

Estate-Village Integration

— a challenge to the Sri Lanka economy

A case for mixed farming units

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A new approach to rural development and estate-village integration has become one of the priority items in the government's development programme. The main object in this exercise is not merely to achieve the highest efficiency in the cultivation and manufacturing processes of our main agricultural export commodities but also in raising the living standards of those workers engaged on our plantations and in paying closer attention to the welfare of their families and all others who live in the surrounding villages.

Mr. Subasinghe, who has been involved in the development programmes of the villages over the past several years, as Assistant Government Agent, Agalawatte, presents a first hand insight into the basic problem areas that confront villagers in taking to mixed farming and makes certain proposals based on his experiences. He emphasises in this study the need for an integrated development plan covering all sectors based on the full utilization of the human and physical resources of an area; initiating projects which are self reliant based on these resources without being dependent on raw materials, skills or management expertise from outside; generating incomes from within the projects itself, which, while providing employment and incomes to the self employed, also permit setting aside some part of the savings for a common fund; and the village assembly and the village fund; and he suggests how best these objectives could be achieved.

The attention of the government is now focussed on the problem of unemployment and its attendant difficulties. For formulating a quick and practicable solution it is necessary to identify projects which could be successfully implemented throughout the country. The results of the schemes launched earlier have shown that a practical approach is of paramount importance in successfully implementing such proposals. One of the main reasons for the failure of earlier projects was that they did not envisage the problems they would be confronted with in the various stages of implementation. It also needs to be emphasised that any attempts to formulate economic development projects should consider that they are all part of the overall economic plan.

Employment plans have to be an integral part of the national development programme and must not be formulated in isolation.

This proposal envisages a plan directed at solving the unemploy-

ment problem in the rural areas. Economic development and employment generation should not be regarded as two separate goals but as an interdependent single objective. In this context the harnessing of all available physical resources for greater productive development in well formulated, practical schemes, becomes of paramount importance.

The structure of Sri Lanka's economy has displayed the classical dualism; with two distinct sectors differing from each other in many characteristics. The economic dualism which came in from around the mid 19th century with the plantations generated a series of events and measures which resulted in a substitution of labour for capital. The plantation sector was based on capitalist enterprise, with expatriate capital, wage labour, factory type technology and operation of large estates producing for a foreign market. The necessary business acumen, organisational skills, banking, insurance, transport and engineering services

all developed at a rapid pace in keeping with the requirements of this sector. Alongside this modernised sector had to exist the traditional rural sector characterised by its subsistence agriculture, simple technology and small holdings. The traditional agricultural sector was dominated by rice cultivation spread over all parts of the country; while the plantation sector, confined climatically to the lower and central wet zone, made deep inroads into the existing village economy in places where it was established, more particularly in the highland areas where tea plantations were opened. In the rubber and coconut plantations of the mid and lowlands of the wet zone the physical proximity of the village was greater and these estates drew part of their labour from the village but in these areas too the self-sufficiency of the existing village economy tended to collapse and it became less and less adopted for supplying even the basic day to day needs of the community.

The rural sector as a whole provides employment to an estimated 80 per cent of the people but these are not jobs which generate full employment. The economic base is provided by paddy cultivation in this sector. However, the traditional agricultural sector in the wet zone differs from that in the dry zone in many ways. The wet zone farmer, in the Kalutara, Ratnapura and Colombo districts, for instance, who for the most part cultivates about half an acre in extent in two seasons is not totally employed. He utilizes less than two months for preparation and sowing of his paddy field and reaping the crops. He is occupied some days after this in spraying weedicides and insecticides and thereafter he is not employed in the fields. The rapid growth in population has resulted in crop rotation (thattu maru) and a decline in production. The Yala season also shows a decline in production due to excessive rainfall. Though paddy cultivation is the basic occupation for the traditional rural peasantry it does not give them full employment nor does it provide their families a fair income. In addition the irregular cultivation of cash crops like coconut, rubber and tea and other types of mixed crops though they offer some relief, the vagaries of weather and unscientific methods of cultivation have not helped to bring in good returns or

offered much income to the villagers. Many villagers who do not possess paddy fields, coconut lands or rubber eke out an existence by tapping rubber and doing manual labour in nearby estates. With incomes such as this they are compelled to live at a very low level of subsistence. Some of their basic human need targets which seem unattainable are: to maintain good health, to give their children a proper education and to possess a reasonably good dwelling house.

The hill country and the lower wet zone are areas that have witnessed a heavier increase in population over the years. With the increase of population the number of peasant families too has increased; and among all these families could be counted a large number of young people without jobs. With the increase in population the area of cultivable land decreases and the land which could be used for the sustenance of the increasing population gets reduced.

The Challenge

One result of this trend is that attention has come to be focussed on the plantations which resemble "oases in a desert of poverty". The plantations introduced modern systems of organisation, maintained production at the highest level and provided optimum employment opportunities, while the villages suffered in comparative neglect. Generally the village and the estate were separated not only by a physical partition but they were also economically, socially and culturally isolated from each other. The duality of the economy, namely the plantation sector and the traditional agricultural sector needs therefore to be unified into one dynamic economic system which can incorporate the productive and efficient features of the plantation sector while promoting the aspirations of the village.

There has been no rapport between the developed plantation sector and the underdeveloped traditional rural sector, though initial steps are now being taken. At present most of the plantation sector is nationalised and the view has been strongly expressed that these estates should not be alienated from the rural sector and must function as a unit which would confer the maximum benefit to the adjoining villages. This has resulted in much talk about schemes to

integrate the village and the plantations.

With the growing population in the villages and greater demand for their development it is no longer possible to maintain the privileged and isolated position of the plantations. It is necessary to obtain some sort of assistance from the plantations to solve the growing problem of unemployment. It is not possible, however, to get many more people from the village to work on the estates in order to find more employment opportunities for them as optimum employment levels are being reached here. Therefore an integration is necessary and it should be carried out in a manner beneficial to both sectors. To achieve this objective new avenues have to be opened. As it is generally accepted that the plantation sector cannot generate much more employment at present, a new type of innovative thinking and desire to change the existing structure and relationships will have to be introduced.

For this purpose the administration, discipline and advanced cultivation methods and organisation practices in the plantations will have to be safeguarded while personnel from the plantations will have to come out and help to organise the rural sector, giving out the benefits of their experience and knowledge. This would no doubt help to dispel the fear that villages would devour the plantations or vice versa.

Mixed Farming

The plantations are capable of assisting in an economic renaissance, specially those scattered in the central and lower wet zones could help to accelerate economic growth of these areas within a short space of time. The potential for rapid advancement particularly through mixed farming becomes apparent. Dairy farming is one area with a high potential for growth and could play a major role in this scheme. Except for a period of 2 to 3 months a constant rain fall of about 80 inches is observed throughout the wet zone. This is quite evident in the districts of Kalutara, Colombo, Kegalle and Ratnapura; and also to an extent in districts like Galle, part of Matara, Kandy and Matale. In these areas the staple diet for cattle, "grass", could be grown throughout the year.

Rubber plantations are widely spread over the areas covered by these districts. Although small holdings and the large rubber plantations are found in abundance, due to incessant rains production levels often fluctuate. During these periods the monthly salary of these workers falls and they find it difficult even to find their daily food. There is an imperative need to find some sort of solution to the plight faced by these people. One answer to this problem could be found in dairy farming. These areas receive rain throughout the year and fodder grass would thrive here, as in mixed farms and home gardens forage is generally offcut fodder from small plots.

Though the environment is conducive for dairy farming it is unfortunate that government veterinary benefits are not extended to wider areas in the wet zone. An area served by about three A.G.A. divisions has only one veterinary surgeon and two assistants. In so widely a scattered area all veterinary services like artificial insemination, prevention of diseases, advice on livestock control and improving stock and pasture management cannot be carried out by such a meagre staff. A large number of qualified personnel of this category could not be provided at short notice. It is also not advisable to utilize a large amount of money for creating a large institutional set up.

Dairying

However, a scheme could be devised to make use of the existing resources to form an economically viable mixed agriculture unit in each plantation area. The main occupation could be dairy farming. It is not necessary to appoint livestock officers and veterinary surgeons with degree qualifications. For this purpose young people who have gained an intermediate knowledge, such as a diploma in agriculture, could be appointed. They could obtain the necessary advanced technical know how from the veterinary surgeon in the area. Also the assistance from the superintendents of the nearby estates who have the practical experience could be obtained. Thus by centralising the areas of operation around estates a viable veterinary unit could be formed.

It will be necessary to get about 25 acres from each estate for this unit. These 25 acres could be demarcated from areas which are

not cultivated. Low lying areas are not suitable for rubber or tea plantation and are more suited for mixed agriculture, particularly cultivation of grass and vegetables. In certain other areas of this land high yielding varieties of grass like Bracheria, Geniya and Nepir could be grown and these could be distributed to the villages. Although in coconut lands good grass is grown and livestock farming is encouraged the situation is not the same in and around rubber plantations. In rubber plantations too grass could be grown and supplied to the villages for their cattle. It is now accepted that land should be put to optimum use while avoiding a conflict in the interests of different types of consumers. For example, large areas should not be utilized for planting of rubber alone while estates should not be arbitrarily fragmented. At present rubber is grown for a period of 30 years and after 20 years about 6 per cent (the first planted area) will need replanting. Instead of Peuraria now grown for the protection of rubber seedlings grass could be grown. In this instance more fertilizer could be used so that the rubber plants would not be stunted in growth. This type of vegetation is possible for a period of 6 years till sunlight is precluded from coming down due to the density of leaves. After this period a type of grass which does not need much sunlight for growth could be grown. Thus by allowing grass to be grown alongside rubber the growth of rubber will not be retarded and the production of rubber on the plantations will not be affected as a result. Research could also be carried out to improve the local varieties of grass. A certain type of grass which is available for fodder is now being cut and made use of in the Agalawatte area. One of the services which could be performed in this sphere is to provide good wholesome grass to villagers at a nominal price to help them in livestock farming. As the villagers do not have sufficient land to grow grass on this could be done on an organised basis for them, so that even their small plots could be utilized for livestock farming. The leaves of trees like "Ipil-Ipil" and "Alfa" offer popular nutritious fodder, and these can be grown on the boundaries of their little plots.

To establish successful dairies cattle of high milk yielding stock should be reared and breeds such as

Jersey, Ayrshire, Fresian, Sind etc. should be made available in sufficient quantities. The cattle now distributed to individuals often die due to various diseases, mostly through a lack of technical knowledge. Later, as the technical know-how and the facilities are available the imported cows should be distributed among estates. The foreign cattle could be cross-bred with local stock and a breed which would be suited to our climate and yielding large quantities of milk could be developed. These animals could be distributed among selected villagers. In addition certain technical know-how and the practices in the farms which breed these cattle could be imparted to the villagers.

The villagers could be taught the intricacies of putting up a cattle shed and turning out a balanced diet at a low cost, cattle management and care and prevention of various diseases involving cattle. The traditional forms and practices of cattle rearing could be examined on a scientific basis and where necessary improved methods demonstrated to the villagers.

Breeding and Marketing

In planning a dairy farm complex, yielding a large amount of milk, it is not possible to confine the scheme only to providing good breeds of cattle to villagers. It is also necessary to improve the various types of village cattle. As cattle feed could ultimately pose a problem the increase of stunted and inferior breeds of village cattle should be discouraged. Side by side with this programme steps should be taken to cross the good types of village cattle with the imported breeds. This could be done with assistance from a veterinary surgeon, in two ways. One is by artificial insemination and the other through stud bulls. It appears that the majority of villagers have not made use of these services. It is now confined to only a few individuals. With the limited number of extension officers it is not possible carrying out this work on a large scale. However, in the proposed units which would be centralised in estates this type of service could be readily performed. A census of all cattle would be helpful in promoting a livestock development programme. If stud bulls and artificial insemination are made available to all dairy farms and if these services could be given free it

would be a great service to the villagers.

A constraint in this type of dairy project is the problem of marketing. The main market for milk is the capital city and the towns on the periphery of the capital. These urban areas are the main potential markets for milk. Although there is a very high demand for milk in these areas supply is limited. In Colombo and other towns milk is generally available in the mornings or afternoon for only about two to three hours. It is very evident that the supply is quite insufficient while milk foods are still imported in large quantities. There is no problem therefore as far as markets are concerned. The Milk Board is the government agency established for facilitating market operations. Milk collecting centres should be opened throughout the entire wet-zone. The Milk Board now confines its milk collecting centres to areas which could collect 1200 pints per day. If with the establishment of the proposed units, milk production could be sufficiently improved the establishment of milk collecting centres could be justified in several of these areas. This would give a great impetus to the producers. The estates could collect the milk produced and transport it at a minimum cost in their vehicles to the collection centres. Thus a viable structure for collecting milk could be established within a short while.

For starting a dairy complex of this nature the villagers should be provided with easy credit facilities with the minimum of delay. At present a few officers are engaged in inspections and follow up work but the work is not satisfactorily carried out. By utilizing the services of livestock officers in the proposed units, loans could be granted within a short period and an effective follow up process could also be carried out.

Thus within a short period increased quantities of milk could be produced and any surplus could be utilized for the manufacture of products like cheese, butter and similar milk foods thus generating employment and saving foreign exchange. Manufacture of cheese and butter could be carried out at a cottage industry level in village houses. These products are manufactured on an organised cottage scale in countries like Denmark, utilizing simple traditional methods. They could be carried out in Sri Lanka

too and the IDB has shown the feasibility of such projects.

Self Financing

In this manner it is possible to establish a mixed farm which could be run as a self financing unit. The services of this unit could also be extended to adjoining villages, as the employment potential is great in this type of project. In areas where plantations are not existent at least 5 acres could be obtained from the lands vested in the government under the property ceiling and a unit established under the guidance of a diploma holder in agriculture. Once such a unit is established it could also help in identifying more projects in the villages and further promote the development of rural areas. Arrangements should be made to run such units on a self-financing basis. The officer-in-charge who should be a diploma holder in agriculture should be resident in the place and he should be provided with accommodation and other facilities on the site. The workers may come from the villages or they could be requested to reside in the premises. They may be paid daily wages as in the plantations and in addition an incentive allowance could be paid. The managerial organisation of the plantations could be adopted on these farms.

While making dairy farming the base, a number of other projects could be inaugurated from this income. In formulating a scheme of this nature it is necessary to have interaction with many agencies. Obtaining imported stocks of cattle, cattle food, land for this purpose, the required capital, the planting of grass, manufacture of various types of milk foods, research on ongoing projects etc. will have to be carried out in liaison with a number of agencies like the Ministry of Plan Implementation, the Ministry of Plantation Industries, the State Plantations Corporation, Janawasama Board, Milk Board, the Livestock Board, People's Bank and Bank of Ceylon, Rubber Research Institute and the Department of Rural Development.

The various roles to be played by the agencies and the targets to be achieved have to be identified and a plan has to be formulated as a first step. It is also necessary to appoint a Committee or an Authority to monitor the working of the

scheme and thereby to pinpoint the drawbacks and lapses.

In the proposed scheme much emphasis was placed on dairy farming because the initial investment on dairy farming could be realized within a short time. Also the farm could be run as an economically viable unit from the income derived from the dairy. However, the mixed farm unit should not be confined to dairy farming.

Home Gardens

Home gardens will play a significant role in the agricultural unit centered around the plantations. Many villagers plant some jak trees, coffee trees, lime etc. to supplement their income. The total production from these home gardens adds upto a fair amount. This type of cultivation is also suitable for conserving the fertility of soil as it does not extract as much nourishment as in monoculture with only. The ancient methods and practices connected with obtaining optimum production could be explored to ascertain whether they have any scientific base.

Another useful product which could be developed is the making of compost manure. Compost manure could be made in every garden. This manure would add to an increase in production and unlike artificial manure it would involve no foreign exchange or other cost and help to maintain greater fertility of the soil.

The necessary seeds for germination could be distributed among the villagers. In addition know-how for growing flowers for export, growing of fruit trees, improved varieties of pepper, coffee, etc., could be imparted to the villagers with the help of these mixed farm units. Another aspect is bee keeping which could yield much income with proper guidance in marketing. Timber resources could also be built up by planting trees like teak, mahogany and tropical pines. Fresh water fishes could be bred in inland lakes providing valuable nourishment and even income to the villagers.

The small holders of tea and rubber could be helped by providing seeds and planting material of high quality and they could be directed regarding the intricacies of obtaining bank loans, advanced methods of cultivation etc. A better income from cultivation could be obtained for instance by centralising their production of sheet rubber and enabling them to make

optimum use of modern techniques.

The dearth of qualified and trained officers could be circumvented with the setting up of units of this type. The leadership necessary for the renaissance of the agricultural sector in the wet zone could be provided through the proposed units.

In carrying out these schemes the participation of voluntary organisations is very necessary. Therefore setting up of rural development societies are important as they could be the main instruments through which the people's participation is harnessed. In development activities co-ordination of the work of village level officers like grama sevakas, field advisers and agricultural instructors is important. They must maintain a constant dialogue and liaison with the centralised unit directing operations.

In a proposal of this nature the organisation of the villagers and educating them in the advantages of such schemes and motivating them are of the utmost importance. In this context deployment of many volunteers would be necessary. The desired results of this scheme lies in the hands of the village level officers, as well as the officers of the Ministries who should integrate with the young energetic volunteers in the villages.

One key element required in such a scheme is the training of village cadres of young persons already involved in voluntary social work in the village in such matters as shramadana, thrift societies, death donation schemes etc. and generally helping the villagers in their needs will be best suited for this purpose. Such persons would have the full confidence of all sections of the community in which they work. They will function as "link-cadres" and could ultimately become the active members of "rural development societies", but would not become officials who often tend to represent a minority of vested interests. These cadres will have to be continually trained and committed to developing the village, and enriching the community through their activities. In the final analysis it is these persons who will have to work resolutely towards the breaking down of estate-village and all other barriers within their areas and on whom would depend the successful integration and enrichment of village life.