AGRICULTURAL TRANSFORMATION IN A PLANTATION ECONOMY

A Contribution to the Discussion by Lloyd Best*

Need for a Macro-Model of a Plantation Economy

The problem of agricultural transformation needs to be located within a macro-economic model which embraces the forces impinging on particular units of production. The individual farmer is not operating in a vacuum. He faces particular market forms and identifiable conditions of supply and demand. His perception of investment opportunities and his ability to calculate risk and potential profits depend on the "state of the trade", and on the changes being introduced by developments in the external economy, by government action, and by the action of other operators in the field as well as by himself. To understand his behaviour and its effects on transformation, we must place him in the context which describes the relevant facts of life for him.

The macro-economic model implicit in the neo-classical theory of the firm (and of consumer behaviour) is not suitable for our purpose. Assumed in this model are markets permitting automatic adjustment through perfectly competitive markets. Besides, there are unstated assumptions regarding the forms in which entrepreneurship appears, the manner in which technical progress is introduced and taste formed, the avenues through which capital becomes available for accumulation, and the role of the state.

These assumptions more or less describe the conditions which existed in Europe in the phase of "mature metropolitan industrialization" during the middle of the nineteenth century. They no longer hold even for the economies of the North Atlantic countries today and much less so for the contemporary Caribbean.

The macro-model required on this occasion has to be explicit about the conditions under which Caribbean farmers actually operate. For the purpose it is being suggested that a model of "a plantation economy further modified" is called for.

Such a model describes the legacy of structures which has been inherited from the plantation past and the process of modification taking place as a result of new activities and new policies adopted on the postwar period. When the "pure sugar plantation economy" broke down at the beginning of the nineteenth century, the economic system adjusted by introducing "minor staples" (cocoa, citrus, coffee, bananas, cotton, spices) and by developing a 'residentiary' section producing variegated small manufacturing service and particularly agricultural outputs for home consumption. In the event the combination of the legacy and the adjustments failed to produce transformation. "Plantation Economy Modified" proved unviable and broke down in the 1930's. This has forced the current adjustments by means of industrialisation (manufacturing and tourism), planned transformation of domestic agriculture, and active participation by the public sector.

Elements of a Plantation Economy Further Modified

In the limited time and space available, it is not here possible to set out a model of "plantation economy further modified". Yet a survey of the elements may be indicative of the possibilities. Five are mentioned.

(1) Plantation economy is *passively* not *actively* incorporated into the international economy. It does not satisfy the assumptions of the pure theory of international trade. It does not import in order to complement domestic supply. Its raison d'etre is to provide staples. *It imports in order to export.* To this end, its monetary, fiscal, commercial and educational systems are all well adapted.

(2) The traditional export sector is organised by "total institutions" tied to metropolitan units of enterprise and therefore to metropolitan markets. These institutions are only incidentally interested in diversification of the domestic economy. They have the option of satisfying their demands from imports and of using their investment funds in other *countries*, as distinct from other *activities* when profit levels become unsatisfactory. The external economies of this mode of adaptation in any case accrue in the metropole where their head offices share in them.

(3) The residentiary sector is a *creation* of the traditional export sector. It is when the latter breaks down and is forced to free labour and other resources that the national economy is born. The economy begins its existence as part of the international economy and is organised through total institutions tied to the metropole. Contrary to the assumptions of development theory the economy is not "dual" in the sense of having metropolitan enclaves surrounded by an ocean of subsistence farms. Transformation does not take place by drawing labour into the modern sector. On the contrary, it takes place by modifying the legacy of plantation structures and attitudes with which the residentiary sector comes into existence.

(4) The process of transformation is therefore a conflict between the inheritance and the attempted adjustments. To the extent that the adjustments themselves reflect inherited attitudes, forces of transformation are themselves contradictory.

* In view of the interest in Lloyd Best's contribution to the discussion copies of his remarks were circulated. The contribution is here reproduced in full.

(5) The legacy of structure is reinforced by the establishment of new export staples, organised along traditional lines (by metropolitan units of enterprise).

Imperatives of an Economic Analysis

In the light of the above, an economic analysis of transformation under these conditions must be premissed on the following considerations :-

(i) The supply side of the land and labour markets has special features.

(a) Rigidities in the response of land to income opportunities in the residentiary sector. The biases in the infra-structure minimise export risk. Metropolitan ownership and the taste for imports also favour the earning of foreign exchange.

(b) Labour (especially organised labour) bargains harder in the export sector both in respect of the wage rate and in regard to the displacement of job opportunities by mechanisation. In the 19th century (modified plantation economy) the same attitudes expressed themselves in a backward-sloping supply curve of labour, noted by Benham and disputed by Lewis. A related phenomenon noted by M. G. Smith, is the strategic withholding of labour even when this involves unemployment. Finally, wage rates and conditions of work set in the export sector determine the supply price and other minimum conditions of work in other sectors. This phenomenon has been noted by Seers and (unconvincingly) disputed by Brewster. Here, it is enough to note that the markets for labour and land cannot be treated in either Ricardian or Marshallian terms. There is no simple mechanism inducing shifts of factors from one activity to another.

(i i) The infra-structure is biased towards export production: location of the population, education, utilities. Hence the cost of transformation is very high. It also takes time for external economies to accrue to individual innovators in the residentiary sector. The rate of failure is high, dampening diversificatory drives.

(iii) Commodity markets take their character from the fact that the economy is passively incorporated into international trade.

(a) The infra-structure is biased against the extension of territorial and regional commodity markets.

(b) Price levels and tastes are formed by possibilities of importation. Demand for residentiary output is fractured and uncertain. The risk of residentiary investment is therefore high and a bias is introduced towards import substitution via replacement of metropolitan commodities rather than their displacement through new domestic goods. One effect is to facilitate the use of metropolitan capital, entrepreneurship and technology in import replacement thus perpetuating the traditional structures.

(iv) Since the residentiary sector is born out of the traditional export sector, it comes into being without entrepreneurship of the kind needed. Operators have been formed by the habits of wage labour. This governs the perception of investment opportunities. It also places a heavy burden on the public sector under conditions where the cost of transformation is high and where the political system does not allow the state to admit failure and therefore to take risks.

Variants of the Model

The manner in which these elements are to be combined varies from place to place depending on the particular conditions under which pressure for transformation arises. There needs, for example, to be a distinction on the basis of the degree of maturity reached by an individual territorial economy at the time when pure plantation economy broke down. Mature plantation economies like St. Kitts, Antigua and Barbados are quite different from "mixed-plantation" economies like Jamaica (where more land was available for the labour force). New plantation economies like Cuba, Puerto Rico, the Dominican Republic, Trinidad and Demerara are something else again. Clearly, the options open to labour varied somewhat from place to place. Moreover, there needs to be a distinction between territories which have found new staples (Trinidad/petroleum), (Jamaica, Surinam, Guyana/bauxite), those which have found "quasi-staples" (Barbados, Antigua, Puerto Rico, Virgin Islands/tourism), and those which have found no staples (Anguilla). Then the size of the staple sector (big in Trinidad, small in the Dominican Republic), the degree of maturity (still in the "Golden Age" with Jamaican bauxite, already declining in the case of Trinidad petroleum), all have to be taken into account. These determine the actual state of trade, the character of demand, possible supply responses, the amount of manoeuvrability open to the Government, the functioning of the labour market and so on. Yet the general model holds good.

The Problems of Transformation

The problem of transformation in the context of a macro-economic model of this type appears as a clash of forces. The inheritance is forming taste and technology by importation; intervention to transform needs to create domestic demand for residentiary output and to trigger off innovations on the supply side.

Lewis' diagnosis of the problem has led the Caribbean economies into difficulties because it failed to take sufficient account of this conflict. The solution was to promote accumulation in the manufacturing and tourist sectors via temporary borrowing of metropolitan capital, know-how and entrepreneurship. This was expected to create a sufficient number of jobs in the towns to draw labour off the land and thus permit rationalization there. It was expected that incomes and savings would grow enough to create capital for a take-over by local entrepreneurs in the long-run. These results have been frustrated –

(i) by the difficulty of channelling national wage and salary and revenue incomes into investment, and

(i i) by the restriction of locally-exploitable investment opportunities by the bias towards import replacement and, therefore, towards external capital and technology.

Even when prices and profits are good, national entrepreneurs cannot enter in the Ricardian way. Metropolitan investors always get the jump on them because commodity demand is, in the first instance, serviced by imports when incomes rise. This tendency has been reinforced by public "incentive" policy and by the inherited conditions of money and credit. Moreover, the high cost of transformation has made it near impossible for public intervention to help local entrepreneurs to win any real success. **Hence,** transformation remains a major issue and a new strategy is called for.

Notes Towards a New Strategy of Agricultural Transformation

The strategy which suggests itself is one of insulating the economy from metropolitan formation of technology and taste. Conditions must be created for successful intervention by national entrepreneurs. In policy terms this implies an attempt by the government to manage a "disequilibrium system". Export earnings must not be allowed automatically to translate themselves into commodity demand for imports. If imports and exchange controls are employed for this purpose, demand would be forced towards domestic output. Given suitable credit policies, prices and profits in the residentiary sector will rise. Given that slack exists in local production possibilities, local entrepreneurs will get an opening. The system must be kept in a state of chronic shortage with judicious relaxation of import policy in strategic areas and at crucial points of over-inflationary pressure. Fiscal policy must also be brought into play. The smallness of the economies and the heritage of a British Civil Service, both in many other ways a liability, are an asset here. More than most countries, the West Indian public sectors are equipped to manage their economies.

This strategy is extremely necessary in regard to agricultural transformation. Food prices must be allowed to rise so as to force the population to plant every inch of ground and to make the most of all available foods and fruits. It is under these conditions that private initiative will be exercised in plant breeding, new techniques, etc..The pressure will be taken off the public sector, which can then use its Extension Services and its other financial and real resources to break particularly severe bottlenecks. Above all, the shift in the structure of prices will expose the land constraint on the expansion of local output where it exists. Staple interests will be brought under scrutiny and forced to justify their claims on national assets. Political conditions for a rationalization of sugar will be created by economic means.

The strategy needs to be adopted while preferences last. The restriction of imports will, of course, mean building-up external assets and it is precisely these assets which will be available when, later, a structural change in the staple sector brings a fall in export earning capacity. The real restraint on this strategy is not so much a technical one. It is that the governing classes will suffer most from rising domestic prices; correspondingly, the peasants and little men who will be forced to adjust by *producing* from their own resources will gain. Money wage and salary incomes of civil servants and organised labour will be worth less. Moreover, these governing classes have misjudged the capacity of the working population to avert disaster by innovating and changing the conditions of supply. This is a view which is justified by a study of Caribbean history. When the pure plantation economy broke down, as Lewis has pointed out, it was the former wage labour class which found possibilities to diversify and save the day when the planter class could see only limitations.

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