"Rethinking Caribbean Agriculture Re-evaluating Lewis's Misunderstood Perspective"*

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Abstract

In 1950 Arthur Lewis published an article which in hindsight bore the unfortunate title “The Industrialization of the British West Indies”. The title was unfortunate because Lewis never saw economic development in terms of the growth of one sector as against another. For “those who speak as if the choice in the West Indies lay between agricultural . . . and industrial development have failed completely to understand the problem (1950; 843). It is arguable that the English-speaking Caribbean has, as a whole, failed to understand the manner in which agriculture needed to be developed in the second half of the twentieth century. During this time Lewis offered an alternative path for agriculture within the region. This paper reviews the ideas that he offered and comments on the extent to which his perspective continues to provide useful insights at a moment in which the international food economy has once more been destabilized.

Introduction

W. Arthur Lewis produced over one hundred scholarly publications in his over five decades as an academic but there are a small number of these for which he is best known. Internationally, his article on “Economic Development with Unlimited Supplies of Labour (1954)” stands out. This is in large part because it formed the bases for what was popularized as the “Lewis Model”. A presentation of which has more often than not been included in development economics text that have been in use since the discipline was established. Elsewhere, I have sought to demonstrate that the “Model fails to capture Lewis’s essential ideas”. I have also suggested that the way in which it has been presented, “has left generations of scholars with the view that Lewis saw industrialization as the key to development and that he underplayed the role of agriculture”. (Figueroa 2004; 746) Within the English-speaking Caribbean, where Lewis was born, he is still largely known in connection with the catch phrase “Industrialization by Invitation” with which Lloyd Best in his words “lampooned (Best 2004; 87)” Lewis’s article: “The Industrialization of the British West Indies (1950)”. This too is unfortunate as the article’s title and even more so Best’s lampoon fail to capture Lewis’s perspective which he outlined clearly.

> There are still people who discuss industrialization as … an *alternative* to agricultural improvement … this approach is without meaning in the West Indian Islands. There is no choice

> … between industry and agriculture. The islands need as large an agriculture as possible … It is not … that agriculture cannot continue to develop if industry is developed … the opposite is true: agriculture cannot be put on to a basis where it will yield a reasonable standard of living unless new jobs are created off the land (1950; 831-2).[1]

In the English-speaking Caribbean, Lewis's perspective is probably somewhat better understood now than it was when I started my detailed study of his work thirty years ago (Figueroa 1993). There certainly has been a revival of interest in his work and as we seek to reflect on what we can learn from him, it is useful to consider the role that agriculture played in his thinking. In what follows, I discuss the centrality of agriculture to his perspective on development; give an indication as to kinds of agricultural policies that he supported in the Caribbean context; and comment on the extent to which policy diverted from his perspective. I then conclude making reference to some lessons that we might draw for the contemporary period in which the sector is once more receiving attention in light of the recent instability manifested in the world market for agricultural commodities.

[1] All unattributed references are to Lewis. Where the work is included in Patrick Emmanuel's collection (1994) of Lewis's papers (EP for short) the reference is to this edition.

Lewis's Emphasis on Agriculture

Shortly after his twentieth birthday, Lewis who was then a student at the London School of Economics draws to the attention of the leadership of the British Labour movement that he had, "recently been doing a not inconsiderable amount of research into the history, government and prospects of the West Indies (Lewis to John Parker 1935-03-12)". Based on this, he offered to provide the New Fabian Research Bureau with a pamphlet on "The British West Indies". The draft (1935) was never published but sections of it were included in later pamphlets (1939, IASB c1938). While working on the draft, which he completed in June 1935, he paid keen attention to policy issues relating to agriculture. In particular, he was torn between supporting "cooperative peasant farming … and large-scale farming (Lewis to Parker 1935-04-10)". [2] Perhaps in an effort to resolve his dilemma he undertook a study on "The Evolution of the Peasantry in the British West Indies (1936)" which he submitted for a student essay competition.

During and after the 1939-1945 war Lewis worked closely with the British Colonial Office serving as member of the Colonial Economic Advisory Committee (CEAC) and the Colonial Economic and Development Council (CEDC). He drafted various memos and made comments on the development plans prepared for many of the colonies. His interventions

[2] The two letters quoted from Lewis to Parker can be found in (CJP 25/1a, 8) and (CJP 25/1a, 6) respectively. The second is quoted in Ken Post (1978; 345).

were consistent with the view that “agricultural development is of prime importance, and especially increased food production” and that “Agricultural and industrial development usually go hand in hand”. (1944; 2, 10) In meetings held during 1946 to discuss development plans including those of Gambia, Mauritius, and Tanganyika, Lewis tried to ensure that there was “the provision of means for increasing productivity of its peasant farmers”. As he felt that “the desired improvements in ... the … economic position … could not be achieved” without the appropriate actions being taken “to increase the individual productivity of the peasant farmer.” (PRO CO999/1) As he noted at a later meeting, “Inadequate attention was being paid to peasant agriculture (Minutes 1948-06-28 CEDC; 8 in PRO CO999/2)”.

In his published work Lewis adopted the same stance. “A great increase in agricultural production in the colonial empire … From the point of view of the colonial peoples … is a *sine qua non* of better living (1949; 1179).” “To raise agricultural yield per acre, all over the world, must be one of the major objectives of the next half century (1951; 1204)”. Above I have quoted from Lewis on “Industrialization of the British West Indies” which came out in the Caribbean Economic Review. It is not widely known that in the following year he published an article in the same journal dealing with “Issues in Land Settlement Policy (1951a)”. In which he takes a position on the question on which he had vacillated since he started writing on

agriculture in (1935). In (1954a) he also provides “Thoughts on Land Settlement”.

He made himself unpopular with the nationalist leadership in the Gold Coast (Ghana) for indicating that the “[n]umber one priority” for that country was a “concerted attack on the system of growing food, so as to get in motion an ever increasing productivity. This is the way to provide the market, the capital and the labour for industrialization (1953; 22).” They would have been more comfortable hearing about heavy industry given their acquaintance with the Soviet perspective. He was, however, undaunted in his commitment that “Agricultural output should everywhere be pushed with vigour (1953a; 1677)”.

> “Japan shows that … government … can have spectacular effects on the output of peasants … and that agriculture … can be … a leader … But … governments … … neglected peasant agriculture, with the result that its failure to expand … kept down growth in other sectors (1955; 279).” “In Africa and Asia three-quarters of the people are engaged in agriculture on a small-scale … To increase the output of these people is the fundamental problem of economic development (1962; 1816-7).” “The most obvious feature of … development in the West has been urbanization and industrialization. It took some time to

realize that this was made possible only by an equally profound revolution in agriculture (1962; 1820)".

Throughout the period of rapid decolonization in the 1960s and the subsequent debates between the "North and South" in the 1970s, Lewis continued to draw attention to the importance of agriculture. "The sector to which the government initiatives could contribute the most is agriculture … [It] has … been the most neglected (1965; 1876)." "It is desirable to increase agricultural productivity irrespective of whether a country will be a net importer or net exporter of agricultural products (1967; 474)". In his first address as President of the Caribbean Development Bank (CDB) he states that, "Our agriculture cannot survive … unless it revolutionizes its structure … Our Bank must do everything to support this agricultural revolution (1971; 1474)". Writing on the Bank he notes that, "Part of our problem is that in most of our LDC's the public has already accepted the idea that agriculture is doomed (1972; 1922)". He also wrote that, "Agricultural prosperity is an essential part of any programme of reducing the growth of urban unemployment (1972b; 1953)" which for him remained such "an agonizing human problem … that … No one deserves human happiness while this condition lasts (1972c; 1484)."

Despite the forgoing his clearest statements on the centrality of the agricultural sector were yet to come. "The modernization of agriculture is at

the core of the development process (1973; 1986).” “The most important item on the agenda of development is to transform the food sector … The principal cause of the poverty of the developing countries … is that half of their labour force (more or less) produces food at very low productivity levels (1977; 75-6) .” “Agriculture … has been the weakest link in the development chain (1979; 736).” “The Third World’s failure with agriculture has been mainly at the political level, in a system where the small cultivator carries little political weight (1984; 128).”

Lewis’s Conceptual Framework for Agricultural Policy

To understand Lewis’s perspective on agricultural policy, it is necessary to take note of the distinctions that he used. Lewis worked with a series of dichotomies that included: over populated-under populated; developed-underdeveloped; temperate-tropical; dry tropics-wet tropics; peasant-plantation, and commercial-subsistence. As can be noted from the quotations above he discusses the role of agriculture in developed as well as under developed countries. With respect to the former he analysed the different paths that different developed countries had taken as a result of the agricultural policy they pursued. His general discussions on matters such as balanced growth were relevant to both developed and underdeveloped countries but I only focus on the latter group.

Readers unfamiliar with Lewis's historical analysis may wish to refer to his "The Evolution of the International Economic Order (1977)" where he makes clear the significance between the European colonies of temperate and tropical settlement. His temperate-tropical distinction is both geographical and historical. This distinction relates to the nature of the agricultural commodities produced and the unequal exchange between the two zones based on differences with respect to their insertion into the global trading system. Given the significance he place on advances in agricultural productivity, Lewis was particularly concerned regarding the dry tropics. In his view, rapid growth in these areas was unlikely without a resolution of the technical problems relating to agriculture in arid zones (1979; 739). The dry tropics therefore posed significant problems for development. In contrast he was far more optimistic with respect to the wet tropics which include the countries of the Caribbean.

The most important distinction in understanding his policy perspective as it relates to agriculture is that which he makes between over populated and under populated regions. With the exception of Belize and potentially Guyana[3] the countries of the English-speaking Caribbean were generally

[3] Lewis's view on the Caribbean as an over populated region evolved. He initially contrasted Barbados with "a colony like Jamaica, where land is plentiful in relation to labour (1936; 40)". He subsequently contrasts Barbados and "British Guiana with its abundant spaces (1938; 10) but he later spends some time to show that British Guiana also would "soon have a population problem, in the sense that population will press upon the

over populated. Although agricultural development was seen by Lewis as important to both types of countries their paths towards agricultural development would have to be different. The main difference being that over populated countries needed to find a way to reduce the number of persons on the land while using it more intensively. Here “the objective is to maximize the output per acre of land”. Under populated countries still have vacant land that can be occupied. It is important to improve agricultural technique but it is still possible to increase agricultural output by encompassing more land. Here “the objective is to maximize output per man” (1951a; 1223).

Within the Caribbean the peasant-plantation dichotomy was important for analysing the difference between countries and their histories. It was also important within particular countries such as Jamaica and Guyana where both sectors were well represented. When Lewis started writing, vast areas of the world were dominated by the subsistence peasantry. Much of his writing is global in sweep with a focus on Africa and Asia where small farming was far more dominant than it was in the Caribbean and where such farmers were generally less involved in commercial agriculture than the Caribbean peasantry. This needs to be borne in mind in interpreting his perspective as it related to the Caribbean.

coastal strip (1950; 839)”. Only if there was as significant change in land usage could Guyana become a genuinely under populated country.

Agriculture in Lewis's Theory

In his famed article of (1954) Lewis presents a closed national model and an open world economy model.[4] Each of these provides different types of insights. It is in many ways unfortunate that the first model was presented in much greater detail and for this and other reasons was the one which was seized upon by Ranis and Fei[5] and adsorbed into the cannon of development economics. I say this because the second, open, world economy model is far more central to Lewis's thinking and connects more closely with the work that he produces during his later career. Lewis was interested in big questions and the open model was about the global economy. It contains the kernel of Lewis's assessment as to why the tropical world was poor and what needed to be done to make it an equal partner in the international economy. This is a goal to which he dedicated himself tirelessly. The central idea that he presents in (1954) on the tropical world and on which he elaborates in (1969) is a very simple and is alluded to in the second half of the quote from (1977) above.

[4] For a full discussion of Lewis's models as opposed to the "Lewis Model" see Figueroa (2004).

[5] Gustav Ranis and John Fei whose main contributions are to be found in Ranis and Fei (1961) and Fei and Ranis (1963, 1964) are in many ways responsible for the creation of the "Lewis Model" as it came to be discussed within the mainstream of Development Economics.

There are a few important episodes that were crucial to the construction of the world economy as Lewis came to see it during the twentieth century. The eighteenth century industrial revolution in Britain which resulted in the original “developed” economy can be seen as the template for the closed model. This was of great interest as it provided lessons for countries that wish to follow but of greater interest to a native of the tropics were the happenings of the nineteenth century. The transformation of transportation technologies fundamentally changed commerce and along with it came what Lewis identified as the two great migrations (see 1977; 14ff). The first involved the movement of 50 million persons from Europe to the countries of temperate settlement and the second was a comparable migration from India and China to the plantation tropics. He identifies these two large-scale movements of people as central to the setting of the terms for subsequent trade. The global economy was able to draw from India and China unlimited supplies of labour to produce tropical plantation products for export. Given the low standard of living available for subsistence farmers in these countries, the plantation owners could pay their labourers low wages and hence the cost of tropical products were low. In contrast the wages of European workers were much higher as they were leaving much better circumstances and hence the price of temperate crops such as wheat, wool and beef were much higher.

His argument is presented in (1954) utilizing a simple Ricardian Model of trade in which two countries both produce two goods where only one is common. The common good is food with the developed country, Germany, producing steel and the underdeveloped country, Brazil, producing coffee. The question is: what will be the relative price of steel and coffee? The answer is that the relative price must be determined by the opportunity cost in terms of food. German has higher wages given its superior productivity per person in food. He also demonstrates that any increase in the productivity of plantation agriculture will benefit the consumer in Germany. The only way to ensure that the prices of tropical products improve is to improve the productivity in the domestic agricultural sector.

In what follows I present the model almost in exactly the same format that Lewis uses (1969; 505). In the table below, Lewis provides an example of "outputs produced per head".

	Steel	Food	Coffee
Germany	3	3	-
Brazil	-	1	1
Guinea	-	0.6	0.9

Ignore Guinea for the moment and consider first that only Germany and Brazil are trading. From this it is easy to read the commodity terms of trade as in both country one unit of food must be given up to produce one unit of the other commodity hence:

1 steel = 1 food = 1 coffee

An increase in the productivity in coffee does not help Brazil (save that Brazilians drink coffee) as the terms of trade are locked by the fact that both countries are producing food. A doubling of the productivity in coffee would lead to a halving of the price when traded.

Now let us consider when Guinea enters into coffee production and trade. If the Guinea had the same 1:1 relative productivities in food and coffee nothing would change. In Lewis's example, Guinea produces coffee relatively more cheaply in terms of food. The output per head for coffee is one and a half times the output for food in Guinea. Although Guinea produces coffee less productively its entry into the market would drive out Brazil as the terms of trade would now be as set out below. It would no longer be profitable for Brazil to produce coffee as giving up one food would allow it to purchase 1.5 units of coffee. (Recall that transport and other transaction costs are always ignored in these simple models.)

1 steel = 1 food = 1.5 coffee

The factoral terms of trade, which measure how much the inputs get paid in each country, depend on the relative productivities in food. In the first case we would have:

1 German wage = 3 Brazilian wage

With the entry of Guinea into the market we would then have:

1 German wage = 5 Guinea wages

Note Guinea's entry into the market represents a relative decline in the productivity of tropical labour within the domestic agricultural sector. This would also come about if Germany increased its agricultural productivity more rapidly than its tropical partner. Dynamizing Lewis's model we see that the tropical countries started at a disadvantage in trading with the temperate zone base on the low standard of living of their labour recruits. As the temperate economies were able to improve productivity within the food producing sector at a more rapid rate than that achieved by the tropical countries the gap widened.

In his various discussions of the relationship between industry and agriculture in development, Lewis provides many arguments as to why agriculture needs to be developed along with manufacturing in a balanced way. All of these point to the importance that he placed on agricultural development. Space does not permit me to outline the range of arguments that he provides, some of which are quite technical.[6] For the purpose of this

[6] For example, he discusses the role of agricultural development in reducing population growth (1951; 1205), rural urban drift and hence urban unemployment (1972b; 1953). He shows how growth in agriculture helps to prevent pressure on BOP and facilitate the growth of other domestic sectors (1973; 1985). He also provides historical examples where the failure of agriculture led to stagnation in the growth of the manufacturing sector (1960; 1275-6).

study the central argument presented above is enough as it makes it quite clear that once the tropical countries continue to face competition from each other, the prices of commodities that they produce and sell abroad will be tied to the low standard of living of their domestic agricultural population. It is not what tropical countries produce or necessarily how productively they are in producing the specialized exports that is important (1976; 2051). Their future depends on the relative productivity of the food producing sector of the tropical countries as a group. The centrepiece of development strategy must therefore focus on the advancement in the productivity of the domestic agricultural sector as this ultimately determines the terms on which the tropical countries share in the wealth of the global economy.

Lewis and Agricultural Policy in the Caribbean

There were aspects of agricultural policy that Lewis would he have seen as applicable to the full range of tropical and indeed many temperate cases. This is because he felt that all countries needed to ensure that agriculture was developing at an appropriate rate. Common policy measures would involve for example, the support for research and the application of the latest results from biological sciences and engineering to agriculture. He stressed that ultimately over populated countries such as Britain, Egypt, India, Jamaica and Japan would need to import agricultural products and export manufactures while under populated countries such as Australia,

Canada and the USA would do the opposite. In the former cases, attention to agriculture was important as greater success in this field limited the extent to which they had to compete in the export of manufactures. In the latter cases, attention to agriculture was important to ensure that they obtained the greatest benefit from their natural resource endowments.

As economies develop, agriculture generally sheds labour [7] and contributes to a diminishing fraction of national income. This does not mean that agriculture should be treated as a dying industry; allowed to languish or left behind when it comes to investments in research and development or social overheads and physical infrastructure. The attitude adopted to agriculture is fundamental. The characteristics of the ideal agricultural sector included: 1] it remains global competitive; 2] new techniques are constantly being introduced; 3] these raise labour productivity so quickly that despite an increase in outputs utilizing the same or larger land area it becomes necessary to shed labour. In contrast, a country does not wish to have an agriculture that is slipping on all fronts as it fails to gain the necessary inputs in terms of technology, entrepreneurship, capital, labour, social overheads and physical infrastructure. An agricultural sector that is loosing its global competitiveness and which is only able to produce fewer outputs profitably employing less land and utilizing less labour is making a very poor contribution to the development of a country. One of Lewis's earliest

[7] Lewis stressed that there is initially only a relatively decline in agricultural population (see 1979; 740).

references to West Indian Agriculture suggested that, “its position is attacked by competition from all sides, and, until it reorganises itself completely on more efficient lines, it can hardly hope for a restoration of real prosperity (1935; 29)”. Despite his efforts this trend continued throughout his life and continues to this day.

Given the geographical conditions a country faces, it may be necessary over time to reduce the area utilized for agriculture but whatever remains must be a quality sector and not one that is waiting to die. Agriculture should not be what you do because you cannot do anything better; it should be something that you seek to do very well. This is why all formulations of the “Lewis Model” that present agriculture as the traditional sector and industry as the modern sector represent a major disservice to Lewis’s ideas and the underdeveloped world. The logic of these formulations is that agriculture is to be replaced, go out of business or at best is given a passive role in development. That is, to do little more than give up labour to sectors that can make better use of it. Lewis’s distinction was between the subsistence sector, which had large agricultural but also non agricultural elements such as “handicraft workers, petty traders, domestic and casual workers (1962; 1807)” and the capitalist sector which could include highly productive manufacturing, mining, agricultural and service elements (tourism and hospitality for example). He was therefore not in favour of the elimination of the agricultural sector. He was in favour of the elimination of

low productive sectors; including subsistence agriculture which was to be replaced by a highly productive commercial agricultural sector. In the Caribbean case, the subsistence sector remained largely un-transformed and the commercial sector for the most part remained uncompetitive leading to the decline of both.

The need to ensure that agriculture was getting the best possible technical inputs holds for all situations but Lewis did not see agriculture only in technical terms. He was very conscious of the social relations in agriculture. When Lewis was developing his views on agriculture in the tropical world it was dominated by subsistence peasant production in many of the areas on which he focused his attention. For most of Asia and Africa, Lewis suggested that the agricultural revolution depended primarily on bringing new knowledge to the peasantry. If this was done he saw no difficulty in meeting the required growth targets in agriculture. In the Caribbean there was a sharp demarcation between peasant and plantation agriculture. In this context, Lewis struggled to come up with an appropriate policy and vacillated between the two alternatives that he posed when he began to confront the choice between peasant and large-scale agriculture (see quote from Lewis to Parker 1935-04-10 above).

Influenced by prevailing socialist ideas regarding the benefits of collectivization he initially came down on the side of large-scale publicly

owned agricultural enterprises although the achievements of the peasantry had impressed him sufficiently to leave open the possibility that the Caribbean people may choose to pursue a peasant policy (1935; 30). By the time he had completed his study of the “Evolution of the Peasantry in the British West Indies (1936)” his perspective had shifted in favour of a peasant policy. He maintains this position up to the end of the 1930s. During the 1940s he does not produce a comprehensive statement on this question although he speaks to the need for “some consolidation of holdings to secure a larger average size seems necessary to a higher output”. He also refers to the “agrarian revolution of countries as diverse as Britain and Russia” and questions whether Jamaica should follow the path of “the British, the Russian, the Mexican, or some other model?” (1944a; 612) He subsequently comes down in favour of a peasant policy for all crops except for sugar (1951a). In his writings up to this time, he can be seen to be considering the trade off between the economic benefit to be derived from large-scale operations in terms of a higher level of land productivity as against the social benefits to be derived from a more equitable distribution of land.

For Lewis, the social problems presented by Caribbean agriculture had rough parallels elsewhere in the world. In Asia, for example, there were countries where a small landlord class monopolized the land leading to a situation where political, economic and social power were excessively

concentrated in the hands of a small minority. In the Caribbean, the situation was further complicated by the factor of race. “The plantations are not all owned by whites, but the overlap is sufficiently great to be embarrassing (1951a; 1226).” Elsewhere Lewis notes that the “very uneven distribution of land is not to be explained on any grounds of efficiency; it is simply the heritage of the days of slavery, when that same one per cent owned practically the whole of the land (IASB c1938; 25)”. Lewis urged the Moyne Commission to accept “the recommendation that as far as possible plantations should be dismembered and divided into smaller units suitable for cultivation as peasant holdings (1938; 10)”. About the same time he opined that, “the abolition of slavery should be taken a step further by destroying the economic foundations of slavery, and redistributing the land more equitably (IASB c1938; 25)”. Ultimately, he shared what he suggested was, “The general opinion in the West Indies … that the plantation is inferior to the peasant farm on every count except that of economic efficiency (1951a; 1226)”. Lewis was concerned with economic efficiency but he was also concerned with the consequences for political and social power where the ownership of one of the principal economic resources was in the hands of a small minority especially where this minority was drawn largely from a racial minority group. Caribbean agricultural policy was rarely informed by this consciousness although there were moments when these issues came to the fore as with the case of the Michael Manley government in Jamaica during the 1970s.

If Lewis had been put in charge of agriculture in the Caribbean, I doubt that he would have implemented a policy as radical as the one he proposed in (1951a) but there are a number of points that stand out regarding the perspective that he proposed at that time. The social problems of agriculture led him to suggest that all non sugar agriculture should be in the hands of small and medium farmers. In the case of cane farming he proposed that new forms of mixed enterprises should be developed. In crafting these, he suggests that inspiration could be drawn from models tried in Egypt and Fiji. In the cases that he cited, the crop was tended by individual farmers who occupied large estates under the guidance of a central authority which provide common services including irrigation and ploughing and inputs such as planting material and fertiliser. This approach would have the advantages with respect to technical change. “Large farms can effect rapid improvements, an expert in a similar area of small farms can only persuade, and will never get as good results (1951a; 1228).” At the same time, he suggests that the efficiency gap between peasants and plantations were exaggerated. “If adequate educational and other provision is made, and provide that the units are not too small … peasant agriculture can probably hold its own … except on sugar lands (1951a; 1229)”. It is possible that Lewis exaggerated his support for a peasant policy in order to make a point as there is nothing in his later work that takes as radical a stand. It is therefore important to emphasise that his support for a peasant

policy was contingent on the extent to which peasants could be provided with the necessary land and support services that were required to make them competitive. There is no evidence that small farmers ever received this kind of support on a sustained basis in the English-speaking Caribbean.

Before looking at the complete package of support that Lewis advocated, it is important to understand Lewis's position on land distribution. It was clear that in the appropriate circumstance, Lewis advocated the breaking up of larger estates but of equal importance was the consolidation of small farms. In "The Industrialization of the British West Indies" he provides statistics to show that there were far too many persons on the land. He suggests that "the number engaged in the present acreage must be drastically reduced – it must be something like halved (1950; 830)". "What Jamaica needs is a great increase in the number of 50 to 100 acre farms. Both the great estates and the small-holdings represent uneconomic use of land and both should be pressured (1964; 1461)".[8] Working out the right mix of land holdings and putting in the support that would be required by small and medium farmers was not an easy task. This led Lewis to issue a caution, "small farmers are a powerful lobby, and working out intelligent schemes is going to take a lot of

[8] This estimate for Jamaica is above one previously given for the region as a whole. "What the West Indies needs in more farmers in the twenty to fifty acre class (1951a; 1237)". He later suggests a "range of say 20 to 100 acres (1972; 1918)". Notably, while he was President, the CDB was "lending to the Agricultural Credit Banks for re-lending to farmers with less than 200 acres (1971; 1473)".

time. There should be no rush to acquire more lands until the means of securing the most fruitful development have been ensured (1964; 1461)".

The need to "pressure" small farmers was one of the distinctive aspects of Lewis's proposal for land reform. Many persons think of land reform in terms of taking land from the large land owners and giving it to the small peasants and landless labourers. Even if they consider consolidation of small plots, they usually have in mind a net transfer of land to the small holders. What Lewis suggests is that the Caribbean was so overpopulated that land would have to be transferred from both small and large farmers. Many small farmers would have to come out of agriculture. In some cases the consolidation of small farms would have to be the basis for creating viable medium sized farms. Whereas large landowners may receive land bonds (1972; 1918) as compensation, alternative jobs were to be found to entice the agricultural population into manufacturing and productive services. It is in this sense that, "The creation of new industries is an essential part of a programme for agricultural improvement (1950; 831)".

Thus far I have focused on land but land is not enough. "Indeed several writers now speak not of land reform but of 'the land reform package', to distinguish what they see as good land reform from bad land reform (1979; 737)". To get an idea of some of what Lewis had in mind I quote at length.

> The bases for agricultural progress are well known. The terms on which small farmers hold their lands must be such as to give incentives to effort. Large landowners must not be allowed to hold fertile lands empty while small farmers scrape a living on infertile soils. Money must be spent on research and agricultural extension, to bring knowledge of new seeds, fertilizers and pest and disease control to the farmers. Investment is needed in roads, water and processing facilities (1967; 473)

This was in keeping with the perspective that he adopted early in his career.

> To establish a prosperous peasantry it is necessary not merely to provide land, but also to provide instruction through schools, societies and peasant advisers, to establish peasant banks or cooperative credit societies, and to provide for cooperative processing and marketing of the product. Given these essential institutions, there seems no reason why the West Indian peasant should not learn to utilise the land as capably as the planter (1938; 10)

Lewis also expressed the need for important changes in the structure of the state institutions responsible for agriculture. He was a strong advocate of "Agricultural Engineering – in the sense of pushing land around to create new cultivable areas". He was of the view that the creation of a "Division of

Agricultural Engineering in the Ministry of Agriculture was one of the most important step that the country could take". (1964; 1458) Hence the CDB was "willing to lend … to support … terracing of land, control of water … drainage, irrigation, reclamation and the Land Authority type of function (1971; 1473)". He insisted that agricultural departments cover all technical areas but he was also clear that agriculture development was not just a technical matter. "A complete reorientation … is needed … Technical matters … must be given their true perspective. The head of … department should be a man not primarily … concerned with technical research or the administration of an education service, but devoting his attention to … larger questions of agricultural organisation (1944; 8)." For Lewis, state policy in agriculture needed to be active and tranformatory in a social as well as technical sense but regional agricultural policy did not generally adopt this vision.

Returning to the history of agriculture in the Caribbean, Lewis reminds us that "Whatever its economic merits, a plantation system has disastrous sociological drawbacks (IASB 1938; 7)" "[T]he shadow of the plantation carries with it the touch of serfdom, depriving the labourer of that sense of dignity … which would be his in a society in which property was more widely diffused, and this is a factor most important in debasing mentally and spiritually the West Indian labourer (1938; 7)". Elsewhere he suggests that the, "West Indian worker has a traditional distaste for agricultural

labour, a tradition formed, no doubt by slavery (1950; 855)". This underlines the need to transform the region's outlook on agriculture and connects with the issue of attitude raised in the second paragraph of this section. So long as the approach to agriculture is that it is for persons who are low skill, low intelligence and with no alternative then it is unlikely to prosper.

Lewis suggested that education, as a vehicle for the transfer of knowledge, would need to play an important role in the transformation of agriculture. He discussed education at all levels including the creation of adult education/ mass education movements and development of research institutes within the tropics. The latter would ensure that the teachers were able to teach tropical farmers relevant materials and not misapply ideas and techniques borrowed from the developed temperate world (1949; 1184). Education had the potential to contribute to the enhancement of the productivity of labour in agriculture but it could also have a negative impact on agriculture and rural life more generally by exacerbating the attitudes discussed in the paragraph above. This Lewis saw as primarily a matter of status rather than curriculum (1962a; 2103). It was important to make the curriculum of rural schools as relevant to rural life as possible but this was not enough. If the gap between the status conferred on persons with even a modicum of education was so much more than that conveyed to persons engaged in agriculture and other trades connected to manual work the

effect of education would be to exacerbate the tendency for the youth to leave the countryside.

Lewis frequently refers to this problem especially as it relates to the West African case where young persons who acquired a primary education were crowding into the towns in search of clerical jobs to the detriment of the rural economy (1962a; 2103). If agriculture was not transformed then there was little chance of it attracting the bright young people that it would require. To limit the rural urban drift the, “Expansion of rural education and the modernisation of agriculture should march in step (1966; 1384)”. This involved “building rural schools while simultaneously reforming the agrarian structure so that it can absorb and hold the products of the schools (1969a; 2189)”. Along the same lines, Lewis had drawn to the attention of the Moyne Commission, the recommendations of previous commissions “for improving the facilities for teaching agriculture in the schools (1938; 11)”. Later he made it clear that “our small farmer ought all to have gone to agricultural institutions (1972c; 1493)”. The reforms in the formal education system that Lewis advocated are yet to be implemented in the region. The bias towards academic subjects and the professions remain. “Bright” children still strive to be doctors and lawyers and not agriculturalists.

The other side to Lewis’s proposals for education related to what he termed mass education. He was quite impressed with the early work in agricultural

extension in Jamaica and of the Jamaica Agricultural Society. “There is not a single colony in the whole British colonial empire, with the exception of Jamaica, that has an agricultural extension service anywhere nearly adequate to the job (1949; 1183)”.[9] He wished to extend and deepen this work with an “underlying method … to interest the people in building up something of their own … such a movement spreads like wild fire, and its achievements appear miraculous (1949; 1184)”.

> The key to rapid … development is mass adult education … not just in literacy … but in life - in agriculture, in hygiene, in domestic living, in cultural values, in democratic organisation, in self-help … on the required scale [it] cannot be provided … by extension of government services … it must be by mass employment of the partially qualified … mass education … envisages the Department of Agriculture reaching into every village … demonstrating new techniques on farmers’ holdings, promoting cooperatives, lending seed, fertilisers, improved tools and cattle … using … not only its … staff but … farmers … who,

[9] His admiration for Jamaica probably led him to overstate the extent to which it conformed to his ideals. We can contrast two of his statements from the same document. He suggested that apart from an incomes policy which he saw as “the most important policy required in agriculture … government’s … policy is on the right lines”. He then goes on to “emphasise three features which are crucial to success”. These related to land use issues discussed above. In discussing one of these he notes that, “That over the past fifty years … Jamaica has put vast amounts of time and money … into … people who farm five acres or less. Now it is time to look elsewhere”. (1964; 1457, 1460)

> after participation in … courses, demonstrations and discussions, become … links in a chain reaction that stirs the whole farming community (1948; 1-2).

The other social question that received a great deal of attention from Lewis was the question of leadership. He felt that any plan for agricultural development needed to come to a view as to where to expect “dynamic leadership … how much can Jamaica rely … on private enterprise, and how much pioneering must be done by the state? Her planters have not shown much dynamic quality for a hundred years … Should we rely on them or on the Agricultural Department? (1944a; 610)” This is why Lewis felt that agricultural departments should not just see themselves as technical institutions. “The failure in agriculture is due mainly to political rather than technical factors (1967; 473)”. It is not clear that the question of social leadership was sufficiently problematized in Caribbean economic policy. Lewis was clear that it was necessary to understand the capacities of each social group and where there was no group in the society up to the task the state would need to ensure that the job was done.

In his early writings Lewis placed some importance on the negotiation of trade agreements that would provide improved market conditions for agricultural exports (1935; 32, 1938; 5, IASB c1938; 23, 1939; 45). He even appealed for “increased preferential treatment and grants and loans from

the Imperial Treasury” in support of an immediate and concerted effort to reduce poverty but in doing so he suggested that “no one proposes that these islands should live permanently on the charity of Great Britain. It is therefore necessary to discuss what measures can be taken in order to secure that in the long run they may be able to stand permanently and prosperously on their own feet (1938; 3)”. He therefore rejected at an early age the notion of a Caribbean agriculture that would be permanently dependent on preferential treatment. Lewis was less concerned with the commodity terms of trade and did not believe that they “must always move against agriculture … there is no support for this in the historical record (1967; 476)”. As we can note from his theoretical analysis above, his focus was on the factoral terms of trade and when the debate on the New International Economic Order emerged in the 1970s he suggested that if the underdeveloped world could “transform the food sector … we shall automatically have a new international economic order (1977; 75)”. Lewis began to warn the Caribbean that it was facing competitive challenges seventy years ago (1935; 29). During this period there have been many other warnings that underlined the fact that agricultural productivity in the English-speaking Caribbean was lagging behind the competition and or that the region was going to loose its protected markets. During these seven decades agricultural policy failed to use the window of opportunity to bring about the transformation to put agriculture in a competitive position.

In his early writings Lewis calls for “minimum wage machinery (1939; 46)” and other forms of social legislation (1935; 12, IASB c1938; 29) but his emphasis shifts by the mid 1940s. At which time he praises those who tell “the workers that the main cause of their low standard of living is that their productivity is low” and tackles the issue of what can be done given that “the Jamaican price level is too high” (1944a; 606, 616) The following quotes suggest that his view on this remained unchanged for the rest of his life. “Most observers of the West Indian scene have concluded that real wages are too high (1958; 975)”. “Everybody knows that Jamaica’s costs are too high (1964; 1449)”. “Our money costs of production are too high in relation to world prices (1972c; 1484)”. Lewis felt that wages in the agricultural sector had been influenced by the wages paid in sectors that were highly profitable for example the bauxite and oil industries in Jamaica and Trinidad respectively. He also felt that urban wages were having a pull effect on wages in agriculture which were driven by trade union and political pressure. “[I]ndustries of slowly rising productivity keep trying to catch up, through trade union, farmers’ associations, or other political activity (1962; 1808)”.

For him this had meant that the sugar industry itself had produced out of line wages resulting in excessive mechanization and additional unemployment. “In Jamaica the pace has been set … by … mining … paying wages three times as high as any other industry could bear. Before this it

was the sugar industry, mechanizing rapidly, and paying wages which other kinds of agriculture could not afford 1964; 1445)". He demonstrated that, "Machines are not the prime cause of unemployment; they themselves are the result of incomes policy (1964; 1951)". He suggests that "We could discourage all those [innovations] which … reduce employment but ... we would be wiser not to restrict technological improvement (1958; 978)". "Machinery keeps down the costs. If machinery were not used, costs would be higher, output would be still less competitive, and there would be still fewer jobs. So, paradoxically, machinery destroys jobs, but without machinery there would be still fewer jobs at the current level of incomes (1964; 1450)". "We used to be afraid to mechanise for fear of displacing labour. Now … if agriculture does not mechanise, no labour will be made available to it 1972; 1917"

Higher wages outside of agriculture undermined the profitability of the sector and reduced its access to high quality labour. In the Caribbean this was aggravated by the presence of highly developed enclaves. For Lewis there was an alternative approach to the one adopted in the region. "The proper answer to abnormal profits in a particular industry is not wages in that industry, but a system of royalties or taxes which draws the rent element into the public treasury, where it can finance public services, and capital formation (1967a; 1037)." Agriculture has also been undermined by the tendencies of governments to spend more on the towns making them

more attractive. “Wages apart, the capital city also attracts because governments tend to concentrate here an abnormal proportion of their expenditure (1966; 1383)”. “So that the differential in amenities between town and country widens … and the stream of migrants is increased (1979; 739)”.

He regularly discussed ways in which costs could be kept down. He was initially favourable to active devaluation in (1944a; 616ff) but later indicated “why devaluation will not work (1964; 1452)” although he made it clear that “no country can avoid devaluation forever if its economic policies are driving in that direction (1972c; 1489)”. This is especially true with respect to keeping exports competitive as the alternative, “export subsidies … would be expensive … are … resented by other countries … [and] forbidden by international agreements (1964; 1453)”. For domestic production he saw devaluation as less relevant “in order to protect the home market … since such protection can … be given by tariffs and import licensing (1964; 1953)”. Such options are less available in the contemporary world but Lewis held strongly to the view that in conditions of labour surplus the law of comparative costs provided a “valid foundation of arguments for protection (1954; 960)”. This is because “money costs are entirely misleading in economies where there is surplus labour at the ruling wage (1954; 954)”.

In addition to devaluation, tariffs and other trade policy measures, Lewis indicated that the only other two options were “lowering income per head, or by increasing productivity (1972c; 1492)”. With respect to the latter he noted that “our biggest training gap is in agriculture (1972c; 1493)” but bringing about changes in productivity in the short term was something that he had long dismissed. It was not a solution with “practical relevance” as it “sometimes takes years to achieve (even Japan at its most rapid achieved … only 7 per cent per annum)” (1944a; 617). He therefore turned his attention to reducing money costs. Here he placed considerable store on achieving social consensus with a view to implementing an effective incomes policy. For Jamaica he proposed a “National Economic Council” which would seek to bring about a “general public consensus” on matters such as “an incomes policy; matching … domestic costs to world prices; agreeing on … tax burden … land use … protecting manufacturing; and so on (1964; 1469-70)”. In his usual style he suggested that an incomes policy was a “sine qua non” and suggested to his readers that, “if it was not possible, read no further (1964; 1456-7)”.

Lewis’s Agricultural Legacy

There is much that remains relevant that the contemporary Caribbean can adopt from Lewis’s approach to agricultural policy. First among these is the spirit with which he approached the issue. As he often said his mother taught him that “anything they can do we can do too (1985; 2077-8). The

first thing agriculture needs is a can do attitude. There are many successful agricultural enterprises in the Caribbean and their success must be emulated. Agriculture will continue to have a number of subsectors. The goal should be to retain the largest possible globally competitive commercial sector producing for both the home and export market. This would not preclude the retention of a traditional subsistence or mixed farming sector on lands that do not support commercial farming. In addition to which there are many merits to the maintenance of home and institutional garden plots.

The commercial sector is likely to cover a wide range of farm sizes but there is a minimum size for all types of operations and this needs to be kept in mind. State support in the field of trade protection will increasingly have to be limited to anti-dumping measures. At the same time it is important to maintain state support in the field of research, education and extension with a differential approach towards the different sectors. Significant efforts will need to be made to change the traditional view of agriculture as a backward field for persons who cannot do better. A multifaceted policy will have to be adopted to ensure that bright young people are attracted into agriculture. Issues relating to what Lewis refers to as the land reform package have never been resolved in the Caribbean and there are many planning issues to be resolved so as to ensure that the best agricultural lands in some countries do not become the object of real estate development schemes.

References

Best, Lloyd. (2004) “The Lewis Tradition Town and Gown”, The Integrationist, 2, 1, June pp. 78-92.

CJP, Creech Jones Papers, Rhodes House Library, Oxford.

EP, Emmanuel, Patrick. (ed.) (1994) Sir William Arthur Lewis Collected Papers 1941-1988, ISER (Eastern Caribbean), UWI, Barbados in three volumes.

Fei, John and Gustav Ranis. (1963) “Innovation Capital Accumulation and Economic Development”, American Economic Review, 53, 3, June pp. 285-313.

(1964). Development of the Labor Surplus Economy: Theory and Policy, Homewood IL, Richard D. Irwin.

Figueroa, Mark. (1993), “W. Arthur Lewis’s Socioeconomic Analysis and the Development of Industrialization policy in Jamaica 1945-1960”, PhD Thesis, Department of Economics, University of Manchester.

(2004), “W. Arthur Lewis Versus the Lewis Model: Agricultural or Industrial Development?” The Manchester School of Social and Economic Studies, 72, 6, pp. 734-48.

IASB, The International African Service Bureau. (c1938) The West Indies Today, IASB, London.

Lewis, W. Arthur. (1935) “The British West Indies”, typescript, draft of a pamphlet prepared for the Fabian Colonial Bureau, in CJP 25, 1a item 1 and 2. Quotations are taken from the latter version, item 2, which is

dated by the typist 11 June 1935 and has on the cover “17/6/35 Corrected copy”.

(1936) The Evolution of the Peasantry in the British West Indies, photocopy of a typescript in Main Library, UWI, Mona.

(1938) “Memorandum of Evidence to the West India Royal Commission”, in CO950/5c Public Records Office London.

(1939) Labour in the West Indies the Birth of Workers’ Movement, first published by Fabian Society (1939), New Beacon Books edition (1977).

(1944) “Colonial Economic Development”, Draft Report to the Colonial Economic Advisory Committee Agenda Subcommittee, C.E.A.C. (Agenda) (44) 7 in CO990/7 Public Records Office London.

(1944a) “An Economic Plan for Jamaica”, Agenda, 3, 4, November pp. 154-63 (EP; 604-22).

(1948) “Principles of Development Planning”, Memorandum to the Colonial Economic and Development Council in Fabian Colonial Bureau Papers, Rhodes House Library, Oxford, 67/2.

(1949) “Developing Colonial Agriculture” Three Banks Review, No. 2, June pp. 3-21 (EP; 1179-98).

(1950) “The Industrialization of the British West Indies”, Caribbean Economic Review, 2, 1, May pp. 1-61 (EP; 824-99).

(1951) “Food and Raw Materials”, District Bank Review, No. 99, September pp. 1-11 (EP; 1199-1210).

(1951a) “Issues in Land Settlement Policy”, Caribbean Economic Review, 3, 1 & 2, October pp. 58-92 (EP; 1211-55).

(1953) Report on Industrialization and the Gold Coast, Government Printer, Accra.

(1953a) “United Nations Primer for Development; A Comment”, Quarterly Journal of Economics, 67, 2, May pp. 267-75 (EP; 1671-83).

(1954) “Economic Development with Unlimited Supplies of labour”, The Manchester School, 22, 2, May pp. 139-91 (EP; 900-60).

(1954a) “Thoughts on Land Settlement”, Journal of Agricultural Economics, 11, 1, June pp. 3-19 (EP; 1256-72).

(1955) Theory of Economic Growth, Allen and Unwin, London.

(1958) “Employment Policy in an Underdeveloped Area”, Social and Economic Studies, 7, 3, September pp. 42-54 (EP; 961-81).

(1960) “The Shifting Fortunes of Agriculture: The General Setting”, Proceedings of the 10 International Conference of Agricultural Economists, 1958, Oxford University Press, Oxford pp. 27-34. (EP; 1273-83).

(1962) “Economic Problems of Development”, in Lester B. Pearson (ed.) (1962) Restless Nations: A Study of World Tensions and Development, Dodd, Mead & Co., New York pp 68-91 (EP; 1806-32).

(1962a) “Education and Economic Development”, Social and Economic Studies, UWI, Institute of Social and Economic Research, 10, 2, (EP; 2098-2121).

(1964) “Jamaica’s Economic Problems”, A series of seven articles in The Daily Gleaner, September, Pamphlet edition, Gleaner Co., Kingston (EP; 1436-70).

(1965) “A Review of Economic Development”, American Economic Review, American, 55, 2, pp. 1-16 (EP; 1869-92).

(1966) “Aspects of Economic Development”, in J Karefa- Smart (ed.) (1966) Africa’s Progress Through Cooperation, Dodd, Mead & Co., New York pp.115-130. (EP; 1370-87).

(1967) “International Trade and Economic Growth”, in David Krivine (ed.) (1967) Fiscal and Monetary Problems in Developing States, Praeger Publishers, New York pp. 350-358 (EP; 466-77).

(1967a) “Unemployment in Developing Areas”, in A.M. Whiteford (ed.) (1967) A Re-Appraisal of Economic Development, Aldine de Gruyter Publishers Inc., Chicago pp. 1-17 (EP; 1019-68).

(1969) Aspects of Tropical Trade 1883-1965 (The Wicksell Lectures) Almqvist & Wiksell, Stockholm (EP; 490-518).

(1969a) “Economic Aspects of Quality in Education”, in UNESCO and the International Institute of Educational Planning, Qualitative Aspects of Educational Planning, UNESCO (EP; 2178-2204).

(1971) Presidential Address to the Board of Governors of the Caribbean Development Bank at the First Annual General Meeting, Antigua , Caribbean Development Bank, Widley, St. Michael, Barbados (EP; 1471-82).

(1972) “The Caribbean Development Bank”, in Proceedings of the Seventh West Indian Agricultural Economics Conference, Department of Agricultural Economics and Farm Management, UWI, St. Augustine: pp. 3-7 (EP; 1913-22).

(1972b) “Objectives and Prognostications”, in Gustav Rains (ed.) The Gap Between Rich and Poor Nations, London: Macmillan, pp. 411-420 (EP; 1944-59).

(1972c) Presidential Address to the Board of Governors of the Caribbean Development Bank at the Second Annual General Meeting, St. Lucia, Caribbean Development Bank, Wildey, St. Michael, Barbados (EP; 1483-1501).

(1973) “The Development Process: The Lessons of Two Decades”, The Case for Development: Six Studies, Praeger Publishers, New York pp 52-84 (EP; 1960-2001).

(1976) “Diffusion of Development”, The Market and the State, T. Wilson and A. Skinner (eds), Clarendon Press, Oxford, pp. 135-63 (EP; 2025-52).

(1977) The Evolution of the International Economic Order, Princeton UP.

(1979) Development Strategy in a Limping World Economy, Elmhirst Memorial Lecture, Gower Publishing Limited, Hampshire (EP; 734-56).

(1984) “Development Economics in the 1950s”, in Gerard Meier and Dudley Seers (eds) (1984) Pioneers in Development, World Bank, OUP edition 1985, pp. 121-37.

(1985) What Have We Learnt from Development, Caribbean Development Bank, Wildey, St. Michael, Barbados (EP; 2073-81).

Post, Ken. (1978) Arise Ye Starvelings, Martinus Nijhoff, The Hague.

PRO Public Records Office London (References are to file numbers where CO stands for Colonial Office).

Ranis, Gustav and John Fei. (1961) “A Theory of Economic Development”, American

Economic Review, 51, 4, September pp. 533-65.

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