and organised in these countries and they

now handle not only the conveyance but almost the entire distribution of heroin smuggled by them into several European countries. They are known to have developed links with other criminal and terrorist organisations. According to the reports published by international agencies in February, 1986:

The majority of Sri Lankans found themselves unemployed and were largely of low educational background making them even easier targets for the illicit trafficking organisations. This process continues and the number of Sri Lankans arrested in recent years bears witness to these facts. Almost 50 percent of these persons are in the age group 18 to 30 years. As a result of continued involvement in this type of drug trafficking, one time couriers have formed themselves into trafficking groups located in Spain, Switzerland, Italy and France. Sri Lankan couriers have established close contacts with drug dealers and criminal syndicates in Paris, Rome and Amsterdam and have become involved with Indians, Pakistanis, Iranians and Nigerians, nationals who have proved to be significant heroin traffickers. The majority of Sri Lankan couriers will be in possession of false and altered passports with forged visa endorsements. They will also carry separatist political propaganda. It is expected that Sri Lankans and other couriers will move in a large quantity of heroin from India and Pakistan to Western Europe in Summer 1986.

While some of these Sri Lankan Tamils travel to India or Pakistan legally or illegally and then proceed with heroin to the West European countries, most of these traffickers first enter the European countries as political refugees and travel from there to India and Pakistan to pick up the heroin for the organisations established in the European countries. These organisations consist of Sri Lankan Tamils and other international criminal and terrorist organisations which handle details of travel, stay, accommodation and financing and also help each person to establish their claims for political refuge.

Investigations have also revealed connections with foreign based terrorist training centres and also the siphoning of part of the proceeds to international terrorist organisations in recompense for their support activities to the Tamil dominated drug rings.

(From a National Dangerous Drugs Control Board report).



# THE ONE-CHILD SOLUTION

## Declining Fertility in China

Carol Vlassoff

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China is undergoing a demographic transition with a rapidity never before experienced in the history of mankind.

Groin hirth rates plummeted from an estimated of about 50 births per thousand population in 1953 to only 21 in 1983. Death rates also declined markedly. As a result, the population growth rate during the 1980-85 period 1.17 percent per year - approximated that of the industrialized world.

These dramatic declines have been attributed largely to China's vigorous family planning program, the promotion of one child families, and a system of related rewards and penalties. The goal is to halt population growth by the year 2000 at 1.2 billion, and gradually to reduce the population size in the years thereafter.

Chinese authorities have devoted considerable attention to research on population characteristics and trends in the past few years. This represents a major boost in the status of demography in the People's Republic.

Demographic statistics used to be based mostly on speculation and inferences from press reports, with occasional references to a little known official population registration system. Since 1982, however, information has been collected and reported in a vigorous manner from a number of sources: registration figures for births, deaths and year-end population totals from 1950 to 1982; the 1982 population census, which was conducted with meticulous care; a 10 percent sample survey of census questionnaires; and a one-per-thousand sample fertility survey, also conducted in 1982.

The most current contributions to China's growing bank of demographic information are coming from an in-depth fertility survey conducted in April 1985 by the State Statistical

Bureau (SSB).

Assistance was provided by Canada's (IDRC) International Development Research Centre and Norwegian and Danish donors. IDRC's role was to provide training for the Chinese researchers in the survey design and methodology.

The results, once compiled and analyzed, will provide a wealth of information on fertility, contraception, abortion, infant mortality, family size preferences, and attitudes toward government policy - subjects never before investigated in detail in China.

The survey covered two provinces, Hebei and Shaanxi, and one municipality, Shanghai. These areas contain about 10 percent of China's total population. Hebei is typical of the coastal provinces of northern China; Shaanxi, of the inland regions; and Shanghai, of the large metropolitan centres.

In each area a random sample of 6000-7000 households was selected. From these, all women of child-bearing age who had ever been married were interviewed, amounting to more than 13000 respondents.

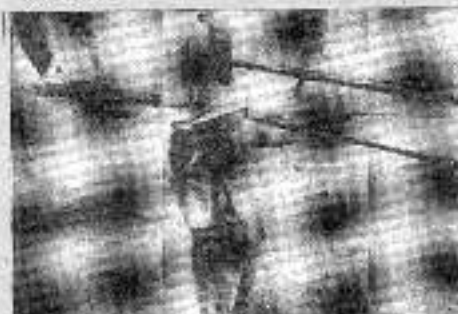
The quality of the data was exceptional, as was the speed with which they were collected. The remarkably high response rate of more than 95 percent in each of the three areas reflects both the dedication of the survey team members and the enthusiastic co-operation of the respondents.

The interviewers, many of whom held other jobs as family planning workers, worked late into the night studying for examinations designed to assess their readiness to undertake the fieldwork. "Unless we obtained marks of over 90 percent", explained one interviewer, "we were not allowed to participate. We didn't do it for

money, only as part of our regular jobs. It was a wonderful opportunity to learn how to conduct a scientific survey".

As for the high level of public participation, it can largely be explained by the pre-survey efforts of the research team. "The survey was advertised in advance in newspapers and billboards" said one of the survey supervisors, "and people were urged to co-operate. This meant that they were prepared for the survey and even felt honoured to be chosen. We also arranged interview times to suit the women so that the questionnaire was not viewed as an inconvenience but rather as a novel, and even special, event".

The preliminary tabulations now available contain a number of interesting insights. And the information appears to be remarkably consistent with the 1982 census results and other sources.



The success of China's family planning program is demonstrated by a dramatic fall in fertility. The total fertility rate (TFR) - roughly the number of children per completed family - declined from 5.4 in the 1940s to 2.6 in 1981 for the country as a whole.

The 1985 in-depth survey revealed further declines, at least for the three study areas, with TFRs of 2.4, 2.3, and 1.1 in Hebei, Shaanxi, and Shanghai, respectively. These large rural-urban differences between the provinces and Shanghai are attributed by Chinese researchers to the greater intensity of family planning programs in urban areas. They conclude that if China's population growth is to be halted at the 1.2 billion mark by the year 2000, family planning efforts will have to be concentrated in rural areas.



Another important factor contributing to lower fertility is the transition to later marrying ages of women over the past 30 years. The in-depth survey revealed that in Shanghai, for example, 42 percent of the oldest cohort of women (aged 45-49) were married during their teens, compared with only 3 percent of those aged 20-24. This increase in age at marriage is mainly the result of a national policy encouraging delayed marriage and of a weakening of the tradition of arranged marriages.

The use of birth control in China approximates that of the industrialized countries, with about 70 percent of married women of reproductive ages practicing contraception in 1982. In the three surveyed areas, 70-80 percent of the women interviewed had used at least one family planning method, and the large majority were practicing birth control at the time of the study: 83 percent in Shanghai, 76 percent in Tibet, and 69 percent in Shaanxi.

Chinese researchers were concerned that a small but significant proportion of women were not using birth control but already had one or two children. These were seen as the most important target for family planning information.

Since 1979, in keeping with the one-child-per-family policy, the Chinese government has been issuing single-child certificates to couples with one baby who pledge to have no more. In 1982, the one-per-thousand survey revealed that 43 percent of single offspring mothers had accepted the one-child certificate. Only 6 percent of certificate holders interviewed had failed to maintain their pledge, nearly all of them from rural areas.

Infant deaths among certificate-holding families were amazingly rare. Family planning officers attributed this to the fact that an only child is better cared for because by law no one is entitled to superior medical services. Furthermore, an only child does not have to compete with siblings for parental care and attention.

Following the traditional Chinese preference for male offspring, 60 per-



cent of the certified children were boys, 40 percent girls. In effect, couples were more likely to agree not to have any more children if their first baby was a boy rather than a girl. This imbalance was, again, more pronounced in rural areas.

Data on one-child certificate holders from the in-depth survey have not yet been analyzed but preliminary results indicate an increasing acceptance of the one-child norm. In Shanghai, for instance, four-fifths of sampled women had borne only one child, compared with less than half the respondents in Shaanxi and Hebei. The researchers attribute these differences to variations in infant mortality rates among the three areas from 19 deaths per 100 births in Shanghai to 35 per 1000 in the other two provinces. (It is common for rural couples to have several children in the fear that one or more will die.)

Varying infant mortality reflects divergent social and health conditions. In Shanghai, for example, the large majority of deliveries take place in hospitals, whereas in the more isolated provinces most of the births occur at home. Thus, researchers note that if the one-child family policy is to succeed in rural areas, health conditions there must be substantially improved.

## CONVINCING THE PEASANTS

In spite of its record to date, China's population policy still faces nu-

merous challenges, including the need to improve family planning acceptance in rural areas. Many Chinese express doubt as to whether the policy's success in the countryside will ever match that of the metropolitan areas. The "responsibility system", which permits the sale of surplus produce on the open market, has already greatly enhanced the welfare of rural peasants, enabling some to provide for several children independently. They may well be willing, therefore, to forego some of the public benefits offered to one-child families.

Another challenge is the reversal of public prejudice in favour of sons so that couples will be content with only one child, whether male or female. This radical change in sex preference has already begun, and there is little concrete evidence of female infanticide or neglect.

One researcher noted that ancient proverbs in praise of girls are being revived. One, for example, compares boys to jackets, which are meant primarily for appearance and are easily removed. Girls, on the other hand, are like undershirts: their value is less obvious but they are worn close to the heart.

It will be fascinating to follow the future course of demographic trends in China, the world's most populous nation. Indeed, if current enthusiasm for fertility surveys continues, the resulting documentation will be rich and plentiful.



The Economic Review in its Twelfth year of publication has produced several issues that are still in demand. For the benefit of those who have made repeated inquiries, we give below a list of some of the issues of which few copies are still available.

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	July	77 General Elections
	August	Fisheries
1979	Jan./Feb.	The Economy
	March	Children (IYC)
	April/May	Rural Credit
1982	Sept.	Presidential Polls
	Dec.	National Elections
1983	Feb./Mar.	Budget 1983
	April	Higher Education
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	June	Fisheries II
	July/Aug.	Tourism II
	Sept.	Foreign Aid
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