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NEW STRATEGIES FOR AGRICULTURAL DEVELOPMENT - IMPLICATIONS FOR NATIONAL LEVEL PLANNING

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Introduction

Whatever the importance of food strategies and of basic needs approaches as ends in themselves, the over-riding consideration that faces West Indian agriculture is the identification and articulation of the role of the sector as a means of promoting rapid economic growth. For as long as we refuse to recognise that Caribbean youth will be attracted only to prosperity and modernity in the context of West Indian resources and West Indian cultural patterns, we will not address the conditions for increasing the attractiveness of agriculture to prospective young farmers. If accordingly our plans do not link agricultural development with plans for rapid growth of the overall economy, we will find that the Region will continue to have large net deficits in agricultural trade and an increasing dependence on food imports. In effect, therefore, the emphasis on basic needs and on a food strategy, if only partially conceived, is likely to be misplaced. The plea which I wish to make is that we should see the objective of achieving increasing financial and technological independence as one which must rely very considerably on the agricultural resource base.

There is nothing new about the perspective that I wish to outline. In my view, we need to search for new applications of old strategies. We need to give new emphasis to the technological dimensions of agricultural development and we need to examine social dimensions of agricultural development with greater urgency.

The broader issue in which the strategies for agricultural development should be discussed remains that of increasingly indigenising overall development and not abandoning the strategies for growth and development to the imperatives associated with the current crisis. I need to explain what I mean by that remark. The response which is being recommended for the very acute crisis that faces the developing world, sometimes indicates acceptance of the solution of *privatisation* uncritically. However, an abandonment of planning directed towards achieving increasing financial and economic independence, for the supposed benefits of uncoordinated private sector inflows, will not always provide technological advances nor progressive societal changes.

I stress the importance of societal changes for the reason that some resolution of social contradiction is essential if agriculture is to attract dynamic youth into programmes for the development of the sector. The well-known phenomenon of small and scattered peasant holdings has led to inefficient farming and to the situation where the average age of the farmer is increasing. The better young people are not taking up agriculture. Where the State in Guyana now operates plantations, the social relations between the sugar worker and the State have remained trapped in age-old historical contradictions. Where farmers have attempted to farm collectively to benefit from economics of scale, the technology has rarely been sufficiently productive to afford the

members the expected living standards, and the collectives have either been abandoned or have been operated as subsidiary rather than as main activities. Where farmers have owned small plots but do not have the resources to obtain equipment and to finance their between crop living requirements at levels sufficiently adequate to provide secondary education for their children, small plots have been sold to larger farmers and the exploitative conditions that gave rise to the need for some equitable distribution of land, return to the rural areas. These are the pressing social issues in rural agriculture that are centuries old. They cannot be solved in isolation from the overall development plans of the country. In fact, the difficulty that we face in planning is that we have to address these social issues simultaneously with that of deriving surpluses from agriculture for the finance of total development. To put that dilemma another way, we have to solve the basic needs of people at the same time as we satisfy their aspirations for a relatively high standard of living. If we ignore basic needs we intensify poverty. If we provide only basic needs, we lose our best young people to North America.

Links with Development in the Other Sectors and with Other Activities within the Agricultural Sector

The strategy that I would like to suggest for agricultural development is one that emphasizes its links with the other sectors of the economy. Already in Guyana, agriculture is linked with industry by the need to provide raw materials for processing and fabrication. Cotton textile manufacture, for example, is linked with the growing of cotton. The expansion of textile manufacturing to include other forms of fibres will assist in the strengthening of the garment industry and can reinforce the demand for cotton as the industry expands. This suggests that the scale of production does not necessarily reside in the external market for cotton. It can be a function of the external market for textiles. The establishment of a leather tannery and later a boot and shoe factory will provide an internal market for the by-products of beef production. The additional processing of rice into breakfast cereals is under consideration as a private sector activity. The manufacture of boards from sugarcane bagasse, the use of alcohol as a source of energy, the development of a wide range of by-products from sugar - all these represent links with industry and with the provision of energy.

The link between sugar and cattle rearing is an example of the inter connections between activities in the agricultural sector that are important for cheapening production costs. For example, the cost of meat is a function of the cost of producing stock feed. The task of planning these simultaneous developments is not always straight-forward but represents an important approach to improving the prospects of activities in the agricultural sector.

It is my impression, however, that it is not enough to see the investment and development of the agricultural sector only in terms of the needs of the sector. The relationship with investment in other sectors is obviously crucial for the development of the agricultural sector since development of agriculture would respond also to the expansion of incomes within the economy. While in Guyana investment in the agriculture sector for the period 1979-1983 was projected at some 40 percent there was equal stress on investment in infrastructure which comprised about 20 percent, in manufacturing and mining another 20 percent, in the social sector, about 12 percent and another 8 percent in miscellaneous buildings. These facts are emphasized to stress the earlier argument that the total environment needs to be improved if agricultural

development is to be achieved. Access roads have to be build, schools have to be provided in the more remote farming areas, hospitals and health services have to be available if farmers are to be attracted to the more distant rural areas.

Financing of the Investments

The importance of both internal and external sources of finance of these investments needs to be stressed. While external agencies, particularly the multi-lateral financial institutions provide necessary assistance, the country has to rely also on internal sources of finance for the execution of the investment programme. This is an area of major weakness at present when the terms of trade of the major commodities are declining.

Some indication of the acreages used for various crops will indicate the likely financing contribution of each. Rice occupies most of the agricultural land and, at present, some 55 percent of the total acreage available is cultivated under rice, about 30 percent is under sugar and about 15 percent under other crops. However, recovery of finance from these activities for general development is extremely low. Although activities in the agricultural sector generate about 25 percent of the Gross Domestic Product (GDP), employment in the agricultural sector, measured admittedly, by very crude methods, is estimated at nearly 40 percent. In fact, this relatively low return to labour obtains in a sector which is highly capital intensive, particularly in the rice sub-sector where land preparation and harvesting are accomplished almost entirely by machine. In this situation owners of machines do appear to be earning positive returns from equipment that is not used all the year round but that is lying idle for long periods during the year. The relatively low value added therefore must be reflected in a very uneven distribution of incomes in the agricultural sector. The tendency to capital intensity would protect the owners of machines during declines in the commodity terms of trade but further aggravate the plight of those who do not own equipment. The potential for their accumulation of capital to own equipment is indeed very small.

The reasons for the relatively low returns are those to which we have already alluded. They inhere in the small sizes of farms and in the inadequate tillage methods that many farmers have adopted.

From a recent farm household survey it has been estimated that close to 90 percent of the farms are under 25 acres in size and about 60 percent are under 10 acres. The following table summarises the distribution of farms by different sizes:

<i>Size of Farm (acres)</i>	<i>No. of Households</i>	<i>Percentage Each Group</i>	<i>Cumulative Percentage</i>
Less than 2.5	6,167	25.1	25.1
2.5 - 9.9	8,674	35.3	60.4
10.0 - 24.9	6,978	28.4	88.8
25.0 - 49.9	1,597	6.5	95.3
59.0 and over	1,155	4.7	100.0
TOTAL	24,571	100.0	

It is of some interest to note that a relatively high proportion of these farmers own the lands. Of the average of 16 acres per household almost 55 percent own their plots. The distribution is as follows:

	Acres	Percent
Owned	8.7	54.4
Long term leases	5.6	35.2
Short term leases	1.5	9.4
Other tenancies	0.7	0.7
TOTAL	15.9	100.0

On these small farms annual incomes of households and of each person are relatively small. These are set out below in the following table:

Income per Caput (G\$)	No. of Households in Income Group	% of Households in Income Group	Cumulative Percentage
0 - 49	4,420	18.0	18.0
50 - 149	2,590	10.5	28.5
150 - 299	3,840	15.6	44.1
300 - 599	5,549	22.6	66.7
600 - 899	3,161	12.9	79.6
900 - 1499	3,109	12.7	92.3
1500- 2999	1,463	6.0	98.3
3000 & over	439	1.8	100.0
TOTAL	24,571	100.0	

Clearly these income levels are in many instances unsustainable. Far from providing surpluses for internal financing of the capital investment programme, the farmers need subsidies if they are to subsist at some sustainable level of income. Since there are no such subsidies available, farmers seek other sources of income in addition to farming. The data indicate that more than three-fifths of the income of rural farm households come from sources other than their own farms. These data are as follows:

Size of Farm (acres)	Proportion of Households	Source of Net Income (G\$)			
		Farm	Off-Farm	Total	% Farm
Less than 2.5	25.1	592	3,135	3,727	15.9
2.5 - 4.9	15.3	470	2,221	2,691	17.5
5.0 - 9.9	20.0	603	2,178	2,780	21.7
10.0 - 14.9	13.8	868	1,685	2,554	33.9
15.0 - 24.9	14.6	2,538	1,653	4,191	60.6
25.0 - 49.9	6.5	1,855	1,666	3,521	52.7
50 and over	4.7	5,014	1,517	6,531	76.8

While there is a very strong correlation between farm size and proportion of income earned from farming, there are other factors such as type of farming, location, water control, proximity of household to farms, operating efficiency and farm management which affect the proportion of income which a farmer gets from his farm.

These data merely emphasize the difficulty which is faced in relation to recovery of surpluses from farming for the finance of the investment programme. Even rates for maintaining drainage and irrigation systems are not collected. Hence drainage and irrigation systems are not maintained and production efficiency spirals cumulatively downward.

These dilemmas place a very heavy reliance on external sources for finance. Such reliance is justified only if it can be associated with the task of changing the structure of agricultural production so that it can be more efficient.

Changing the Agricultural Environment

The ownership structure which has given rise to such weak internal financing needs definitely to be changed. The large plantations should be reduced while the small scattered strips should be consolidated to provide holdings that will permit full time farming since it is clear that agriculture in the Caribbean will not develop until farming is a full time activity that will attract our best youth.

In Guyana, there is no doubt that the arrangement which divorces the farmer's holdings from his homestead needs to be changed so that better farm husbandry can be pursued.

Even though it is clear that these major structural changes should be pursued, the precise forms that should be fashioned are not easily decided. Shall we allow the large plantation holdings to remain and improve the social relations by turning them into cooperatives? Shall we decide to strengthen the peasantry by consolidating holdings and change the physical configuration of the rural environment by moving homesteads away from the present clusters so that such homesteads can be nearer their farms?

Social planners prefer to lower the cost of providing social services by encouraging the growth of communities in clusters. Others who are concerned with the need to raise the productivity of agriculture, wish to see farmers living nearer or on their farms. To move to the latter arrangement implies a major structural change not only physically but in our concept of social relations and also in our inheritance laws.

There are perhaps several answers to the combination of farming efficiency and improving communal relations. The answers depend on the nature of the societies that we find in the rural areas and on the planned linkages between farming and industrial and other activities.

What do we mean by the nature of the societies? In Guyana, rural societies differ in their social relations. Some which are Amerindian still bear features of tribalism that provide the basis for collective farming as long as the traditional hierarchical relationships of the leaders to the people are sufficiently flexible to permit the introduction of modern farming and processing and other industrial technology. In other rural communities, there are strong kinship ties that can be fostered to develop cooperatives that can permit farming on separate plots while linking the farms into cooperatives for the provision of common services relating to machine pools, common input purchasing arrangements, common laboratory and seed testing facilities, and common marketing arrangements. None of these will become a permanent feature of the rural environment if rural farming is not linked with rural processing and other forms of industry in which the farmers have a stake. This is the element of agricultural development strategy that I think is most crucial and on which attention needs to be focused even though we are at the same time concerned with food strategies and are placing emphasis on basic needs.

If there were sufficient imaginativeness and financial capability in our agricultural development strategy we would pursue the vision of a rural community based say, on sugarcane in which cane sugar would be a by-product of other activities. By changing the processing technology, it would be possible for sugarcane processing to produce simultaneously bagasse particle board, cattle fodder, cane sugar and alcohol to name only a few of the wide range of products that new processing technologies can make available. The social relations that can be associated with such diversity of output include collective as well as individual ownership of the cattle rearing and other livestock activities. What would seem to be ideal in these rural arrangements is the cooperative ownership of the dairy processing facilities and those factories processing sugarcane into its many products.

If the rural environment is to be transformed in this way, it would seem to permit a variety of more efficient farm holdings, ranging from separate homestead plots where farmers are linked to the community by good access roads, to more collective arrangements where kinship and other social bonds permit efficient joint action. Already joint and collective activity has become a dominant feature of those Rastafarians who take farming seriously and who may be persuaded to diversify into a wide range of crops.

It is clear that the rural community such as I have been outlining will require a wide range of top level skills for the efficient functioning of the many diverse activities that such a community will be pursuing - from top flight mechanical engineering to biochemistry, to good management, to leadership that can provide social entertainment for a vibrant community. To my mind, this is the main form of agricultural development that will attract bright young people from the rural areas. By giving emphasis over time to joint activities of crop and livestock as well as the processing of commodities, the approach will provide the dynamism that will raise agriculture productivity and thus close the food import gap. It is my view that in most parts of the Caribbean this is the best route for growth in the agricultural sector. It is quite likely that we will continue to lament on the failure to close the food import gap until these more integrated strategies are used. This could provide the basis of what I referred to at the very start of this paper as prosperity and modernity in the context of West Indian resources and West Indian cultural patterns.

The obvious deficiency in my presentation is that I do not indicate where the finance should come from. Clearly my earlier analysis does not indicate that the finance can be generated from internal sources and that it is obvious that such money needs to come from external sources. Clearly also, we are talking here of relatively large amounts of finance over long periods of time. All of the money is not required immediately. What is required at the beginning is an acceptance of the need to apply our best inter-disciplinary skills to work with communities to evolve new patterns of agriculture. As these change, finance would be required for investment in land reform, land improvement, access roads, marketing facilities, machine pools and the like. As the production expands, investment in processing facilities will become necessary. These are options that our rural communities ought to find advantageous for the retention of their better youth and for reducing the drift to the cities. Why should we not exercise our intellects on these possibilities instead of being resigned in our choice of options to naked external privatisation? The developed world has slack resources that can be applied to providing the skills and equipment for this kind of

development. The options in the rural community do not exclude privatisation either. The difference is that some privatisation is functional to developing our youth in the places where they were born and some is patently dysfunctional. Should we not at this stage advance the case for functionality in respect of our societies rather than abjectly surrender to dysfunctionality? The implications for the representations that we make for bilateral and multi-lateral assistance would vary quite considerably.

The Stress on Productivity

At all levels of planning agricultural development, there is increasing need to put stress on the raising of productivity as the major means of augmenting internal financial resources and of making those financial resources more easily available for the finance of further total development. This is an aspect of agricultural development planning that we must always continue to consider. There are simplistic approaches that either excluded the possibility of taxing agriculture to finance development or advocate rather heavy handed taxation of agriculture to finance the development of manufacturing industry. Enough has been said in so many places to indicate that there is such diversity in agricultural activity that some farms can bear taxation while others require subsidy. In effect, the greater mobilisation of resources from agriculture is associated with increasing the prosperity of the farmer.

It is that fact which makes it so necessary to sharply raise farming productivity per acre. In many instances, advocates of agricultural development in Guyana have advanced the argument that production can be increased at least cost by increasing the land under cultivation and that there was no need to put too much stress on raising yields per acre. That approach does not give adequate consideration to the structure of the farming environment which makes it so difficult to raise internal financing. Since, in addition, investment in farming improvement is usually a function of private profitability, it is important to cheapen costs by raising yields. These are dimensions that relate to farm management which depend on the quality of our extension services and the direction of our research.

Much of what is required in these areas is not new strategy nor even new knowledge. The innovations are required more in the patience with which we deliver extension services and in the adequate grasp of the social factors that have to be understood if farming is to be prosperous.