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POVERTY REDUCTION AND SUSTAINABLE AGRICULTURAL DEVELOPMENT IN THE CARIBBEAN: THE CONFLICT AND CONVERGENCE DILEMMA

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INTRODUCTION

Poverty eradication or reduction is increasingly being recognized as an important dimension of Third World economic development. Also, with increasing attention being given to the contemporary biospheric view of sustainable agricultural development, there is seldom any dissent on the importance of both poverty eradication/reduction and sustainable agricultural development as vital constituents of social welfare gains. Despite this movement towards some degree of consensus of opinion, Vyas [1991, p.2] argues that "*... there is a discernible lack of clarity on the nature of inter-relationship between rural poverty and environmental constraints which inhibit sustainable agriculture, and a good deal of confusion on how to tackle them simultaneously*".

The major issues relating to the poverty reduction and sustainable agriculture development nexus has to do with the convergence or conflict questions on economic sustainability versus environmental sustainability of the present agricultural production systems. It would

appear that the increasing concern about the agro-ecological or environmental sustainability of present mode of agriculture stems from the two interwoven concerns: (1) increasing population pressure on land resource base and (2) deteriorating quality of the earth's resource, partly due to intensification of agriculture [Vyas. 1991]. Pomareda Benel [1990] argues forcefully that within the context of the Latin American and Caribbean (LAC) subregion: (1) rural poverty is a growing problem, and that little is being done to attack its structural roots, and (2) an important structural element of the increasing incidence of LAC rural poverty is declining quality of human resource base and its growing inability to cope with the challenges of living in a turbulent and rapidly changing socio-economic environment, and growing degradation of natural resources in rural areas.

This paper is an attempt to contribute to the debate by examining and clarifying some of the key issues relating to the question of the relationship between poverty reduction and sustainable agricultural development, particularly within

the context of the Commonwealth Caribbean (Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Christopher and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago).

DERNING POVERTY AND SUSTAINABLE AGRICULTURAL DEVELOPMENT: A BRIEF OVERVIEW

The Meaning and Measurement of Poverty

The concept of poverty in the general sense, and rural poverty in the particular sense, is one which conveys a sense of an individual's or group of individuals' command over financial resources. Behrman (1990, p.28), defines poverty as *"the limited command over resources of individuals, often aggregated together for many purposes • including sharing of resources - into households or into other groups"*. The degree of an individual's or households' command over resources is a function of several factors, including: (1) assets owned by the individual/households (2) the prices for the use or sale of these assets (3) levels of net transfers (money or in-kind) received by the individual/ households and (4) the price that individual/households must pay for goods and services consumed [Behrman, 1990]. FAO [1988, p. 77] defines poverty as *"the incapacity to become inserted in the socio-economic environment in a way that continually allows for the satisfaction of basic necessities of life"*. The FAO uses the term *"poverty"* and *"marginality"* synonymously, based on the argument that the concept of marginality conveys a better sense of the

dimension of poverty as a form of being cut off from the main stream of modern life [FAO, 1988, p.TJ.

There are a number of operational measures or indicators of poverty. However, in many instances there are inconsistencies among these indicators. The problems stemming from lack of or inconsistent poverty data are well recognized. That issue, although important, is not the focal point of this paper. As such, discussion of poverty statistics is based on the assumption that measurement problems notwithstanding, there is utility in the existing statistics in advancing the development objectives of countries. The common feature is that poverty is almost invariably defined in terms of some income threshold. FAO [1988], in its attempt to highlight the marginalization process associated with poverty status, used two related concepts of economic deprivation - destitution and absolute poverty.

Destitution is defined as that income level below which not even a minimum food diet can be purchased. The term minimum is used in the sense that the bundle of food purchased is without any concern for the presence of basic necessities. *Absolute poverty* is defined as that income level below which a set of basic necessities cannot be afforded. The World Bank [1990] has developed three operational measures of poverty status among individuals. Two of these measures appear to overlap with and provide specific income level thresholds for the FAO destitute and absolute poverty concepts. The three World Bank indicators are: (1) poverty status, (2) absolute poverty status and (3) relative poverty status. *Poverty* status persons are persons with less than US\$375 per year (at 1985 prices). In 1985

it was estimated that at least 380 million persons worldwide fell in this category. *Absolute poverty* status persons are persons with less than US\$275 per year (at 1985 prices). The estimated number of persons worldwide in this category in 1985 was about 663 million. *Relative poverty* status persons are persons earning less than one-third of the national average income of a country.

The World Bank's *absolute poverty* status appears to define the FAO's *destitute* status, while the Bank's poverty status appears to define the FAO's absolute poverty status. It is important to recognize that poverty status is a dynamic phenomenon, with a time component. As such, different categories of the poor are often defined within two time-dependent dimensions: (1) the *chronically poor or chronic poverty* status and (2) the *transient poor or transient poverty* status. The chronically poor are those persons who experience poverty for most, if not all of their lives, while the transient poor are those experiencing poverty during specific time periods. The transient poor can be subdivided into two categories the *cyclical poor*, those experiencing poverty during stages of the life cycle or at particular stage of the development of the household (e.g elderly or children), and the *seasonal poor*, those experiencing poverty during certain months of the year or during natural disasters [FAO. 1988].

The Meaning of Sustainable Agricultural Development

The contemporary concept of sustainable agricultural development owes much of its intellectual heritage to the 1987 so-called Brundtland Report [World Commission on Environment, 1987] and

the 1988 FAO Council definition [FAO. 1991]. The Brundtland Report defines sustainable development as, "*development that meets the needs of the present without compromising the ability of future generation to meet their own needs*". The definition adopted by the FAO in 1988 is, "*The management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations*" [p.3]. Davis [1992] in his review of the conceptual dimensions of the sustainable development issues, argues that the concept is intrinsically process-based. He arrives at that conclusion from the fact that the concept: (1) explicitly states that a key *necessary* condition for the attainment of that state of affair is constancy of the natural resource assets between generations and (2) explicitly requires the setting in place of a set of *sufficient* conditions for its attainment. Davis [1992, p.8] defines sustainable agricultural development as "*a process in which a sector or subsector is on a trajectory of receiving increases in desirable social objectives, without consuming such large proportions of the energy of the eco-system. whereby the eco-system is unable to regenerate itself continuously*"

DEFINING THE RELATIONSHIP BETWEEN POVERTY AND SUSTAINABLE AGRICULTURAL DEVELOPMENT

The poverty characteristics of a country or sector can have a profound impact on the ability of that country or sector to attain sustainable development. Panayotou

[1992, p.355] places the poverty-sustainable development nexus in a pragmatic context when he argues that, *"Developing countries that are struggling to escape poverty and meet the growing aspirations of their still-expanding populations find the concern for sustainability an added burden on what is already a Herculean task"*. He poses a number of thought provoking questions regarding the poverty sustainable development issue. One such question is whether sustainability means Spartan living by the current generation of the poor so that the next generation of the poor will have a better standard of living and if that is the case, where is intergenerational justice. Another question is whether sustainability means that future generations should be able to enjoy the same level of poverty as the current generation and if that is the case, why sustain poverty. He takes the position that sustainable development, *"is meant to benefit both current and future generations. It is not simply a matter of temporal tradeoffs and intergenerational transfers"* [p.356]

Within the context of sustainable agricultural development as defined in this paper, a position is taken which is similar to that of Panayotou. Specifically, it is maintained that rural poverty reduction (enhanced income position) is a key constituent of the gains in the set of socially desirable objectives that are forthcoming as the agricultural sector moves along a trajectory of sustainable agricultural development. Furthermore, such enhanced rural income positions (reduction in rural poverty) cannot from a pragmatic point of view, be obtained without sustainable economic growth and growth benefit distribution. This position is

also consistent with that of Vyas [1991, p.8], who argues that, *"there cannot be any doubt about the fact that without growth poverty eradication will not be a practical proposition"*. In short, economic growth is seen as the key conduit for rural poverty reduction, and the latter is critical for the attainment of sustainable agricultural development.

In suggesting an interactive functional process of economic growth - rural poverty reduction sustainable agricultural development, the position explicitly rejects the notion that economic growth (or non-growth) must necessarily degrade the natural resource capital stock. This argument was developed more fully in Davis [1992, p.25] who concludes that, *"it is the source and patterns of certain factors that accompany either path which is the cause of decline in environmental assets. These combined factors reflect either market or policy failure"*. It should be recognized that the effects of economic growth on poverty reduction would vary with the structural conditions of each economy or sector. As such, the particular type and combination of market and policy instruments designed to counter market and policy failures would have to be addressed within the specific context of the economy or sector that is of concern. As a general observation, however, it would appear that at a minimum, successful growth-based rural poverty reduction initiatives require that the methods used to reduce poverty be consistent with: (1) overall growth and (2) security and participation in the gains of growth by the non-poor as well. This type of economic growth is referred to as *"inclusionary growth"* [Sheahan, 1990]. Sheahan [1990, p.40] argues that, *"Inclusionary growth requires combinations*

of intervention directed toward structural change, active social welfare programs, and simultaneous attention to private incentives and macro-economic constraints".

In examining the relationship between rural poverty and sustainable agricultural development, it might be useful to be reminded of a central principle of the sustainable agriculture development debate which unfortunately, is too often overlooked. That principle is cogently articulated in Lipton's [1989, p. 10] statement that, "*What needs to be sustainable* is not a particular form of farming, nor a particular use of this or that piece of land. What has to be sustained is the capacity of people, country, and the world to support decent livelihoods*" Poverty status as defined earlier, suggests the incapacity to sustainably support decent livelihoods. In the context of sustainable agriculture development issues, a growing proportion of poor persons are located in rural areas - either as limited resource farm owners or landless farmers and farm workers. In the absence of inclusionary growth strategies as defined by Sheahan [1990], but also inclusive of micro-economic instruments to offset market and policy failures [Miranda and Muzondo, 1991], poverty status could compromise the integrity of agro-ecological systems.

One way that rural poverty can degrade the environment and natural resource stock is via the pressures placed on private and common rural property rights /Upton. 1989]. Land ownership and land rental provide the basis for claims on private rural property resources. Upton [1989] argues that poor Third World rural people are discouraged from making investment in long-term conservation of

private rural property resource by very high real interest rates (25%- 50%) and that they find soil mining an appealing alternative. By the same token, poverty and population growth encourage degradation of common rural property resources. Common rural property resources are "*entitlement rights*" by individuals or groups to such things as fuelwood, water, grazing land or fishing within a community. First, poverty increases the pressure of entitled persons or groups to use up more common rural property resources (e.g. intensification of grazing on communal lands). Second, the number of poor persons or groups exercising entitlement rights to common rural property resources within a community is increased by population growth. Third, population growth also increases the number of poor persons or groups in areas adjacent to a particular community, thereby putting pressure for these groups to "*encroach*" on common rural property resources to which they are not entitled.

ECONOMIC GROWTH AND RURAL POVERTY IN THE CARIBBEAN

The FAO [1988. p.81] analysis of rural poverty in Latin America and the Caribbean concluded that the major factors contributing to relatively high poverty incidence among rural inhabitants are: (1) the dichotomy characterizing the agricultural sector in most countries, which is a consequence of the development model adopted', (2) financial adjustment, resulting from large foreign debt, which has forced reduction in capital investment for economic and social activities in rural areas, (3) government policies which have not always been to the advantage of

impoverished groups and (4) overall deterioration of rural areas, which has led to a high rate of unemployment and migration to the cities. The study concludes that these factors are matters which must be addressed in order to combat poverty. It further suggests that a strategic approach, "...must not only be based on equity and social justice, but on the need to step up economic growth in the region" [p.81]. The FAO [1988] study offers strong empirical support to the argument that rapid and sustained economic growth is critical to rural poverty reduction and sustainable agricultural development. Within this context, we find it useful to examine some of the available data on the economic growth performance and rural poverty characteristics of Caribbean economies.

Table 1 presents an overview of selected socio-demographic characteristics of Caribbean economies over the 1980-1989 period. Table 2 shows the rural poverty characteristics of three CARICOM countries (Grenada, Jamaica, Trinidad and Tobago) and two non-CARICOM countries (Haiti, Dominican Republic) for the year 1980. The 1980 time period and the selected Caribbean countries are those for which comparable data are available. The aggregate annual real growth rate in GNP were positive in 9 of the 12 countries for which data are available, and negative in 3 of the 12 countries. The range in aggregate annual real growth rates in GNP varied from a high of 6.8 per cent in Antigua, to a low of -6.0 percent in Guyana. The pattern exhibited in annual real growth rate in per capita GNP was similar to that of the aggregate annual real growth rate, since the per capita figure is simply an adjustment for population change. However, the range in the per

capita real growth rate figures varied from a high of 6.6 percent in St. Christopher and Nevis to a low of -7.3 percent in Trinidad and Tobago. The average annual real growth rate in aggregate GNP and the average annual real growth rates in per capita GNP was 2.7 percent and 1.6 percent, respectively for the twelve countries (Table 1).

These low to negative growth rates would most likely have a more far-reaching impact on the agricultural sectors of those countries in which agriculture's share of GDP is relatively high. These countries are: Belize (19%), Dominica (31%), Grenada (21%), Guyana (25%), St. Christopher and Nevis (10%), St. Lucia (16 percent), and St. Vincent and the Grenadines (20%). These relatively low real growth rates of Caribbean economies are of direct relevance to the issue of rural poverty reduction in the region. Empirical evidence indicates that the "trickle down" or "spread effect" of economic growth on poverty reduction is significant when at least one of two conditions are present. These conditions are: (1) a very high rate of real growth in the economies (8-10% per annum) or (2) the existence of some asset base among the poor [Vyas, 1991; FAO, 1988]. In the case of the Caribbean, the data indicate that condition (1) does not exist and there are questions about the existence of condition (2) in light of the increasing impoverishment of the rural economies [FAO, 1988].

For the three English-speaking countries for which data are available, the incidence of rural poverty varies from a low of 25 percent in Grenada to 51 percent in Jamaica. Trinidad and Tobago registered a 44 percent rural poverty incidence. The source of the data [FAO, 1988] points out that rural-urban

differences are quite blurred in the English-speaking Caribbean. Haiti registered the highest rural poverty incidence, where it reaches 95 percent of the total rural population.

It is interesting to note that the incidence of rural poverty in the *total population* was closely comparable to the incidence of poverty in the *rural population* in the case of Grenada in the English-speaking Caribbean. However, in the case of Jamaica and Trinidad and Tobago there was significant divergence between the two sets of estimates. The poverty incidence estimates for rural poverty in the total population was 25 percent in Jamaica and 34 percent in Trinidad and Tobago. The 80 percent rural poverty incidence in the total population again places Haiti at the top of the list of poor countries in the region (Table 2).

The general picture of the English-speaking Caribbean rural poverty situation, is one of significantly lower levels than the majority of Latin American and Central American countries. Nevertheless, the levels are unacceptably high in the larger countries of Jamaica and Trinidad and Tobago which experienced earlier windfall revenues from their mineral sectors. However, the non-growth to negative-growth performance of the agro-economies of CARICOM countries in the last fifteen years [Davis, 1992], plus the potential for further negative economic shocks associated with global economic changes and structural adjustment conditionalities, provide cause for concern regarding rising rural poverty levels in the region.

IMPLICATIONS FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT IN THE REGION

The Caribbean is confronted with what would appear from a cursory assessment, to be a fundamental economic conflict between on one hand: (1) finding an optimal developmental path directed at the attainment of sustained high growth rates in rural incomes, and associated reduction in rural poverty levels and on the other hand (2) charting simultaneously, an optimal development strategy in which their natural resource stocks are exploited at the scale consistent with their regenerative capacity over time. It is argued, however, that an indepth assessment of the sustainable agricultural development issues would suggest that such an apparent conflict could in fact be illusory. Instead, the potential for a high level of convergency between the two paths might be an analytically correct assessment of the issues. The extent to which the potential for convergency of the two paths might be realized is to a large extent, a function of: (1) the choice or selection of the sustainable agricultural development strategy, (2) the source and pattern of the market and policy failure spin-offs that might accompany the development strategy selected, and (3) the effectiveness of the attempts to mitigate the effects of market and policy failures by the establishment of new or recalibrated micro-economic and macro-economic policy instruments.

Davis [1992] points out that the Caribbean appears to have opted to

pursue the interactive economic growth, rural poverty reduction, agro-ecosystem sustainability challenge, via a strategy of agricultural diversification. It should be recognized, however, that the agro-ecological sustainability concern is a relatively recent dimension of Caribbean agricultural diversification planning and implementation strategy. The recency of the concern, and the dialogue on this dimension is reflected in part by the conspicuous absence of scholarly presentations on the subject at the Nineteenth West Indies Agricultural Economics Conference, held in St. Kitts and Nevis in 1988. The issues of environmental, productivity and income sustainability only surfaced in summary statements of critical issues arising from discussions during the course of the conference [Pemberton, 1990, p. 188]. Davis [1990] argues that conceptually, Caribbean agricultural diversification strategies can be viewed in terms of the *form* and the *function* dimensions of the effort. He defines form to include, "*the shape, structure, characteristics or configuration of the diversification effort*" [p.30]. Function is defined as, "*the specific mode of action by which the diversification strategy fulfills its purpose*" [p.31]. He identifies the three critical functional elements of Caribbean agricultural diversification efforts as: (1) intensification of the product of traditional crops by increased productivity and by adding value through processing, (2) increased production of non-traditional crops for national and regional consumption, and (3) increased production of non-traditional crops for export to extra-regional markets. These three functional elements are suggested by Demas [1987] as keys to the attainment of broadly-based production

structures and competitive production in the region. He argues that in attaining this type of production structure the following diversification objectives or goals would be met: (1) regional food security, (2) foreign exchange savings and earnings, (3) employment generation, (4) creation of production linkages and (5) utilization of under-utilized resources. Given the fact that the Caribbean has selected agricultural diversification as the developmental strategy for attaining sustainable agricultural development, two key questions that are directly relevant to the potential for convergency of the high economic growth/poverty reduction path and the natural resource sustainability path are: (1) what are some of the sources and patterns of market and policy failures that are likely to accompany such a strategy? and (2) how can the effects of these types of failures be mitigated?

The key determinants of potential market and policy failures that are likely to accompany a drive towards high and sustained economic growth rates with sustainable natural resource assets are: (1) the nature of the growth path, (2) the source and pattern of increased agricultural sector productivity and (3) the level of efficiency and the avoidance of waste in resource use and allocation within the agricultural sector. It is imperative that the growth path to sustainable poverty reduction and sustainable agricultural development passes through an undistorted, competitive, and well-functioning market. Panayotou [1992], argues that the prevailing configuration of markets and policies results in dissociation between scarcity and price, benefits and costs, rights and responsibilities, actions and consequences. Under the configuration of

existing markets (factor and product), within which the agricultural diversification strategy is to be implemented, many resources might actually be outside the domain of the markets. In essence, - the market configuration acts as a subsidy by the general taxpayers to the excessive use, waste, inefficient allocation, resource depletion and developmental degradation of these extra - market resources. Tax transfers prevent resource prices from rising in line with growing resource scarcity and rising social costs. As such, they dilute the cost of increasing resource scarcity and foster the types of "dissociations" which are the basis of market and policy failures.

The tendency of market configuration to generate these dissociations, can be comprised by institutional reforms and policy intervention mechanisms. Panayotou [1992, p.357] argues that, "A market failure is nothing but a policy failure, one step removed". As such, Caribbean agricultural diversification strategy must give high priority to policy mechanisms that address the following areas: (1) elimination of direct and indirect subsidies, giveaways, and public projects that promote environmental degradation, (2) ensure that the cost of environmental degradation is borne by those who generate the degradation and derive the benefits, rather than by the general taxpayers, (3) develop the appropriate institutions for the efficient functioning of environmental and resource markets (i.e security, enforcement and transfer of property rights), (4) create and ensure market-based economic incentives and disincentive structures to internalize externalities and mitigate other market failures and (5) subject public projects to rigorous scrutiny and environmental

assessment.

With respect to the source and pattern of agricultural sector productivity gains, the challenge to Caribbean agricultural diversification strategy is to develop and implement a technology policy that will increase the productivity of natural resources during the current time period, and simultaneously preserve their quality, under conditions of severe financial and human capital constraints. It should be recognized that the orientation of agricultural technology practices is not *neutral* with respect to either the incidence of rural poverty or the level of environmental degradation. Current agricultural technology practices are heavily oriented toward increases in productivity (in terms of yields) of crop and livestock systems, via chemical intensive energy (such as chemical fertilizers, pesticides and fungicides). Little attention is given to the development and adoption of resource management agricultural technology practices that would generate sustained increases in productivity, with decreasing dependency on chemical energy. Some of the non-chemical sources of energy are, organic fertilizers, solar energy, biomass energy, and human energy.

Failure to develop and adopt a sustainable economic growth and development oriented resource management and technology policy, could place Caribbean agricultural diversification strategy at risk of neither reducing poverty nor attaining sustainable agro-ecosystems. Pomareda Benel [1990] argues that commodity-oriented chemical intensive technology attempts to *indirectly* increase the marginal productivity of rural labour by the displacement of labour from rural areas. This is accomplished by the

substitution of chemical energy (such as herbicides) for human energy. This technology orientation is directly related to the level of rural poverty, since it could generate increased levels of unemployment and impoverishment. He goes on to point out that, "*The complementarity between human and non-human energy is a key element in the sustainability of agriculture*" [p. 6]. Caribbean agricultural diversification strategy must include a resource management and technology policy that will substantially increase the amounts of energy provided by non-chemical sources. This type of technology policy, when used in harmony with other measures to negate market and policy failures, are more likely to bring about convergence between increased real incomes, rural poverty reduction, and environmental asset sustainability.

CONCLUSIONS

Caribbean economies are confronted with the urgent task of finding development strategies that would address the interrelated problems of: (1) low economic growth rates, (2) increasing rural poverty and (3) non-sustainability of the agro-ecological systems. The region has opted to pursue the tripartite problems via an agricultural diversification strategy, which includes maintenance and enhancement of production and value of traditional export commodities, and simultaneously initiating and or increasing the production and value of alternative commodities.

It is argued that rural poverty reduction and sustainable agricultural development are converging objectives, and that sustained high rates of economic growth

are the conduit for the attainment of convergency. The notion is rejected that rapid economic growth (or non-growth for that matter) is the cause of environmental degradation and ultimately unsustainable agro-ecosystem. Instead, it is the source and pattern of market and policy failures, and the orientation of the agricultural technology practices that are impediments to convergence of high growth rates, effective rural poverty reduction, and sustainability of the regenerative capacity of the agro-system. In pursuing an agricultural diversification strategy of sustainable agricultural development, Caribbean economies must pay close attention to and put in place those market, policy, technological and institutional mechanisms that will ensure convergency of developmental objectives.

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TABLE 1: SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SELECTED CARIBBEAN ECONOMIES, 1980-1989

Country	Real Growth Rate in GNP	Population Growth Rate	Real Growth Rate in Per Capita GNP	Agriculture's Share in GDP	Daily Calorie Per Capita	Life Expectancy
	1980-89	1980-89	1980-89	1989	1988	1989
Antigua and Barbuda	6.8	0.4	6.4	6.0	2,222	73
Bahamas	4.2	1.9	2.1	N.A.	2,678	68
Barbados	1.8	9.1	1.5	7.0	3,228	75
Belize	1.0	2.1	0.4	19.0	2,649	67
Dominica	4.6	1.4	3.1	31.0	2,877	75
Grenada	5.9	0.1	5.6	21.0	2,979	69
Guyana	4.0	0.6	4.6	25.0	2,473	64
Jamaica	-0.4	1.1	-1.7	6.0	2,572	73
St Christopher and Nevis	5.6	-0.9	6.8	10.0	2,801	69
St Lucia	6.6	2.0	4.5	16.0	2,821	71
St Vincent and Grenadines	6.0	1.1	4.5	20.0	2,818	70
Trinidad and Tobago	-5.6	1.7	-7.3	3.0	2,960	71

NA. = Not available

TABLE 2: RURAL POVERTY CHARACTERISTICS FOR SELECTED CARIBBEAN COUNTRIES, 1980

Country	Total Population	Total Rural Population	Total Rural Poor ¹	Total Rural Destitute ²	Rural Poor as Proportion of Rural Population ³	Rural Destitute as Proportion of Rural Population	Rural Poor a ⁴ Proportion of Total Population
						
	ousands						
Grenada	108	104	26	9	25.0	9.0	24.0
Jamaica	2,224	1,090	556	N.A.	51.0	N.A.	25.0
Trinidad & Tobago	1,206	940	410	N.A.	43.6	N.A.	34.0
Haiti	5,203	4,381	4,162	3,768	95.0	86.0	80.0
Dominican Republic	5,730	2,751	2,063	N.A.	75.0	N.A.	36.0

Definitions of these terms are discussed in the text.

NA. = Not available

Source: FAO (1988). Potentials for Agricultural and Rural Development in Latin America and the Caribbean: Annex II • Rural Poverty. Rome. Table 2.4. p. 14.