

## LAND USE PLANNING AND THE IRDP

Kalaranji Maheswaram

*The IRDP Programme in the Matale District has been used as a base to present this article on Land Use Planning in the IRDP. The author, currently involved in the evaluation of the Matale IRDP Programme presents below the pros and cons in IRD Programmes in relation to Land Use Planning.*

The land available in the Matale district and the breakdown of it in terms of the use it is put to is given in Table 1.

The issues raised for discussion throughout the article stem from the author's observations made on the use of arable land in this district, which has then been widened to cover the use of land at a National level. The objective of this article is also to highlight the vital need of land use planning in economic and agronomic terms for future development. The issues intended to be raised in the paragraphs below are as follows:

- a) The importance of rational use of arable land, in terms of the types of crops grown - the need to have a wider variety of crops grown in a said location - to ensure better returns to the farmer; to be able to respond to changes in market demand; and to introduce a variety of crops that could contribute to the national economy through the sale of its produce in the local and world market at a given point in time.
- b) IRD Programme - with the prime objective to alleviate rural poverty through introducing the rural mass to income generating activities, relating

to land use, especially agricultural - be guided by a planned land use strategy instead of the ad hoc land use patterns currently in use; guided by the criteria, availability of funds to carry out a particular agricultural activity.

- c) The distribution of non-arable land, in the establishment of social and economic infrastructure required for the enhancement of living standards of the rural mass, through an empirical evaluation of its suitability to be used in the establishment of these infrastructure.

Crops, it would enable him to change his crop in short cycles rather than being committed on a longterm basis under a perennial crop.

Minor Export Crops enable the farmer to earn the highest income per unit yield of produce while at the same time the gestation period of these crops stretches over an year.

- b) Under forests, the funds provided by the IRDP is channelled to the Department of Forestry for the planting of forests or reforestation.

The distribution of land under Minor Export Crops in 1980, before the implementation of the IRDP, and in 1986 at

**TABLE 1 DISTRIBUTION OF LAND UNDER MINOR EXPORT CROPS IN THE MATALE DISTRICT (ACRES)**

Year	Cocoa	Coffee	Cinnamon	Cardamon	Pepper	Cloves	Nutmeg
* 1980	14,166	4,311	386	5,085	10,413	707	203
** 1986	9,605	3,773	220	5,085	9,243	1,828	160

\* Highland Crops and Livestock Statistics, 1980. Dept. of Census and Statistics

\*\* Agricultural Statistics of Sri Lanka, 1988. Dept. of Census and Statistics.

The IRD Programmes in the Matale district has directly influenced the use of land;

- a) under Minor Export Crops, by the provision of funds for the subsidy scheme to Minor Export Crop growers. In this instance it could be argued that the subsidy programme was used as an incentive to farmers for cultivating Minor Export Crops. It is the author's perception that if the subsidies were given to the farmer for other short-term crops, other than the perennial Minor Export

the completion of IRDP funding is presented in the table above for comparison.

There is a change in the land distribution under each of the Minor Export Crops which could be attributed mainly to the change in market demand for the produce of these crops which would have reflected in the prices of such produce. The acreage also reflects to an extent the nature of distribution of subsidies among the Minor Export Crops (MECs).

### Background

Land being a limited resource, it is of great importance to ensure the rational use of it. The recent IRD Programmes implemented in the 20 districts, although varying in planning aspects nevertheless, evolve from the same concept of issuing funds for those projects considered relevant and vital in the alleviation of poverty among the rural poor. In order to achieve the above, the emphasis is on income generating activities for the rural poor, to ensure better living standards and quality of living. The income generating activities call for the use of the limited resource, land, in one form or another be it in the establishment of social or economic infrastructure, or industrial and agricultural use, eg. buildings, power stations, water reservoirs, or agriculture or industry. In establi-

LAND UTILIZATION WITHIN AGRICULTURAL HOLDINGS ACCORDING TO THE CENSUS OF AGRICULTURE - 1982		
Land Use	Area in Hectares	Percent
1. Major Plantation Crops, Tea, Rubber, Coconut	798,103	39.7
2. Other Permanent Crops	176,599	8.8
3. Asweddumized Paddy	556,982	27.7
4. Temporary Crops other than Paddy	195,048	9.7
5. Wood and forest land	54,129	2.7
6. Pasture Land	20,097	1.0
7. Cultivable area but not cultivated	91,648	4.6
8. Area under roads and buildings	73,416	3.7
9. Rocky and waste land	40,805	2.1
	2,008,728	100.0

shing any one of the above the use of land is essential.

The issue that is to be discussed is the rational use of this limited resource.

Land, in all instances has to be categorised and evaluated prior to it being committed to a particular need of the rural mass. The current implementation procedures in the IRD Programmes seem to pay less importance to this as it is centered around the concept of alleviation of poverty of the rural population.

Alleviation of poverty at the cost of irrationally committing the land resource is definitely short sighted. eg. The cultivation of MECs in the Matale District, currently, is considered a means which enables farmers to earn a higher income. But, committing homegardens and other available arable land in those areas where the climate and soil permits, to these crops only is a matter to be pondered. The DMEC's efforts to promote the cultivation of MECs is in keeping with the national goals but, minor export crops being perennial crops the commitment of land to these impairs the cultivation of other short-term crops which could be to the farmers advantage as the gestation period for these is minimal and also it enables the farmer to respond to particular market demands—for produce of crops that could be cultivated in a given location—faster. Mixed cropping with ME crops is not always possible as it does not permit the effective growth of other crops—'A National Phenomena'.

The rehabilitation of tanks to promote the cultivation of paddy is another point of focus. The growing of paddy with sufficient water under effective water management practices in most instances, leads to high yields of paddy; thus leading to the attainment of the national target in paddy production. It also could be argued that the same lands used for paddy production under irrigation, if carefully examined could be used for the cultivation of other dry zone crops. eg. vegetables, fruits etc, enabling the maximum potential of the land and location in forms of the types of crops that could be grown.

These alternative crops have to be identified in relation to the climate and soil in each given area. This identification of crops calls for deep and serious empirical evaluation, in relation to their performance in terms of yields in a given climatic and edaphic condition.

Research of the above nature enables

the relevant authorities to build a gene bank of suitable crops on a locational, seasonal and zonal basis. In order to achieve this experts on agriculture, soil and climate should work together.

IRD Programmes being a component of the National Development Programmes should be considered within the Overall Planning Framework. In doing so, the natural resources, land, water etc. have to be allocated for use in keeping with priorities, ie. food, shelter, ecological balance, administration and cultural needs of the rural mass.

Available land, firstly, has to be categorised as arable land and non arable land. Thus broadly divided, the arable land has to be categorised, according to its distribution in the wet, intermediate and dry zones; further, on type of soils and climate and subsequently on the type of crops that could be cultivated. Having identified the crops suitable to be cultivated at each location further study should be made to analyse the economic feasibility of the crops, based on the marketability of the produce locally as well as in foreign markets. The current practice of cultivating for a fluctuating demand, drains the farmer's big and small; initiative and tangible resources leaving him frustrated in the event of his not being able to market his produce resulting from the fall in the demand for the said produce in the local or foreign market. This, eventuality, leaves him burdened with the repayment of loans and as a result paralyzes him from further progress. In a situation of the above nature the small farmer is struck in a manner never to be able to invest labour, capital or land in any other manner, especially in relation to crop cultivation, but resolve to sell his labour, similar to that of the landless wage labourer, working in the fields of those who could still afford to sustain their cultivation with another crop on a daily wage basis or on an ande basis.

#### Land Use Planning

Land use planning is not an area where much emphasis is placed in IRD Programmes.

- a) land is a natural resource which is a vital part of the national resources and limiting the planning of its use within the IRD Programme framework confined to each district, does lead to achievement of national goals— which covers the needs of the whole mass in terms of agricultural produce, goods and services.
- b) the objective of the IRD Programmes is not targeted towards the conserva-

tion and rational use of land, but alleviating poverty of the rural mass.

Therefore it is suggested that a separate unit be responsible in the overall land use planning at a national level and IRD Programmes as well as other development oriented programmes be guided by this unit in the use of land for the achievement of their respective goals, be it alleviation of poverty, income generating activities for women, shelter for homeless. Cultivation of fruits and vegetables for export, construction of factories.

Although, throughout this article the rational use of land has been stressed, it is appreciated that the rational use of land could be attained with due emphasis on the opportunity cost of each of the uses the land is put to. This emphasis on opportunity cost should be applied even in the event of choosing suitable crops for cultivation. The cultivation of one or another type of crop is a choice that should be given to the farmer, with an estimated crop production costs, sales price and marketability of produce of the given crop enabling him to make the choice.

The choice of crop given to the farmer should fall within the broad frame of crops suitable to be grown in a particular location in relation to its soil type and climate. In the event of letting the farmer make a choice of crop he wishes to grow might at certain time be against, his attitude towards the said crop for reasons of tradition, culture, his past experience in cultivating it etc. The selection of a new crop will solely depend on the farmer's initiative to try out the crop, guided by the cost figures and returns offered to him by an expert. It will also depend on the farmer's initiative, intuition and past experience to see the difference, in terms of advantages and disadvantages in choosing a new crop.

The discussion in the above paragraphs are pertinent to the effective use of arable land. The use of land not suitable for crop cultivation can also be categorised accordingly to suit the other needs such as housing, construction of administrative buildings, factories and other social and economic infrastructure in their proximity to cities and towns, elevation and proximity to water ways and highways. An examination of the distribution of land in the Matale district shows that 97.9 percent of the land is utilised in one form or other and of the total land holdings 48.5 percent is under Major Plantation crops and other perma-

25

ment crops. The components, cultivable land but not cultivated, rocky and waste land and certain parts of land under plantation crops- senile plantations- could be considered for future development programmes, under a planned land use strategy.

Having discussed the types of land use and the means of achieving the rational use of land, the argument leads to the effective planning of land use. It is suggested that this be primarily monitored at a national level where the land is identified according to arability, soil, climate and terrain on an islandwide basis, along with the establishment of a gene bank of crops suitable for each location, as previously stated. In sequel with this the land resource will be considered on a district basis with production targets for each one of the crops chosen to be grown at a point in time. In the case of perennial crops, land should be put to use, after serious empirical consideration in relation to opportunity costs and markets of this crop produce over an established period of time.

In order to attain this planning process at a national level body of experts, in all types of land use, soil and climate, should be formed who will spend time solely to study specific areas in soil, climate, terrain, types of crops, construction specialists (roads and building). Due to the shortage of experts, they could be drawn from the existing Government Departments on a part time basis to work as a team. But, certainly, this central body handling land use planning at a national level should not be confined to one Government Department, eg. to the Roads Development Authority or the Dept. of Agriculture but should be directly communicating with the major policy making institution of the nation.

In the event of a body, suggested above, is formulated the planning involved in the IRD Programmes become more simple in terms of the types of activities that should be promoted to alleviate poverty. Unlike in the current situation where assistance is rendered at the request or interest of the mass, through those government agencies that are responsible in the implementation of the said activity. eg. If the national land and planning body has identified locations suitable to grow MEC in the Matale District the IRDP funds will be used to promote the cultivation of MEC only in those areas and not others and similar. If the National Land Use Planning body had identified another crop or crops to be grown in another part of

Matale, IRDP assistance could be channelled to promote the cultivation of either one of those crops in that location and if it is considered that handicrafts or an Agro Industry would help in improving the income of the rural poor the said industry should be

situated in areas where the raw material is available therefore the funding should be concentrated in a particular area.

The ultimate goal of this is to plan the nations development process in keeping with its land availability and suitability to achieve the overall production targets.

#### References

- 1) Voices from the Culture of Silence. The most disadvantaged Groups in Asian Agriculture, Asian and Pacific Development Centre, Kuala Lumpur, 1988.
- 2) Agriculture Statistics of Sri Lanka, 1988, Dept. of Census and Statistics, Ministry of Plan Implementation.
- 3) Highland Crops and Livestock Statistics, 1980, Department of Census and Statistics.
- 4) Strategy without Ideology: Experience of Rural Development in Sri

Lanka. Hiran D Dias and W.P.T. Silva. The Human Settlement Division, Asian Institute of Technology. 1981.

- 5) Landlessness A growing problem by Radha Sinha, Food and Agricultural Organization of the United Nations, Rome 1984. FAO Economic and Social Development Series, No. 28.
- 6) Administration of Rural Development in ASFAN Countries. United Nations, Economic and Social Commission for Asia and the Pacific, 1983.