

IICA-CIDIA

**IICA**



Proceedings of the Seminar  
**PLANLAC AND THE MEDIA**

April 18, 1991  
Port of Spain,  
Trinidad and Tobago

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IICA OFFICE IN TRINIDAD AND TOBAGO

## **WHAT IS IICA?**

The Inter-American Institute for Cooperation on Agriculture (IICA) is the specialized agency for agriculture of the inter-American system. The Institute was founded on October 7, 1942 when the Council of Directors of the Pan American Union approved the creation of the Inter-American Institute of Agricultural Sciences.

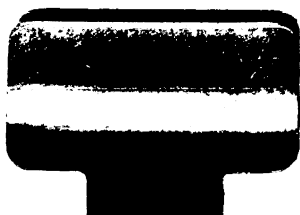
IICA was founded as an institution for agricultural research and graduate training in tropical agriculture. In response to changing needs in the hemisphere, the Institute gradually evolved into an agency for technical cooperation and institutional strengthening in the field of agriculture. These changes were officially recognized through the ratification of a new Convention on December 8, 1980. The Institute's purposes under the new Convention are to encourage, facilitate and support cooperation among its 32 Member States, so as to better promote agricultural development and rural well-being.

With its broader and more flexible mandate and a new structure to facilitate direct participation by the Member States in activities of the Inter-American Board of Agriculture (IABA) and the Executive Committee, the Institute now has a geographic reach that allows it to respond to needs for technical cooperation in all of its Member States.

The contributions provided by the Member States and the ties IICA maintains with its 14 Permanent Observers and numerous international organizations provide the Institute with channels to direct its human and financial resources in support of agricultural development throughout the Americas.

The 1987-1993 Medium Term Plan, the policy document that sets IICA's priorities, stresses the reactivation of the agricultural sector as the key to economic growth. In support of this policy, the Institute is placing special emphasis on the support and promotion of actions to modernize agricultural technology and strengthen the processes of regional and subregional integration. In order to attain these goals, the Institute is concentrating its actions on the following five Programs: Agricultural Policy Analysis and Planning; Technology Generation and Transfer; Organization and Management for Rural Development; Trade and Agroindustry; and Agricultural Health.

The Member States of IICA are: Antigua and Barbuda, Argentina, Barbados, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, the Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, the United States of America, Uruguay and Venezuela. The Permanent Observers of IICA are: Arab Republic of Egypt, Austria, Belgium, European Community, Federal Republic of Germany, France, Israel, Italy, Japan, Netherlands, Portugal, Republic of Korea, Romania, and Spain.



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"The views expressed in signed articles are those of the authors and do not necessarily reflect those of the Inter-American Institute for Cooperation on Agriculture."

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## PREFACE

### Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean (PLANLAC)

*In 1987, the Ministers of Agriculture of the hemisphere met in Canada and signed the Ottawa Declaration, agreeing to promote the development of the agricultural sector in the region. This political decision transcended a mere statement of consensus. The Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean (PLANLAC) was the mechanism chosen to strengthen the growing leadership of agricultural authorities, by providing them with concrete proposals for agricultural development.*

*The rationale for PLANLAC lies in the new awareness of the role agriculture can play in development. Just as over the last three decades the sector's best efforts were not enough to overcome the "anti-agrarian biases" of overall policies, agriculture will not be able to reach its potential unless there is a change in the way the sector is perceived. Consequently, it is very important that there be a re-evaluation of economic development strategies, the role of agriculture and the macro-economic policies which support them.*

*The underlying thesis of the Plan is that a reactivation of the agricultural sector, through increases in productivity, marketing, some form of industrial treatment and efficiency, is consistent within current limitations and is achievable with macro-economic policies that are supportive of agriculture.*

*Recognizing that the region has both the maturity required to identify its priorities and the political determination necessary for engaging in joint efforts on common issues, PLANLAC aims to encourage greater initiative in the region, while at the same time advocating the possibility of establishing strategies of a truly hemispheric nature for technical cooperation, investments and trade negotiations with third parties.*

*The subregions identified in the proposal are the Andean, Southern, Central and Caribbean. For each subregion, the Plan looks at a "strategy" in which the common aspects of sectoral development are discussed in a new development model; it then identifies subregional programs and projects and financial and institutional mechanisms for implementing the Plan at the national and subregional levels.*

*In the Caribbean subregion, the key elements and priority areas of action identified by the Plan involve improving policy instruments, as they impact*

*directly on employment, scale of production and producer security. Some of the key actions for regional agricultural development cover areas such as cooperation and trade between the Caribbean and Latin America, linkages between agriculture and other sectors (industrial and tourism in particular), agricultural inputs, marketing, technology, socioeconomic research, land reform and utilization, irrigation and drainage, farmers' organizations and institutional strengthening.*

*IICA's Plan of Joint Action for the Reactivation of Agriculture in the Caribbean subregion may be defined as a compendium of strategies, ideas and priority programs and projects, as well as a framework for their implementation; it takes as its point of departure the Caribbean Community Programme for Agricultural Development and the OECS Agricultural Diversification Programme. It must therefore be seen as complementary to the provisions contained in those programs. The three plans (CARICOM, OECS and IICA) together form the basis of the overall Caribbean strategy for the modernization and reactivation of the agricultural sector through the 1990s and beyond.*

*Our aim in this seminar was to look at the PLANLAC and what has taken place since it was first conceived by the Ministers of Agriculture of the hemisphere when they met in Ottawa, Canada in 1987. We hoped to answer the question, "Why should a country with a industrial infrastructure like Trinidad and Tobago care about agriculture?" We also looked at the relationship between agriculture and the media and examined the images which we conjure up when we think of agriculture.*

*We analyzed the involvement of communications in agricultural modernization and reactivation; reviewed the challenges for participation in international markets; and discussed the alternatives for the future. We then moved to create a new business environment for investment in agriculture for farmers and for entrepreneurs.*

*Two sessions (four and five) discussed the role of the media, public communications methodology and dissemination of information by the media.*

*The seminar was significant in that the Ministers of Food Production and Marine Exploitation, as well as the Minister of Industry, Enterprise and Tourism, were speakers. Top-level media experts spoke and chaired meetings. The private sector jointly participated with the banks, the public sector and the University of the West Indies.*

*Involvement of the media will be a major step in changing the image of agriculture in this hemisphere.*

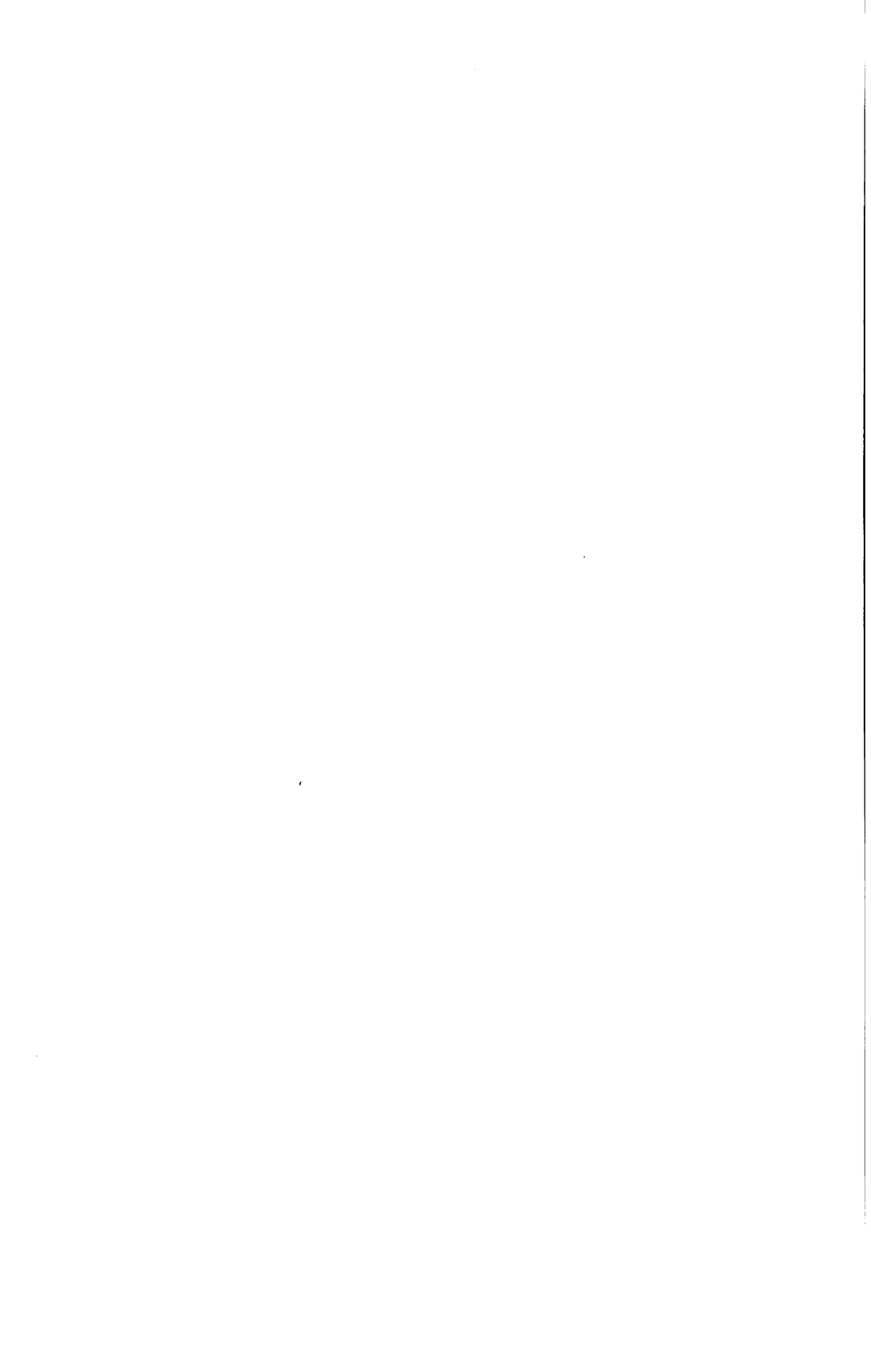
*Joan S. Wallace  
IICA Representative in Trinidad and Tobago*



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**OPENING  
SESSION**

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## Opening Remarks

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*Dr. Joan S. Wallace*

Honorable Minister, Dr. Harlan Davis, Dr. Carlos Pomareda, Dr. Reginald Pierre, government officials, members of the diplomatic corps and international organizations, members of non-governmental organizations, speakers and participants from the business community, farmers and friends. I am pleased to welcome you to what I'm sure will be a very exciting conference!

My name is Joan Wallace and I am the Representative to Trinidad and Tobago of the Inter-American Institute for Cooperation on Agriculture (IICA), an international organization working with 32 countries throughout the hemisphere.

Today, as we gather together in the Tower of the Eric Williams Financial Complex, the people of Trinidad and Tobago, the Caribbean region and the hemisphere face a confidence crisis regarding the global economic future. Advocates of economic development read in the press that European and Asian journalistic commentary about a new "Fortress America" reflects the fears of a powerful united European economic region and a Japanese-led Asiatic economic region. Instant communications through radio and television can fan the flames of fear until they reach forest-fire proportions. Prophets of doom and gloom can cause a loss of confidence and bring nightmares of trade wars and failing trade talks into our living rooms.

A "desert storm" followed by the massacre of Kurds and Shiites by an unrepentant Saddam Hussein captures our attention through a never silent Cable News Network. Famines, starving millions on the African continent, and the tragedies in Somalia and Ethiopia are dramatized

before our eyes. The Food and Agriculture Organization of the United Nations through the print media spreads the news of nations providing too little, too late to solve the gigantic problem of world hunger. To paraphrase Winston Churchill who said, "never have so many owed so much to so few", we might say today, "never has so much media power influenced so many".

So it is against this background of global uncertainty, and human tragedy that we ask you to focus on the potential for media power to add one more dimension to the struggle to reactivate agriculture in the Caribbean and Latin America. Television pictures of hundreds of thousands of refugees and hundreds of tons of food and supplies flying to the Turkish and Iranian borders remind us that the power of the media can perhaps make that vital difference. We need the media to join us and enlist in the war against hunger and the crusade to reactivate agriculture and create a sustainable food supply.

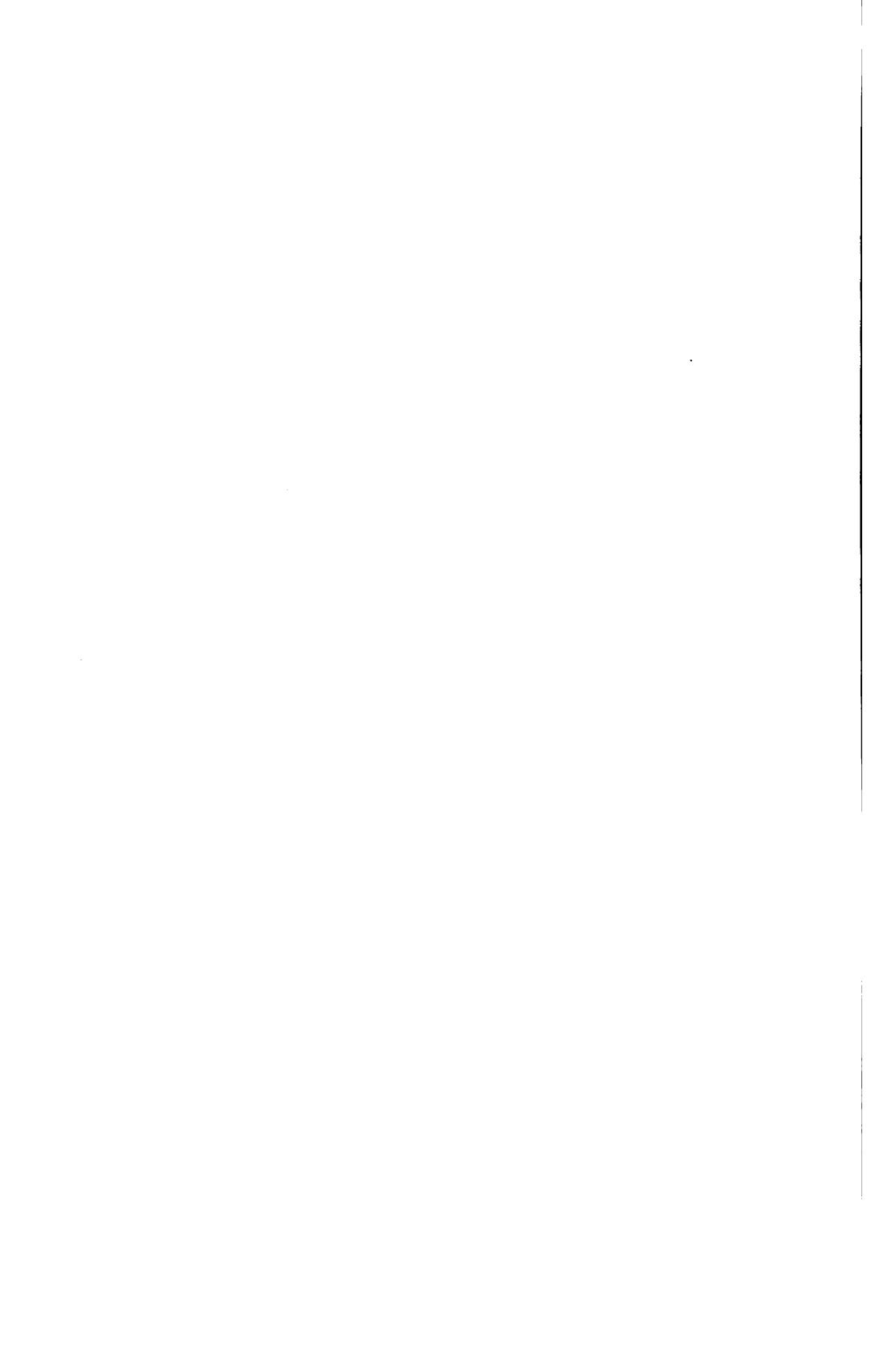
These two days of deliberations can perhaps lead to cooperative and coordinated action that will keep the policy and opinion makers working together to make agriculture a powerful weapon and a priority on our governments' agendas. Our aim here today is to look at the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean (PLANLAC), and what has taken place since it was first conceived by the ministers of agriculture of the hemisphere when they met in Ottawa, Canada in 1987. We hope to answer the question, "Why should a country with an industrial infrastructure like Trinidad and Tobago care about agriculture?" We will also look at the relationship between agriculture and the media and examine the images conjured up when we think of agriculture. Are they positive images? Or are they images of a poor farmer who can barely feed his family? Are they images of a neighbouring country where agriculture is the largest industry employing more than 21 million people? Or do the images include science and technology, modernization and equity for small farmers? Do they include transportation, processing, manufacturing and marketing agricultural products? Which picture of agriculture do you want for the region?

We also want to examine global agricultural issues and their impact on the Caribbean. We want to look at Trinidad and Tobago's thrust toward tourism and business enterprise from the public sector perspective, the financial institutions and the private sector. We want to see agriculture's relationship to this new thrust. Finally we want to learn from the media

the best strategies for dissemination of the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean. Perhaps a marriage between the media and the advocates of agriculture is a key to unlock the door of opportunity to change things from the way they are to the way they ought to be?

Perhaps we can look back next year on the Port of Spain conference on PLANLAC and the media and say that the Action Plan and Action Steps in 1991 took on new life, generated new enthusiasm and created a new determination to accelerate the PLANLAC process? Perhaps each of you will become catalytic agents to help build and shape the future of agriculture in the region in the 21st century?

Put another way, the new dimension of PLANLAC and media collaboration can bring all the pieces together like the fingers of a hand. We have five fingers: alone they are of little use, but together they allow us to paint a picture, use tools, write a letter, pick up items and play an instrument. When they come together, they can also make a powerful fist. Let us suppose that the fingers are tourism, environment, transportation, industry and agriculture. The media might be the hand that forms the powerful fist of economic development by relating to each of these and relating them to each other.



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## PLANLAC: PRINCIPAL IDEAS AND PROPOSALS FOR ACTION

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*Dr. L. Harlan Davis*

I would like to begin by expressing my profound pleasure on being back in the beautiful twin island Republic of Trinidad and Tobago, to participate in a forum in which we seek to address the issues related to Caribbean agricultural development. I bring you the kind regards and greetings of our Director General, Dr. Martin Piñeiro, and on behalf of the staff of our entire Institute, I would like to welcome you to this meeting. I am pleased to meet again with members of the various national, regional and international agencies, but I am particularly happy to have with us this morning members of the press. The press has a very important role to play in facilitating communication with and involving the wider community in the modernization of the agricultural sector. The last time I was here with you, in Tobago in fact, I addressed the Conference of the Caribbean Agro-Economics Society, and on that occasion, I briefly reviewed agriculture in the context of the new economic order. That was a year ago, but in that short time our world has changed substantially, reflecting the dynamism and the ever-changing challenges of our times.

### **The World Scenario**

These are historic times, and it appears that a new political and economic order is emerging. This order can be characterized in various ways. In the political context, the consequences of the war in the Persian Gulf, the internal instability of the Soviet Union, the unification of Germany, the democratization of Eastern Europe and the integration of

Western Europe, are undoubtedly influencing the balance of power in the world.

In the economic context, the emergence of the mega-economic trading blocks of the European Economic Community, the United States of America-Canada-Mexico, Japan and the Pacific Basin countries; and more recently, the initiative of Brazil, Argentina, Uruguay and Paraguay to form a common market in the Southern Cone, will change the modality of international trade and commercial relations.

In the more immediate future, the temporary breakdown of the General Agreement on Tariffs and Trade (GATT) negotiations and the Initiative for the Americas (Bush Initiative) offer both challenges and opportunities for Latin America and the Caribbean, the actual dimensions of which are yet to be determined. These profound changes will undoubtedly influence the approaches and the strategies which we in Latin America and the Caribbean must use in order to ensure that the 1990s are not also characterized as another "lost decade".

Scholars and policy makers are searching for new approaches to deal with changing world events. Since World War II, economic development strategies have assigned a major role to the public sector or the state in the savings and investment process both in market-oriented economies and also in the socialist states. While most analysts would agree that the public sector will continue to play a key role in development, they see the savings-investment process moving into private hands. In this new paradigm, governments will provide the policy and the infrastructure needed for the process to take place: the private sector, lead by the profit motive, will save, invest, allocate resources, produce and market products. Adjustment to this new model will have its costs and benefits, the details of which I cannot delve into at this juncture.

The salient characteristics of the new economic approach include:

- trade liberalization policies that reduce or eliminate tariff and quota distortions
- more open exchange-rate policies
- elimination of differential taxes



- reduction of para-statal organizations
- reduction of other public sector expenditures
- privatization of enterprise and business initiative and
- reduction or elimination of restrictive policies.

### **Obstacles and Opportunities for Caribbean Agriculture**

Where does agriculture, particularly Caribbean agriculture, fit into a changing world and what role will it play in the new economic approaches and strategies? Let me say here that agriculture was never characterized as a lead sector in the development models of the past. Historical evidence and experience show to the contrary, that agriculture was not seen as a source of wealth and progress in the development models of most newly emerging nations of the post-World War II period. Today that bias is reflected in the agricultural sector performance of most Latin American and Caribbean countries.

Agricultural growth is failing to keep pace with population growth, and as a result per capita food supplies have declined. With the exception of Trinidad and Tobago and most of the countries of the Organization of Eastern Caribbean States (OECS), the situation in the Caribbean is serious. According to Inter-American Development Bank (IDB) statistics, value added in the agricultural sector in major producing countries of this region declined precipitously in 1988<sup>1</sup>. In Guyana, it fell by 9.0 per cent; in Barbados, 5.9 per cent; in Haiti, 1.0 per cent; in Jamaica, 7.7 per cent; and Suriname by 13.8 per cent.

Caribbean agriculture is characterized by a dual production, marketing and resource allocation process where traditional non-food export crops and large enterprises are favoured over the domestic sector, which

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<sup>1</sup> See *Economic and Social Progress, 1989 Report*, Inter-American Development Bank, Washington, 1989.

receives less attention. This situation has resulted in a food import bill in excess of US\$1 billion per annum. This duality results in an undercapitalized small farm sector, unequal distribution of land and low levels of food security.

Caribbean agriculture is characterized by a dual production, marketing and resource allocation process where traditional non-food export crops and large enterprises are favoured over the domestic sector, which receives less attention. This situation has resulted in a food import bill in excess of US\$1 billion per annum. This duality results in an undercapitalized small farm sector, unequal distribution of land and low levels of food security.

The causes of agricultural underdevelopment in the Caribbean has been attributed to the structure of plantation capitalism (Gomes 1985). The proposed solution calls for an integrated rural development approach. More recently, in discussing food production and agricultural change in the Caribbean Community, Demas (1988) argued that the dependence of Caribbean agriculture on a limited number of export crops, mainly sugar and bananas, combined with the large import bill, are likely to result in continued deep-seated structural deficits in the countries' balance of payments. Agricultural diversification is seen as a key strategy for achieving a broader-based production structure in local economies. Demas also makes a case for integrated agricultural development in the Caribbean Common Market (CARICOM) region. We share the view that while the Caribbean will continue to depend on the production of traditional export crops as a major source of foreign exchange, the declining prices of these commodities in international trade, the high cost of production, the realities of Europe in 1992 and the possible loss of preferential trading status with the European Economic Community (EEC), suggest a need for a strategy of integrated development and agricultural diversification in the region.

The recently developed Caribbean Community Programme for Agricultural Development (CCPAD) and the OECS Diversification Plan can, I think, be seen as first steps in setting the foundations for a truly regional food production capacity. These programmes will undoubtedly contribute to a new phase of development if appropriate coordination is achieved and if the financial resources necessary for their implementation are obtained.

We share the views of the recent report of the Caribbean Regional Economic Conference that human resource development and regional cooperative arrangements are important strategies for sustainable

economic development in the Caribbean. Consequently, our efforts in the region are designed to support the CARICOM Agricultural Sector Programme and the OECS Diversification Strategy.

### **PLANLAC and the Case for Modernization of Agriculture**

The consensus reached on PLANLAC was premised on the understanding that the development models of the 1960s and 1970s had failed to provide the countries of the hemisphere with a long term, sustainable development strategy.

Prominent among those models was the forced industrialization approach, which sought to develop local economies on the basis of import-substitution industries. This approach to development, which was responsible for considerable economic and social progress, assigned a secondary role to agriculture. In countries which were net exporters of foodstuffs, price and exchange-rate policies were biased against agriculture and agricultural exports. This bias grew even stronger with the rising costs of inputs and capital goods resulting from region-wide efforts to protect national industries. Food prices were controlled at generally low levels in order to dampen inflation, thus preventing the producers from getting international prices. In other cases, inefficient production was encouraged by costly and inefficient subsidies to farmers and consumers.

The Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean is a development strategy which grants a major role in the national economy to the agricultural sector. Agriculture's contribution, within this new strategy, will be made by means of:

- the generation of external resources, through increased exports and import substitution;
- lower prices for food and other agricultural products, making a rise in real wages possible without changing nominal wages, by increasing productivity of the land;

- the generation and/or retention of employment in agriculture and the rural sector, as compared to the uncontrolled urban migration of the past;
- the expansion of intersectoral linkages, which should lead to a process of "competitive agro-based reindustrialization"; and
- the generation of demand due to improved rural incomes, especially among small farmers, who have a high degree of income elasticity.

This contribution to development will require that agriculture be modernized. Modern agriculture of which we speak is characterized by an amplified sector called the agroindustrial complex with backward and forward linkages to other sectors especially industry, but also to tourism in the case of the Caribbean.

Production systems must be modernized to allow agriculture to increase supply without raising prices, expand diversification and improve efficiency, and capitalize on the multiplier effects of increased sectoral interdependence. There is ample room in the region for increased productivity in farming and stockraising through the adoption of techniques that make considerable use of domestic resources, and which call for a relatively low level of investment. This means that agriculture is the sector that has the greatest potential for economic reactivation within existing limitations.

In this concept of modernization, agriculture should not be viewed merely as a primary activity; rather, the dissemination, generation and incorporation of new technology are fundamental requisites for the efficient expansion of agroindustry, and represent a key factor in facilitating the competitive agro-based reindustrialization process mentioned above.

In addition, the production process can be modernized adequately only if the institutional and policy contexts are favourable. In other words, incentive policies must be consistent and far-reaching and, at the same time, other policy measures must not hinder the process.

Modernization also applies to institutions, and aims to equip the institutional apparatus with the capabilities to establish and implement policies and support services consistent with maximum revitalization and modernization of production.

Our initiatives associated with the PLANLAC in the Caribbean are designed to contribute to the modernization of the agricultural sector by:

- Strengthening linkages between Latin America and the Caribbean, specifically with regards marketing opportunities, sourcing supplies of inputs and capital for investment activities, and technology development and transfer.
- Exploiting opportunities in the agricultural sector through the development and fuller utilization of regional trade and production integration mechanisms of the Caribbean Community.
- Strengthening national and regional institutions and upgrading institutional arrangements with a view to providing support services to both the public and private sectors in such areas as policy analysis, planning and management, technology generation and/or acquisition and transfer, investment and investment incentive policy and joint marketing.
- Strengthening farmers' organizations to improve agricultural production and marketing.
- Upgrading the region's institutional capability to develop, produce and market non-traditional crops such as fruits, food crops and vegetables.
- Strengthening national and regional capabilities to monitor and assess the economic impact of diseases and pests which restrict agricultural trade and/or production in the Caribbean, and by strengthening animal and plant quarantine capabilities.
- Motivating and promoting the participation of youth in agricultural transformation and rural development in the Caribbean.

Notwithstanding the importance of these initiatives, perhaps the greatest opportunities for the development of Caribbean agriculture lie in the establishment of linkages with other sectors of the economy, particularly agroindustry and tourism.

Historically, raw materials were only processed in sufficient quantities to ensure convenient and safe transport to metropolitan countries. For example, sugarcane was processed to the raw sugar stage, with further refinement being carried out in the importing country, and the producer

country frequently re-importing the finished product. Similarly, cocoa beans are normally fermented and dried in the producing country whereas further processing and final use in the manufacture of chocolate products generally takes place in the metropolitan country. More advanced domestic processing of local products must be pursued in order to ensure greater benefits to producing countries from the increased value added.

Conversely, where agroindustries have been established in the Caribbean for processing food products, these have been based largely on imported raw materials from developed countries. Thus, the canning of carrots, peas or corn or the bottling of jams has required the importation of the raw materials, and frequently of the containers as well. The processing technology, also imported, is designed for handling raw materials that are not produced locally. Major issues on the local supply side, therefore, are quality and consistency of supply, and the cost of the raw material relative to that of the imported product. Additional consideration should be given to the use-capacity of the existing processing plants in the region.

It is necessary to develop local technology for processing indigenous food products in order to lessen dependence on imported foods. For example, potato chips for the fast food industry might be replaced by cassava or yam chips. In some cases new technologies have been developed for processing local raw materials but marketing has been a problem. The Food Technology Department at the University of the West Indies in St. Augustine, Trinidad, developed an excellent instant yam product but the single attempt by a public sector agency to manufacture it commercially was a failure.

Local food production is largely in the hands of small farmers who generally obtain low yields with high production costs. These items have to compete with food imported from countries with large-scale, highly mechanized production systems, the output of which is often subsidized to make it more competitive.

Decisions must be made at the highest level to resolve the matter of providing cheap food to consumers (many of whom are urban dwellers) while ensuring reasonable returns to farmers. This is complicated by the fact that the low prices of food on the world market encourage importation even though this requires expenditure of foreign exchange.

Rates of currency exchange, tariffs and subsidies, whether on local or imported food items, are central to this difficult issue.

We must work steadily to develop new ways to process food for presentation to local and foreign markets. For example, the pre-cooked Caribbean-style foods recently developed in some Caribbean countries represent an important way to penetrate new markets.

With respect to tourism, there are clear opportunities for using local sources to supply a greater proportion of food consumed by tourists. This will not only reduce net foreign exchange outflow, but also increase demand for local supplies, thus stimulating agricultural development. In addition, serving local foods to tourists has the added long-term advantage of increasing demand by changing food preferences in developed countries. Appropriate mechanisms must be found to develop these tourism-agriculture linkages.

## **The Future of Caribbean Agriculture**

The future of Caribbean agriculture depends on a combination of internal and external factors. Among these are the following:

### ***External factors***

- Development in the international market for sugar, bananas and rum: The single European market (1992) will have a considerable impact on Caribbean agriculture;
- the future of the Lomé Conventions; and
- the future of GATT's Uruguay Round of trade negotiations.

### ***Internal factors***

- The progress achieved in establishing a single integrated Caribbean Common Market by January 1, 1994;
- the success of current development and diversification initiatives including the CCPAD and the OECS Diversification Plan;

- improvements in the financial, physical and human resources allocated to the agricultural sector;
- success in harmonizing policy options related to technology transfer, training, research and extension at the regional level; and the
- promotion and establishment of new vertically-integrated private sector models for production and marketing.

## **Conclusion**

Convinced as we are that agriculture must be given a new place in the national economy, we are pleased to have this opportunity to sit down with representatives of a diverse group of national, regional and international agencies to discuss these concepts and to share experiences with colleagues from other disciplines. It is important to reiterate that the PLANLAC is not perceived as a static instrument or document, but a dynamic process of continuous reflection, subject to adjustments in response to changing needs in our Member States which can be translated into concrete action.

Mr. Chairman, distinguished guests, ladies and gentlemen, let me conclude these brief remarks by quoting a former Minister of Agriculture of the Government of Trinidad and Tobago, who, in endorsing the proposals for the development of PLANLAC, noted: "We will never be forgiven by future generations if we fail by our deeds to give meaning to the principles and strategies enunciated in the Ottawa Declaration".

Mr. Chairman, I submit that the challenges of our times demand success in our efforts to modernize the agricultural sector.

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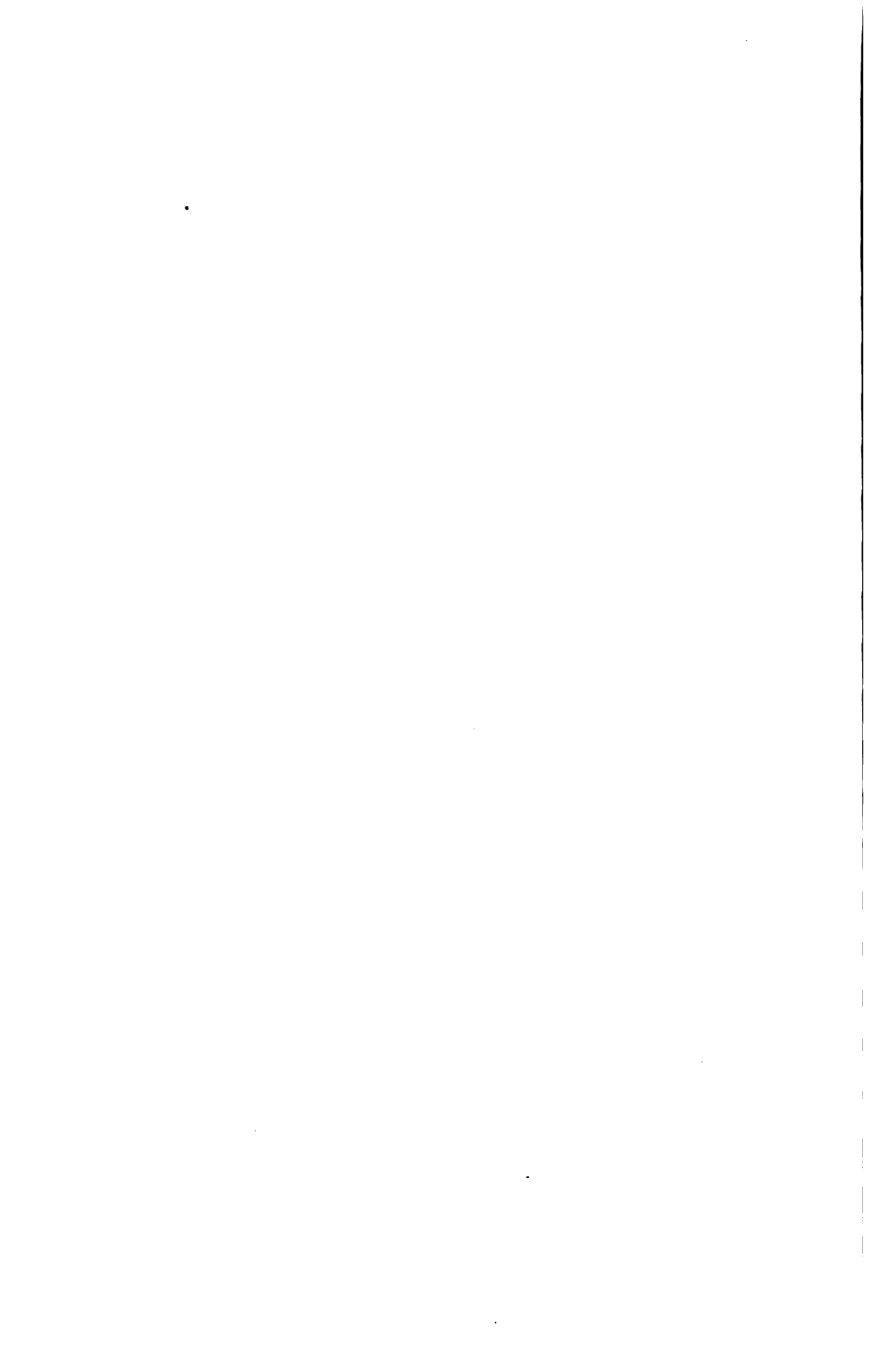
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## **Communications in Agricultural Modernization and Reactivation**

*Dr. Brinsley Samaroo* ✓

Allow me to begin by emphasizing Dr. Wallace's words of welcome to this seminar which our ministry and our government consider to be of considerable significance. When one looks at the quality of the participants and the broad spectrum which they represent, we are assured that the seminar will sow a broad range of ideas for the development of agriculture in the region as well as disseminate ideas to promote a greater involvement of all sectors of our population in decisions about how agriculture should develop.

I recall this government's full commitment to the Ottawa Declaration in 1987 when IICA was charged with responsibility for the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean. Subsequently, in Costa Rica in 1989 we further elaborated on this Plan trimming the rough edges and harmonising the whole programme.

In our own agricultural planning in Trinidad and Tobago, many of the ideas for agricultural diversification are being derived from the broader, more detailed sections of the PLANLAC documents. In working out some of these plans the local professional staff of IICA has been of considerable assistance and we wish to express our gratitude on this occasion.

Dr. Harlan Davis in his address, has raised some of the fundamental considerations that must inform our approach to the whole process of the reactivation of agriculture in the region. I would wish to recommend his address as one of the base documents of this conference due to its

frankness and forthrightness, demonstrating an openness often avoided by politicians for fear of the corns which might be trod upon.

In the first section of his address, he sought to place our Caribbean and Latin American region on the broader canvas of world affairs, indicating the possible consequences of the war in the Persian Gulf, internal instability in the Soviet Union, the democratization of Eastern Europe and the integration of Western Europe. Too often, people like ourselves, in our little corner, imagine that the world begins in our backyards and so we fail to consider the larger context which, in the final analysis, is what determines the fate of communities such as ours. Dr. Davis has warned us that agricultural growth is failing to keep pace with population growth with a resulting decline in per capita food supplies, and that our economies allocate too much of our resource base to traditional non-food export crops, and large enterprises are favoured over the domestic sector, which receives less attention. This results in a food import bill in excess of US\$1 billion per annum. We must, he says, re-examine our programme of forced industrialization which has always assigned a secondary role to the development of agriculture. And finally, we need to always remember his admonition that our agriculture needs to be quickly modernized: "Agriculture should not be viewed merely as a primary activity . . . the dissemination, generation, and incorporation of new technology are fundamental requisites for the efficient expansion of agroindustry, and represent a key factor in facilitating the competitive agro-based reindustrialization process". We are most grateful to Dr. Davis for setting up such a sound base for our continuing deliberations over the next two days.

For my part, I wish to clarify some definitions regarding agriculture, and comment on the manner in which agricultural information can be widely disseminated. One of the factors that has militated against the wider exposure of agricultural information in the public media is the mistaken notion that agriculture is mainly about farming and farmers. Any consideration of reactivation and diversification of agriculture must look at the entire food chain and all those factors which impact on making adequate and nutritious foods available to all our peoples: import policies, food processing and preservation, marketing, and the whole range of activities which impinge on the production of food, in all of its aspects as a basic human need.

Agriculture too, must mean sustainable agriculture which involves the use of environment-friendly practices. All of these considerations ought to be high on the agenda of matters of public concern and so as to continuously engage the attention of the media. Thus, while information on agriculture may indeed be applicable to a specialized audience, information and education about agriculture must be an essential part of everyone's education. Issues dealing with sustainable development are central to programmes on the revitalization and diversification of agriculture, and are also matters of serious general concern warranting the ongoing attention of the media.

Now to the question of "information" and "communication". The importance of information and the volume thereof is properly summarized in an editorial in the *Sunday Express* of January 13, 1991: "Our time has been termed the Age of Information. Information technology over the past few decades has expanded so tremendously that any country, and, indeed, any individual who does not have reasonable access to modern and reliable sources of information is, in effect, living in the Dark Ages. This is not hyperbole. The very weight of information in the 20th Century has led to a development of propaganda on a scale previously unprecedented in human history". However, we must be careful that we make a clear distinction between information and communication. When we speak of information, most often we have in mind "items of knowledge" in which the emphasis is on the items as bits and pieces that amount more to "news" than to understanding. That is certainly not the limited role which the media must see for itself; nor must it allow its use as public relations agency of national governments. Instead of being mere information agencies, the media must take on the role of a positive medium of communication, involving an interactive process, participation, and a sharing of meaning. The real impact of development will be felt only when the media is used to motivate and to teach.

As we continue to look at communications in the reactivation and diversification of agriculture, we must have a strong commitment to striving for real communication and genuine dialogue among all the partners involved. Our preoccupation therefore, should not only be to "disseminate" or "sell" plans, policies, etc., but also to ensure that all the stake-holders have adequate access to the media and the opportunity to make a substantial and relevant input.

Adequate feedback mechanisms must also be established and people encouraged to use them. That aspect of "sharing" and the fundamental notion of "process" by which one characterizes "communication" as more comprehensive than "information" as a statement of items, has far-reaching consequences for what has become known as "development communication." Understood in the manner which I have so far proposed, "information flows" become a necessary, but by no means sufficient condition for a truly effective communication process.

For the purpose of this seminar, and indeed the follow-up actions and programme of work which are to be expected, there should be a well coordinated and sustainable communication campaign, or series of campaigns that go beyond mere information dissemination. These need to address critical agricultural issues affecting not only Trinidad and Tobago, but also the wider Caribbean subregion. In the particular context of Trinidad and Tobago, I wish to commend the *Trinidad Guardian* for having assigned a reporter of maturity and experience in an on-going communication programme. I say communication because participants are interviewed and reports are written, enabling the ministry, for example, to get an idea on the functioning or non-functioning of what it is doing.

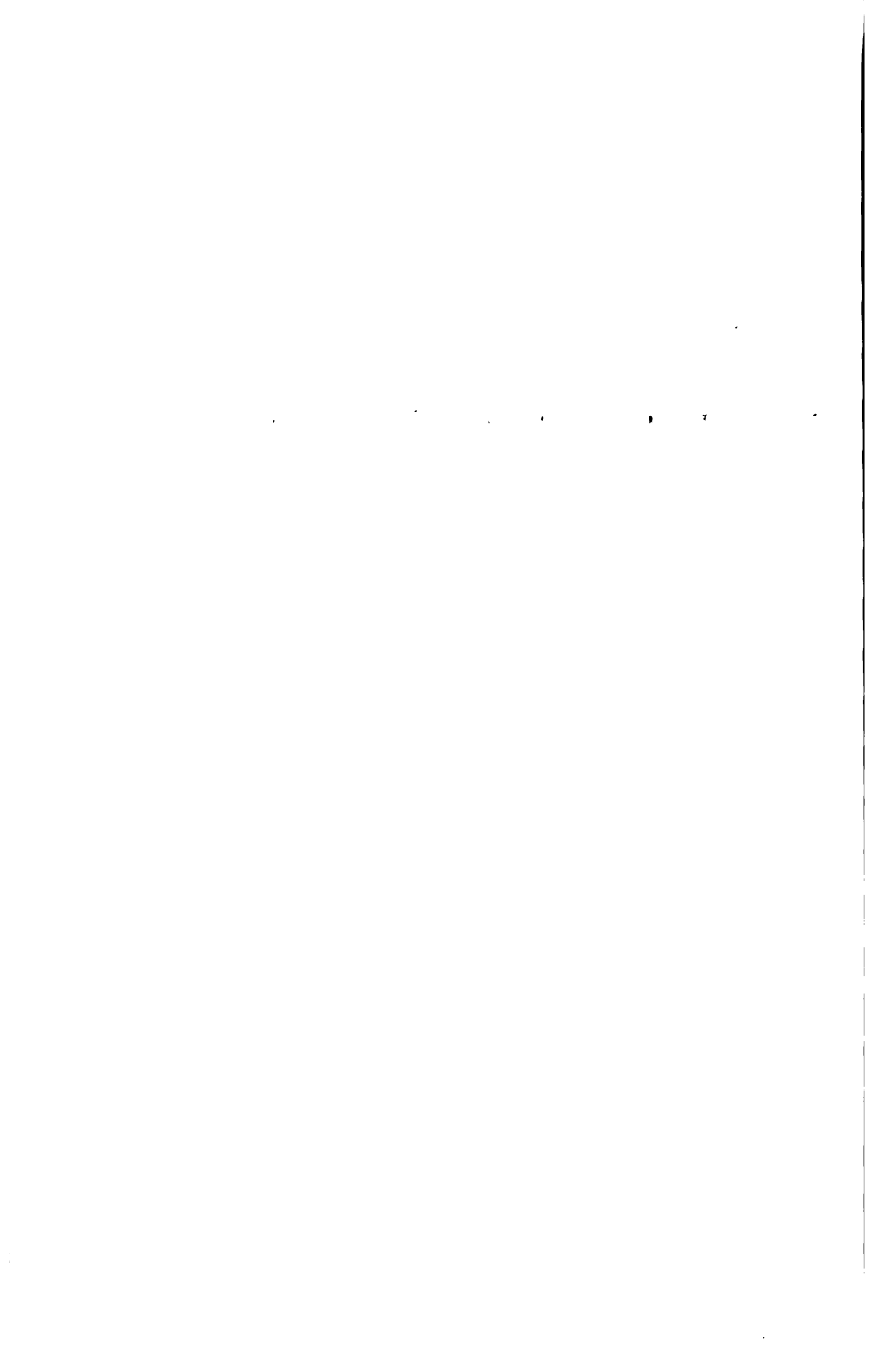
There remains one other major area of communication that this seminar must consider, and which is crucial for the reactivation of agriculture in the region. North Americans call it "feedback" and "feedforward". In our particular Caribbean context, I use it to mean the transference of information from the farming community back to our scientists and agricultural planners; and conversely the transfer of the findings, the results of the work of our scientists and planners to the farmers, the end-users. It would be difficult for me to over-emphasize the severity of the Caribbean's information-flow problem. A good deal of agricultural under-development in the region can be ascribed to this gap between those with access to information and those without it.

You will all agree that the problem is a complex one, relating the region's well-entrenched class system to the failure of our regional education system to give agriculture and manual occupations the respectability they deserve, and the apprehensiveness of the majority of our farmers to move from the security of traditional methods to the perceived insecurity of the new technologies which are so necessary for our thrust towards modernization and competitiveness. I could go on for another half hour in elaborating on this theme which I perceive to be one

our major challenges. I will not. However, I suggest that during and after this seminar, you give the topic some thought and suggest ways in which we can tackle it.

As important as this question of feedback and feedforward is to us, there is some consolation in that it is not a specifically Caribbean problem. For those of us who would wish to read of the manner in which North Americans are tackling the problem, I would refer to a very useful text, *Development Communication* by Robert Hornik of the University of Pennsylvania. A major point he makes is that "effective links among the components of the agricultural system (production, supply, marketing, extension) are crucial to efficient operation". These links, he adds, constitute the crucial input that converts the farmers from peasants to scientific business managers, that converts the nation with a food deficit to a food exporter. What we need to do, he concludes, is to integrate research and education with supply, production, and marketing, "such integration requires both effective communication and receptiveness to the message received".

I would conclude by stressing the importance of communication, and not merely of information for the successful operation of PLANLAC or of any other plan or programme of agricultural modernization and of diversification for the region. The bottom line is that we really have no choice in the matter. We can either remain as the economic back-water of a rapidly moving hemisphere, or catch the current at high tide and move on to greater fortune. We are a young people. We possess the energy, the resourcefulness and the learning to chart a bright horizon. Now is the time to draft the parameters of that new vision.

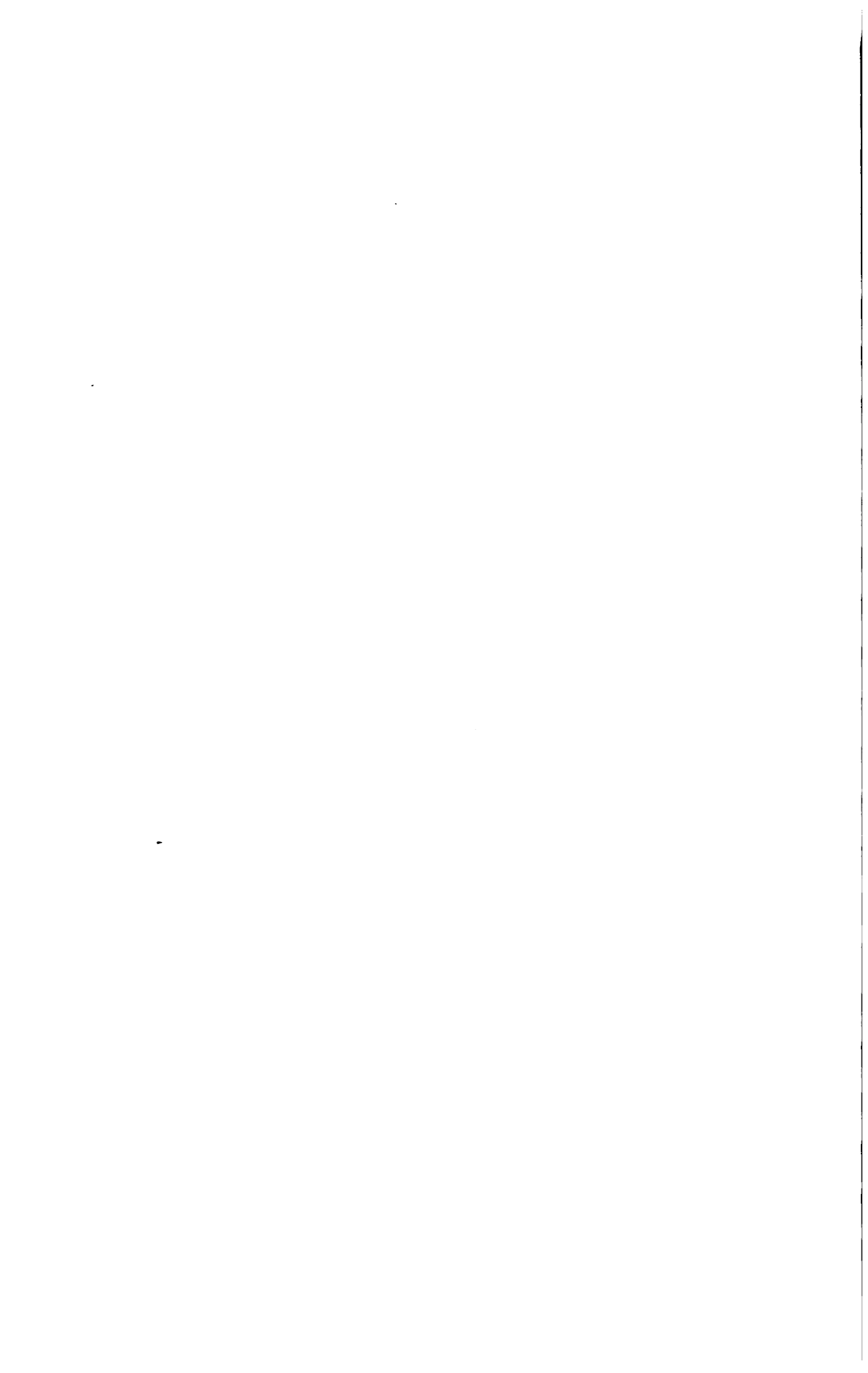




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**SESSION  
ONE**

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# **The Modernization of Agriculture: The Challenge for Effective Participation in International Markets**

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*Dr. Carlos Pomareda* ✓

## **Introduction**

When the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean (PLANLAC) was adopted by the ministers of agriculture of the countries of the region, they took on the formidable task of trying to find a new style of development that would enable them to modernize agriculture and at the same time promote equity. More recent developments highlight the importance of effective participation in international markets as countries move towards trade liberalization.

Before addressing the central issues of modernization of agriculture and international food markets, there are two fundamental aspects that should be borne in mind in connection with any development strategy to be implemented over the next few years. The first has to do with the political and economic environment in the region and in the world. The second, has to do with the very logical proposition that agriculture should no longer be seen as a primary sector, but rather viewed and managed as a broader system, i.e. as an agroindustrial-agricultural complex.

The view that the modernization of agriculture must be seen as a major component of any development model aimed at economic recovery is also discussed. Given food needs and foreign market opportunities, modernization should be intensified in key agricultural sectors for which there is a potential and a need; thus, domestic and international food

markets play a major role as subsequently discussed, and then we refer to the factors that contribute to the modernization process, with special reference to technology, management and organization.

Equity must accompany modernization. We discuss some of the more important aspects in the search for equity, such as issues pertaining to the generation of economic activity, labor and manpower training, nutrition and the improvement of product quality, and the transfer of know-how on ways of achieving modernization.

For agriculture to play an important role in a renewed development strategy, there are major challenges for public policy beyond the traditional realm of agricultural policies, and these are discussed at the end.

In the brief conclusion, we offer some reflections on the challenges which these ideas pose to professionals in the fields of agriculture and economics. We stress the urgency of beginning a highly participative process of improving human capital development in order to pave the way for achieving modernization with equity in a world of increasing turbulence and competition. Appreciation is extended to several colleagues at IICA for their useful comments on the first draft of this paper.

### **The Regional and Global Politico-Economic Environment**

The challenge of achieving modernization with equity is an enormous one, involving actions to be carried out within an increasingly complex national, regional and global environment. An understanding of this complexity is fundamental to the adoption of a style of agricultural development that will provide a way to overcome difficulties and take advantage of opportunities.

On the domestic scene, every country must carefully assess the state's capacity to direct a viable and sustainable development process. Most of the countries are engaged in such an exercise, taking the necessary steps to implement changes at the right pace and with the necessary thoroughness, bearing in mind the existing social, economic and political

conditions. The general trend in the region is for the state to play a guiding role in development efforts, exercising less intervention than it has in the past and showing a greater ability to mobilize the civilian population. The task, however, is a monumental one, particularly considering that the aim is to have a strong, respected and capable state, but also to make public institutions smaller and more efficient. This requires the development of new forms of organization that will allow for the full participation of a civilian population truly committed to the achievement of social objectives.

The restoration of democratic systems is a fundamental step towards the definition and application of a new role for the state, a greater commitment to participation in society on the part of the civilian population, and the reorientation of public expenditure and private investment with social responsibility. It is essential to bring about a better balance between spending on defense and on social security; to reduce the generalized subsidies and protectionism which serve the interests of private elites; and to develop strategic public investment programs geared to the formation of human capital and the promotion of private investment. As the trend towards democratization grows, governments are faced with the need to act decisively, even at the risk of temporarily losing popularity, an inevitable consequence of beginning the profound transformations that are required. In this regard, several countries have already established some noteworthy internal alliances and social covenants.

In Latin America and the Caribbean, as in other parts of the world, efforts are being made to articulate a strategy of sustained development, with a view to avoiding short-term pressure to increase productivity for the sake of achieving competitiveness; instead, the idea is to lay the groundwork for a more robust and viable production structure over the short, medium and long terms. Clearly, in order to achieve sustained development, it is important to place greater emphasis on the future and, consequently, to give priority to human capital and to the rational use of natural resources (Pomareda 1990). Beyond the universal task of working to forge a common future (World Commission... 1987), the LAC countries are faced with the serious challenge of striving for sustained development while at the same time overcoming the structural conditions that give rise to poverty. This, as noted by Sachs (1989), is closely linked to the deterioration of natural resources.

The achievement of sustained development requires, among other things, considerable financial resources. The countries have begun to develop these resources in a variety of ways: some progress has been made towards reducing the external debt, both through negotiations conducted by individual countries and through the collective pressure of LAC, and a different spirit may already be felt in these negotiations. The reforms that have been put underway in Latin America are much more far reaching than is generally recognized (Latin America... 1990). Some countries have begun to rationalize public expenditure, in line with the painful commitment that many of them have assumed in the context of their structural adjustment programs. The fact remains, however, that the burden of these adjustments has been borne by the poorest sectors of the population. Tax reforms have been initiated in order to build more equitable power structures that will rely less on capital accumulation. In addition, the countries are more inclined to recognize the importance of participating in international trade by rationalizing the management of exchange rates. Justifiably, they are somewhat skeptical about the whole process, since the prerequisite for its operation is reciprocity between countries and hence the elimination of barriers on the part of the developed nations.

The challenge, in terms of the operation of the institutional and the informal systems in which financial transactions are conducted, is a formidable one. This system must be made to work, in order that private investments may be oriented towards production, that all social strata may have access to credit, and that the flight of capital, which poses such a serious problem for the region, may be halted (Williamson and Lessard 1987).

In economic and technological terms, it is obvious that none of the countries in the region is holding on to an isolationist development style. That is all in the past; nevertheless, there is the dilemma of how to create a balance between openness in regard to international trade and finance, and growth with equity. What is clearly needed is a development model that will provide for balance between those two pillars. Fortunately, progress is being made in the conception of a development style that can be adopted by any given country, with emphasis being placed on one or the other of these two foundations, as appropriate in light of each country's needs and potentialities. The countries have recognized the need for this balance as they have become aware of the risks they run if they refrain from taking part in the international processes of technology transfer, trade in products, inputs

and services, and increasing capital flows. In addition, they have become concerned with the fact that international participation has usually benefitted only a very limited segment of their populations.

In the years ahead, the LAC countries must be able to offer high-quality agricultural products on competitive terms. In order to make this possible, each country must take measures, as a matter of urgency, to improve the quality and reduce the cost of production of their products; the developed countries, in turn, must take an open-minded approach and assume the cost of eliminating protectionist measures. As regards participation on the international financial market, the countries must develop the capacity to appreciate and account for the total flow of funds into and out of the region. This will allow for more effective measures in the area of monetary and exchange-rate policies.

The LAC countries are showing an increased interest in participating in the international markets, although they still have some reservations. In particular, there is the concern that behind the seemingly good political intention of working for a more just international order there lie private interests and corporate needs that could press for political decisions that would have serious consequences for those emerging medium-scale firms and organizations that are becoming more actively involved in international trade. Once again, the challenge is to adopt a strategy that is in harmony with modern times, i.e., a growth strategy for businesses of all sizes and countries that allows for flexibility, for the adaptation of technologies and for diversification and the spreading of risks in a fair, competitive environment.

The international scene is changing more and more frequently, and the events that bring about the changes are of an increasingly significant nature. One of the most interesting processes has been the opening up of the economies of eastern Europe and the expected consolidated European Market in 1992. This in itself has contributed to a redefinition of economic and political blocs with serious geopolitical implications. It is clear that this new international order presents both a challenge and an opportunity for LAC's role.

Given this international scenario, the Initiative for the Americas, proposed in June 1990 by President Bush, represents a response whereby the bipolar scenario of the last few decades would be replaced by a pluripolar one, with Japan and the new Germany clearly intending to play key roles in establishing a new balance. The plan proposes the

creation of a free trade zone throughout the hemisphere, with a view to increasing investments, providing a fresh flow of capital to the region, and alleviating the debt burden, while offering significant environmental benefits. The three elements of the proposal make it very attractive for LAC; however, in seeking to put it into effect, it is important to remember how it originated and what are the ultimate objectives being pursued on the broader international scene. It must be recalled that it is not a special program for exports of LAC countries to the USA, like the Caribbean Basin Initiative, but rather a program to stimulate investment and trade flows.

The recent changes in eastern Europe, the plan for the unification of Europe in 1992, the Initiative for the Americas, and the war in the Persian Gulf are the most visible developments that are likely to change the international situation. Other, as yet unforeseeable events could also occur which could change the whole picture. Hence the significance of the recent changes: they appear as an additional reference point for the adjustments to be made in development styles and in efforts to achieve balance between domestic and international issues. Many other changes may also occur, on both the domestic and the international scenes; a development style must be devised that will enable us to make the necessary adjustments, but we must not expect to be able to change everything again each time new changes in extraregional initiatives are announced.

What we must be aware of, on the international scene, is the fact that, quite aside from the dimension of the marketplace (the first aspect that came to mind with the opening up of eastern Europe to trade and the presentation of the Initiative for the Americas), we must assess and comprehend the strong interactions that exist in the fields of technology, economics and finance, within the framework of international business and political relations. We must realize that the changes that have taken place on the world scene have also led to a different perception of LAC on the part of the international community, and as far as competitiveness is concerned, we may find that, on the one hand, we are at a comparative disadvantage with the other regions in which some of the developed countries are interested for geopolitical reasons. The EEC countries, for example, look at LAC differently as compared to eastern Europe and northern African countries. On the other hand, it is evident that we are seeing a search for political and economic allies in a new international balance.



Finally, it is worthwhile pointing out that as the developed countries seek to establish bilateral trade relations with each other or between major blocs, the challenge is greater for LAC countries to develop a common position. This is fundamental to be able to deal with emerging political and commercial alliances within blocks of developed countries looking for ways to supplement their own comparative advantages and to strengthen their positions at the international bargaining table. The LAC countries must therefore assess the situation and take the necessary steps for group action, which will, in the long run, be more effective than individual actions. Regional and subregional integration processes in LAC have become even more timely and call for a redoubling of efforts on the part of the countries. Nevertheless, if we are to find effective forms of cooperation and integration, we must reflect seriously on those proposals that heretofore met with little success. What is needed is a true political commitment based on the conviction that technological, commercial and financial relations are the basis of the agreements reached by the private sector in the countries in order to make integration work. Consequently, the countries must create a vigorous and healthy legal and political framework for integration, review the role of the integration agencies, and make a concerted effort to harmonize their policies in order to encourage private sector ties.

### **Agriculture as an Expanded Sector**

Agriculture in LAC can no longer be seen as the primary sector associated with the production of crops and livestock; rather, it must be viewed as the agricultural-agroindustrial complex (Piñeiro 1987). In this complex, the increasing flow of products from the primary sector to the manufacturing sector, and the growing linkages within the rural areas show that agriculture has gone through an important transformation process. Structurally, the sector must also be seen as a conglomerate of enterprises—farms and agroindustries—of different sizes and capacities, conducting transactions via the market or via vertical integration (Pomareda 1989).

Production on farms, in agroindustry and in the food industry involves the use and consumption of increasing amounts of industrial inputs, goods and services. The type of technology used is determined by the demand for these goods and services, including electric power, machinery and equipment, chemical inputs, plastics, packing materials and others. In turn, the levels of technology and types of management applied

determine the demand for services such as information, consulting, accounting and others. Economic policies and the different tools used in implementing them are key elements in enhancing the aforementioned relations in order to build a sound structure for domestic production.

The primary agriculture of the past, which only required land, water, manpower and seed, has changed substantially in much of the region, although the gaps in technology have also widened. The necessity for industrializing agriculture becomes evident as technology, urbanization and international trade relations advance (Mellor 1987). Thus, for example, poultry raising, which over the last 20 years has become one of the most highly modernized and dynamic subsectors of agriculture, involves the use of advanced technologies that require know-how, feeds, machinery and inputs. It has thus given rise to the manufacture of balanced poultry feeds and of highly sophisticated practices in the area of marketing and promotion of consumption. In general terms, the industrialization of agriculture also extends to the production of crops such as cereals (which call for the use of inputs and machinery for production, drying, sorting, shelling, and packing); and coffee production, which necessitates the use of large quantities of industrial inputs.

The process of technological change has promoted the strengthening of relations between the agricultural, industrial and service sectors, especially in regions within countries, or in countries where the greatest technological changes have occurred. This has given rise to industries and services for agriculture and agroindustry, as seen, for example, in the production of vegetables in northwestern Mexico, shrimp on the coast of Ecuador, fruits in central Chile, and milk and dairy products in the central valley of Costa Rica.

In some subregions, such as the Caribbean, there is great potential for the development of strong ties between agriculture and domestic consumption in the tourist sector. Unfortunately, the strategies applied in the two sectors do not mesh, so that a large share of the foods and beverages consumed by tourists is imported, at the same time that the countries are being encouraged to export agriculture products. Also, in the particular case of the Caribbean countries there are evident reasons for an agricultural/tourism environment strategy, especially if we consider the fragile nature of the lands and the large numbers of foreign visitors with spending money.

Clearly, agriculture and agroindustry must be considered a single sector. Nevertheless, the LAC countries are not really aware of this issue and of the magnitude of intrasectoral and intersectoral linkages, despite the fact that several research studies have already underscored these matters (Procesos de... 1990; Mandler 1987). National accounts are still produced and aggregated in accordance with concepts that are inconsistent with these new perceptions, and hence the agricultural sector is thought to be diminishing in importance in the economies of the LAC countries.

Studies conducted in several developed countries, as well as in India, show the potential value of intersectoral relations as a mechanism for reactivating an economy (The Balance... 1989). In the case of LAC, input-output tables have not been updated or broken down so as to make it possible to determine trends in intersectoral relations; however, the little information that is available seems to show that there are already many intersectoral linkages and that they are on the increase. A study made by Mandler (1987) establishes that backward linkages, for example, come to light when total intermediate agricultural consumption<sup>1</sup> is shown as a percentage of the gross value of agricultural production, compared with total intermediate consumption of domestic origin indicated as a percentage of gross domestic product. These indicators show the pressures of the agricultural sector on the various sectors of production as a whole. The linkages are high in Argentina (34% vs. 44%), Chile (42% vs. 42%), Peru (52% vs. 42%) and Uruguay (38% vs. 36%), and relatively low in Bolivia (14% vs. 22%), Guatemala (10% vs. 27%), Haiti (6% vs. 20%) and Brazil (24% vs. 42%). As regards forward linkages, expressed in gross agricultural production with an intermediate destination, they are also comparable with total intermediate goods in terms of the overall economy. In this case, the linkages are very high in Brazil (69% vs. 42%), Chile (56% vs. 42%), Mexico (57% vs. 34%), Uruguay (53% vs. 36%) and Argentina (49% vs. 44%); while quite low in Costa Rica (7% vs. 29%) and Guatemala (17% vs. 27%).

Behind economic relations there lie structural conditions that are not stated in explicit terms, as regards the number of enterprises in the system or the connections between them. This omission makes it difficult to determine the direction that structural change *per se* is expected to take

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1 Refers to the primary agriculture sector, as shown in the input-output tables.

as economic policies are reoriented. Unless the necessary precautions are taken, this situation could contribute to the creation of monopolistic conglomerates. The adjustment process of the 1980s, and the further adjustments that must be pursued during the 1990s with the necessary reorientations, must pave the way for organizing production along lines that are consistent with the social needs of the region and not only with an overall market-economy vision, in which, given the imperfections and subtleties of markets, only a small percentage of the population will actually receive the full benefit of the system.

In order to modify the role of agriculture in economic growth, it is essential to understand the dimensions of the sector and of intersectoral relations. This implies reassessing agriculture's potential for contributing to rural and overall development. Once this information is available, the conceptualization, design and management of economic policy and of incentives aimed at encouraging private investment must be improved. In particular, as a country moves towards a market economy with less direct state intervention in prices, tax schemes and specific trade-policy tools must be reviewed. Former economic policies and protection measures, which made clear distinctions between sectors, should now recognize the need for intersectoral articulation (Pomareda *et al.* 1989).

As far as domestic growth is concerned, a proper articulation between the sectors of production can contribute toward the establishment of an economic structure that will generate jobs and income and enable the countries to compete on the international market (ECLAC 1990). Agriculture has a fundamental role to play in promoting the articulation of the sectors of production as one of the pillars of the development model, although this is more often the case in some countries and in some regions within countries than in others (IICA 1989). The first step towards enhancing the role of agriculture will be to recognize that agriculture has already undergone substantial changes, which led to the strengthening of intersectoral relations. Moreover, major industries have been created —foodstuffs, beverages, leather, tobacco, lumber and agricultural inputs— which, while still using a component of imported inputs, can play a significant role in economic recovery, with the proviso that this should not simply be another program of industrial development providing protection for import substitution.

The recognition of intersectoral linkages should stimulate reanalysis of the strategic areas in which the state should act, how institutions should be modified and how public investment should be oriented. It

will be particularly important to create institutional environments in which agroindustry will no longer be a "no man's land" and in which agroindustrial technology and organization maintain close harmony between the objectives and the means of agricultural development and most of the manufacturing industry and specific food nutritional requirements. The simplistic idea of seeking industrial conversion in very specific sectors in order to improve efficiency in production and trade should be seriously questioned. In the first place, consideration should be given to industries that can play a strategic role in restoring growth and solving social problems; second, conversion must not focus on isolated industries but rather on intersectoral relations and on the effect of backward and forward linkages in the generation of economic activity.

Finally, once these aspects, especially intersectoral relations, are understood, the countries' banking systems will have to adapt their orientation, organization and procedures to help mobilize financial resources for investment in production. Entrepreneurial and trade alliances between the different groups participating in the system must be encouraged. These alliances should seek to capitalize on complementarity of talents, technological know-how and entrepreneurial capability, in order to bring private investment in line with social responsibility. This means the creation of alliances between producers and agroindustries, as well as of new forms of social and entrepreneurial organization, with a view to articulating production systems under common objectives. As regards the mobilization of financial resources for investment in production and for trade, questions were already being raised some years ago about the usefulness of development banks specializing in specific sectors (Pomareda 1982). Recent proposals have called for the rapid creation of multisectoral development banks with the capacity, in particular, to finance technological innovations which, once achieved in a given sector, must be converted into inputs, equipment and materials for other sectors.

### **Modernization as the Means to Development**

There are many ways of defining what is meant by modernization; it is important, however, to define what is meant not only by modernization *per se*, but also what constitutes modernization in agriculture. In this paper, therefore, when we speak of agriculture, we

will be referring to the expanded sector as described in the preceding section.

Human activity in modern times takes place within a complex and dynamic environment, almost as if it were an inflationary spiral. The dizzying pace of technological progress is reflected in know-how, processes, inputs, products and systems which have placed a large number of products on the market designed to promote further progress. Many of these technological advances, however, have been monopolized or kept secret, and are used as a means for gaining power now or in the future.

The information with which society is constantly bombarded influences family and business activities and, in the final analysis, affects the performance of society. Moreover, the mass media have made it possible to transnationalize consumer habits which developing countries cannot easily sustain, given their production structures and levels of technology. This is particularly evident in the urban centers, with regard to dress, entertainment and eating habits. A large percentage of the population, having no access to economic resources through legitimate channels, becomes frustrated at not being able to purchase the products they see advertised and, in many cases, resorts to illegal means of appropriating money. It is quite clear that in LAC much recent delinquency was associated with a lack of economic resources, not only for the satisfaction of so-called basic needs, but also for the consumption of sumptuary goods and of drugs. Priority must be given to changing the focus of the mass media, so that the information they provide consumers will orient their consumption habits in a manner that is consistent with progress, but also with the country's production potential and the realities of its social structure.

The picture is not totally negative; there has been some progress in developing programs which make possible some alleviation of the problems and needs of the population. In fact, the mass media can be one of the best means for improving education and developing human capital. Biotechnology can be an effective and rapid way to increase food production and thus help solve problems of hunger and malnutrition. Medical advances that have already made it possible to halt the spread of some of the worst diseases can be made available to the poorest sectors of the population. Synthetic fibers allow for the mass production of clothing and shelter for large numbers of people who are living in extreme poverty. What causes concern is not scientific progress *per se*,

but rather the need to ensure that this progress is reflected in products and services being made available to society's most needy.

If we ask why scientific progress has not brought greater social benefits, we find that economists think that neither market-oriented nor centralized economies work properly, while sociologists and political scientists find their answer in the breakdown of social systems, the existence of pressure groups and the weakening of the state, despite the gigantic size of public institutions. With some optimism, we see countries redoubling their efforts to create new economic systems with a role for the state that is suited to the challenges of modern times. With less optimism, but with hope, we note that there is a trend towards the establishment of democratic structures in which government is shared. And, with concern, we note the rapid and sometimes surprising emergence of pressure groups whose tremendous capacity for accumulation is facilitated by their lack of ethical and moral principles.

In light of the above and bearing in mind the current and foreseeable economic and social environment, we consider that modernization in agriculture means increasing the capacity of farms and/or similar enterprises to achieve self-reliance, to increase production and income, and to grow in number, under circumstances of market risk, burgeoning technological innovations, and intense competition. It is important that this be achieved without depending on subsidies and protectionism. Still, state support is useful and justifiable, as little can be achieved without it, but this does not mean that subsidies should be perpetuated. We cannot be so naive as to attempt development without carefully oriented support from governments.

This concept of modernization of agriculture, of course, does not go as far as the broader concept of "modernization of the rural environment," which is beyond the scope of this paper. The modernization of the rural environment should be seen as a final objective, and it will be easier to generate proposals for this goal once we have a clear idea of how to modernize agriculture (as a production activity) and how this is to be achieved within the rural environment. This rural space or geopolitical environment must be taken into account because it will make certain patterns of technology viable and will determine the form taken by entrepreneurial and farm organizations. The educational level of the rural population will influence the orientation of technology; agricultural and natural resource zones will be considered both individually and collectively in order to achieve a more rational management of resources;

the formation of specialized commercial or family enterprises at various levels of diversification and vertical integration will be made viable by the prevailing organization. Moreover, it will be possible to develop, within the rural environment, crafts, industries and services that can offer alternatives for those who are not able or do not wish to engage in agriculture.

Considering the interest in and commitment to sustained development, modernization that stimulates improved competitiveness should be developed in order to guarantee better performance in the future. Modernization must be sought on the farm and/or the enterprise, but in order for the process to be a lasting one, the requirements of equity must be borne in mind. Equity is a fundamental condition; without it, modernization at the level of farm and/or enterprise will not lead to economic and social development.

Although in this section we are stressing modernization *per se*—and equity will be discussed later— it is worthwhile at this point to briefly touch on the durability of the process, and the requirements for capital and selectivity. Every effort should be made to ensure that modernization is a lasting process that preserves and strengthens the bases of production, resources and organization. Also modernization should be sought within a context of austerity, given the serious financial limitations and the need to make resources accessible to a large share of the population. It is important to note that modernization of certain units of production does not lead to the displacement and absorption of small-scale, less educated and less aggressive producers. Nevertheless, this concern should not lead to mechanisms that protect obvious inefficiency or extremely conservative approaches.

The modernization of agriculture will begin at the unit level because it is the owner of a farm or the manager of an enterprise who has to make decisions, and that will depend on whether or not he wishes to attempt modernization. This decision is affected by many factors and is usually influenced by public policy and the expectations that it produces. There are two ways of perceiving this environment: as the market for one or more products or as the geopolitical space in which the enterprise is located and operates. In both cases, the strategy for modernization will call for different forms of action on the part of the state and its institutions and among agents in the private sector.



As regards the market, it should offer the necessary climate for risk-taking with a product or resource management. The market need not be large and well defined, but it must provide opportunities and give signals that competition is possible, that opportunities for product differentiation exist and that the marketing process is logical. The geopolitical environment should be carefully assessed, since farms or agroindustries depend on the resources available in the immediate geographical environment. In addition, their contribution to the development of this environment is key for its sustainability and for obtaining support from the general population and from the state.

### **The Relations Between Domestic and International Food Markets**

Economic growth and development in the countries of LAC is a challenge that can no longer be avoided. Economic conditions have reached a level that is undermining the social structure and jeopardizing attempts at democratization. Poverty and hunger are at dangerous levels among large portions of the population, severely limiting the possibility of improving their economic and social situations. As this happens, other groups are reaping the benefits of economic opportunities. It must be clearly understood that these issues are at the heart of the problems of Latin American and Caribbean societies.

In a renewed model, it is anticipated that modernization of agriculture can be one of the means to sustained economic recovery and development. For modernization to be effective in contributing to growth, it must take place in sectors with market potential and foster intersectoral linkages. Also, to contribute to development, it must assume participation of increasing numbers of smaller producers and adequate and improving conditions for workers. To be sustainable, it must be based on technological patterns, organizations and management that specifically contribute to preserving and improving the quality of natural resources.

It should be made clear that, in light of instability in international markets for basic agricultural commodities, LAC countries should have a strategy for national food security. At the individual level, the food security issue means having enough income to satisfy basic needs. At the national level, production and import dependence on basic commodities

has to do with global economic health as well as international financial image. In any event, a national food security strategy should recognize that the needs of the poor are growing and, unfortunately, markets usually do not work in favor of the most needy.

Since domestic markets are limited by severe poverty, international markets play a major role in reactivating the economies. Thus, in this section, the focus is on those issues related to market behavior, with special reference to the performance of and relations between domestic and international markets.

Even though we recognize that economic policies for eliminating distortions must be improved, this by itself will be only one element of the strategy. Given the nature of the problems and the sociopolitical structures in LAC, better conditions cannot be achieved by merely dismantling public institutions and freeing up the market. The problem is too complex for such simple solutions, and special consideration must be given to imperfect national and international markets.

Economic growth and development in the LAC countries must be stimulated, with consideration being given to people's wants and needs, as reflected in market structure and prices of goods and services. This requires the reorientation of the organization of production, to generate from the private sector a growing number of commodities and services needed by society, and also implies a role for the state in fostering these functions in the private sector, orienting, stimulating and complementing their functions in production and trade.

Society's wants and needs are typically determined by culture, education and income, among other factors. Consumer behavior, particularly the demand for food and food-related products, is influenced by information and propaganda; thus, the evolution of patterns of food consumption are evolving internationally in response to the flow of information specifically designed to transnationalize consumer preferences. This has an effect in spite of differences in levels of income and education; it is enough to have access to TV and radio. International information systems have become the best means of generalizing consumption habits, whether for good or bad, among millions of people.

In the countries of LAC, food marketing, preparation and consumption (as well as consumption of other goods) have changed primarily in response to urbanization, the reduced amount of time available to

prepare meals, the pressure on women to enter the labor force, and the international flow of information. This pattern has favored the development of a food industry primarily based on imports of primary inputs such as wheat and powdered milk, spices and flavorings, among others. Their use limits the potential of commodities produced locally, which are often more desirable from a nutritional standpoint.

LAC countries are also being stimulated to export more agricultural commodities to international markets, on the grounds that there is a comparative advantage for such commodities. This is questionable when, to achieve such exports, government intervention takes the form of substantial subsidies, and government concessions are needed to maintain unacceptable taxation systems and plantation production in some countries. It is a matter of concern that countries tend to export food to foreign markets, while foreign tourists in the country consume primarily imported foods rather than high quality domestic produce. The issue is not that imported goods taste better, but rather that high-quality and "safe" products are preferred. Such products can be produced domestically with adequate efforts.

Regarding foreign markets and their potential for LAC countries, two issues are closely related. The first refers to the orientation given to agriculture in LAC countries, taking into consideration demand for food and other elements. The second issue is market protection. The orientation that developed nations are giving to their agricultural sectors is attributable to two principal factors. First is their strategy for development in the rural and periurban areas, with special and specific consideration being given to conservation of natural resources. The second is the satisfaction of consumer needs, with increasing concern for the quality of foods. Both production and consumption considerations give rise to specific economic policies that hinder the proposed model and commercial policies that, with the flexibility in multilateral negotiations, conditions the flow of agricultural commodities.

Even though most developed nations seem to share aspects of this agricultural agenda, there are important differences, at least between Europe and the USA. The EEC 12 have chosen to promote the family farm through increased integration of producers into the marketing process. It is said that this model enhances a coherent social structure and sustainable management of farm resources, particularly the natural resource base. The development of this model is favored by several European Economic Community programs, which include guaranteed

and subsidized producer prices and so-called structural programs. Structural programs in the EEC are oriented toward minimizing social costs, thus favoring less-developed members and backward regions in each country, usually steep hillsides. Their goal is to assist producers in these regions to integrate themselves into the common market. The combined resources of these programs provide a total fund of US\$70 billion for 1989-1993, with an important multiplier effect because governments and farmers provide counterpart funds; total investment for the referred period is about US\$200 billion.

Agriculture in the USA has emphasized large-scale, mechanized, corporate-managed operations, which means that only 3% of the population is involved directly in primary agriculture. The food industry, in turn, is also made up of large marketing corporations. Given this structure, the US approach to natural resource management and improvement focuses on farm technologies less dependent on chemical inputs and land programs. Issues regarding a proposal for a new model of farm organization in the rural USA have little weight as regards the current Farm Bill.

Agricultural policy is also oriented, in developed nations, toward specific goals for the quality of foods. Health and safety considerations and increasing income levels are shaping consumer preferences, with a concomitant demand for foods of higher quality and, therefore, higher value. Although the proportion of income spent on food declines as income increases, the absolute value of expenditures on food increases because the quality of the food basket is higher.

There are important changes in the US food basket toward fewer red meats and milk and more fresh vegetables, white meats, fish and non-sugar sweeteners. In Europe, the preference for red meats has not declined, but there are important positive tendencies towards more fruits and vegetables and high-quality products. Observation and analysis of consumer preferences in developed countries will determine what LAC countries should try to produce for export. It is anticipated that the consumers in developed nations will demand changes in government policy, to allow for imports of desired commodities, regardless of their origin.

Production and consumption trends in the developed nations are an important point of reference for the orientation LAC countries must give to agriculture and agricultural trade. There are opportunities, but there

are also major challenges. International concessions do not seem to be on the cards in the years ahead. Governing factors are competition, global trade negotiations, and a big dose of geopolitics.

### **Key Factors in Modernization and Progress**

In order to achieve modernization in specific sectors of agriculture, capacity must be improved at the unit level. This can be achieved by building and constantly improving the quality of basic capital stock, which is made up of human resources, physical resources, biogenetic (animal and plant) materials, tools, machinery and equipment and infrastructure. This capital stock is the very foundation of modernization.

It has been recognized that technology, management capability and group organization are fundamental elements of the modernization process (Pomareda 1989). The technology required to modernize agriculture may contain significant inputs acquired on the market; but in order to achieve self-sustaining development, it is essential to improve the quality of physical resources, of tools and of genetic materials at the unit level, and to adopt agroindustrial processes that are consistent with technological progress and with the social realities of the countries. Thus, it is important to realize that modernization is not synonymous with the use of large amounts of inputs and capital goods, although some of these may indeed be essential.

In many modernization processes, chemical technology is a determining factor, but self-sustaining development is better achieved in those cases in which there is an adequate balance between the use of inputs that allow for temporary increases in yield (fertilizers and agrochemicals) and those which allow for productivity increases over time (genetic development, irrigation and drainage, crop rotation, production of humus, reforestation, erosion control and others) by improving the quality of resources. It is also clear that as far as the technological components of crops are concerned, for example, new concepts must be developed so as to achieve a comprehensive technology for crop production and stock raising at the unit level.

It is worthwhile pointing out that over the past five decades, emphasis has been placed, at different times, on mechanization, agrochemicals, the development of hybrid varieties, drip and micro sprinkling irrigation methods, artificial insemination, and, more recently, on embryo

transplants and biotechnology. From now on, no one of these aspects should be considered in isolation; rather, they should all be part of a renewed and comprehensive approach designed to take advantage of the best technologies.

There is serious concern about the effect that technologies currently in use have on the cost structure of crop production. For example, despite the significant progress that has been made in genetics in connection with products such as cotton, coffee and grains, agrochemicals represent an increasing share of the costs. This illustrates the orientation of much agricultural research due to the influence of the marketing strategies of transnational corporations that produce and market agrochemicals.

The challenge of ensuring that technology contributes to sustainable modernization and reduces dependency on the international chemical industry can only be met by developing entirely new national science and technology programs for agriculture that are aimed at raising the ceilings of productivity while at the same time developing and improving natural resources. One of the essential functions of such programs will be to monitor technology and keep track of the international-domestic transfer process, in line with the responsibility for defining and promoting a policy on technology. With the meagre resources available for agricultural research in LAC, great care must be exercised in deciding what the public institutions should do, and new patterns for concerted action with private enterprise must be defined.

In any effort to modernize agriculture, managerial ability must go hand in hand with technology. A farmer may be very skilled and use the best technologies in crop production or stock raising, but still not be very successful over the long run. Managerial ability is reflected, for example, in the way a small farmer engaged in primary production applies strategies for managing risks, accumulating capital through livestock, diversifying the family income, and scheduling the planting, storage or dessication of certain products, for example. Farmers with a better education and access to information and financing will be most successful when, although adopting more sophisticated management systems, they still follow these same fundamental principles. This more complex level is called management.

In the approaches followed so far in efforts to achieve the required changes in agriculture and rural development, management has usually been neglected or treated very lightly. In looking back at what has been

done, we find that the main idea has been to seek technological innovation directly. This approach does not really motivate the farmer, nor does it help him improve his management skills. When a farmer is encouraged and becomes interested in a different style of management, and when he sees what others have achieved, he will want to adopt the necessary technology, or will at least be more motivated and better able to do so. From this standpoint, it is evident that in the most notable cases of modernization, ministry of agriculture extension workers have done very little to improve the farmers' management capacity and skills, inasmuch as they have been trained for the transfer of technology *per se*.

Another point concerning management skills and modernization is the fact that, in many cases, these skills come from the urban sector and the entrepreneurs who possess them have little or no knowledge of agriculture. They are people with an enterprising spirit who are trying to make a profit. Without denying the benefits that have been achieved with this type of participation, the fact that they are merely seeking profit does remain a matter of concern. This could lead to a management style in which there is no concern for equity on the conservation of resources; hence, when resources become exhausted over the period of time it takes to recover the investment, the activity would simply be abandoned, without any commitment having been made to resource conservation or sustained development.

Some of the most successful management styles have been those in which planning for the enterprise began with a clear definition of each project and the specific market to be targeted. Skill in the organization of processes and the handling of labor relations are also important; however, the most important aspect is skill in financial management. Many producers who have been relatively successful in the aspect of production *per se* and in applying good marketing strategies have failed because of financial problems, mainly resulting from inflationary processes and changes in macroeconomic policies. Likewise, many of those who have been successful have not sought financing from development banks, thus raising the question as to whether subsidizing the interest rate is so important after all.

In general terms, agricultural units, producer associations, trade associations and others spend very little on marketing, advertising and on learning how to participate in unstable markets. More research is needed on this subject, but in general there are very few cases in which

aggressive strategies have been developed to activate the market. One example of this is the case of poultry producers in Peru, who formed the Peruvian Poultry Raisers Association (*Asociación Peruana de Avicultores*), and in 1986-1987 launched a very successful television program entitled "*Coma Pollo*" ("Eat Chicken"). This system has also been used often in the United States to promote fresh milk, ice cream and other products.

The challenge of developing management skills in agriculture is daunting. Short-term training might begin with extension agents and organized producer groups. On a larger scale, major changes are required in the curricula of schools of agronomy and agricultural economics, as well as in the agricultural training schools. The school at El Zamorano, Honduras, has taken some interesting steps in the area of management. In order for the Latin American schools to produce better results in this area, they will need to be provided with appropriate educational materials (textbooks, video presentations, etc.), starting with the Spanish and English textbooks that are already available.

It has become clear that in order for certain individual objectives to be achieved, a number of group or associative objectives must also be attained. Group action can provide benefits such as economies of scale in marketing and processing; collective purchasing of inputs; technical assistance and financing; management of irrigation and drainage systems; and the capacity to exercise political pressure in order to obtain selective protection or public services. After many years of experience, it has been found that the key to building strong and lasting producer organizations is for members to realize that individual objectives must be subordinated to the objectives of the group as a whole. Thus, for example, if members value private ownership as an objective or a principle, programs based on collective use of the land cannot be expected to succeed; however, the principle of private ownership would not be violated by the establishment of cooperatives for the purpose of obtaining services or processing products.

A willingness to work together and to give up certain individual rights is fundamental to the success of cooperative or associative group action; it is also important to have a clear idea of the order of priority of the problems to be dealt with, and the best ways for the group to organize in order to solve them. The pyramid type of organization set up by vegetable producers in Mexico provides a good illustration of this. At the valley level, the producers' association deals with problems such as irrigation water management and planting schedules, working in close



contact with the pertinent authorities in the Secretariat of Agriculture and Water Resources (*Secretaría de Agricultura y Recursos Hidráulicos - SARH*). At the state level, the representatives of the producer associations in each valley have set up a confederation of producer associations empowered to solve problems pertaining to state policies or to agree on the planting schedule. At the national level, the producer associations are represented in the National Union of Vegetable Producers (*Unión Nacional de Productores de Hortalizas - UNPH*), a well-established agency that has the technical capability and the necessary political clout to negotiate with the Mexican authorities matters pertaining to economic and trade policy. UNPH is also the organization responsible for providing the information needed for bilateral negotiations between Mexico and the United States (Seminario de... 1990).

The three factors mentioned above, technology, management, and group organization, are fundamental to modernization. They determine the sector's ability to obtain benefits within the environment created by current policies, to gain access to domestic and international markets, and to obtain financial resources. Thus, it can be said that the great challenge to be met in order to achieve the modernization of agriculture lies in the formation of human capital. This task must be addressed not only by those involved in agriculture, but also by those responsible for educational policy and for economic and tax policies, so as to encourage a response from those who know and have the most, in order to build a more capable society for the future.

### **Equity as a Prerequisite to Modernization**

The LAC countries are experiencing unbearable poverty and social turmoil; the disparities in income levels are enormous, and a large percentage of the population finds it impossible to build a better future for itself. Unless these conditions are improved, modernization at the farm/enterprise level in the various sectors of production especially agriculture, will not bring about sustained development. Social tensions will increase and, despite any progress that may have been made in the production apparatus, society will self-destruct.

The great challenge, therefore, is to ensure that the modernization process does not aggravate already unacceptable social conditions, but rather that it help improve them within a context of equity. The search

for equity brings to mind at least five issues. First, it is important to create economic activity within the countries, in order to strengthen the structure of production and generate jobs and foreign exchange. Second, economic benefits must be well distributed within the sectors that have achieved modernization, and their social situation and their potential for future performance must be improved. Third, natural resources must be managed responsibly for the explicit purpose of achieving sustainable development in agriculture; this implies a commitment to equity for future generations. Fourth, every effort must be made to increase the variety, quality and volume of production in order to ensure that products are accessible to those who need them most. And finally, the lessons learned from modernization programs must be shared with other sectors of producers, regardless of where they work or the scale of their operations.

Modernization in a given sector can have a widespread multiplier effect provided there is a clear understanding of the intersectoral linkages involved and of how economic policies can contribute to the strengthening of such linkages. Several studies on modernization clearly show that, in many cases, a golden opportunity to contribute to the growth of the domestic economy is lost because the exchange policy is geared towards promoting imports of inputs and products that could have been produced locally, in an effort to build the aforementioned social and production alliances.

In some cases, modernization has had a direct and positive effect in that it has led to the creation of jobs and has brought in foreign exchange, without the necessity of creating related economic activities. In such cases, of course, these benefits must be weighed against the benefits of creating economic activity, since it is not always possible to meet both objectives.

With regard to the lack of equity in labor conditions, in generic terms, there is reason to be concerned about labor-intensive export production. In the case of some agroexports, although the average income received by harvest and packing workers is higher than the average rural wage, this seasonal employment calls for concentrated hard work and creates manual specialization. This type of experience does not really help workers develop flexible skills; and it must be viewed as a temporary job for the sole purpose of generating income, with little potential for upward mobility. In addition, it has been pointed out that agroexports are highly profitable largely due to the fact that wages are low compared

with the value of the marginal product of labor; this demonstrates the current inconsistencies in labor policies.

In order to temporarily obtain a higher income, the worker must make sacrifices, in terms of family relations, which have a long-term negative effect; some women must leave their homes, sometimes for days at a time, because they have to stay at the work center. As a result, children are more likely to have accidents and, behavioral problems due to lack of daily parental guidance. It has been suggested that employers have the obligation to provide child care and educational facilities for minors whose parents have very long work shifts; only a few organizations have actually done this. Explicit requirements have also been established regarding protection against permanent contact with agrochemicals and other pollutants.

As regards environmental conservation, responsible management of natural resources and long-term sustainability of agricultural production, it is obvious that the prevailing production pattern can only be maintained at the risk of totally destroying large areas of natural resources — forests, soils, animals and plants, water, air — thus jeopardizing the very existence of future generations. This makes it imperative to develop production strategies and agricultural modernization processes that meet present needs without compromising the capacity of future generations to meet theirs.

In several significant experiments in modernization (Procesos de... 1990), it has been shown that resource conservation has not been an explicit concern of private enterprise nor has it been fostered by public policy. It should be a matter of concern that the great successes in increasing grain production in Argentina are depleting the soils (Obschatko 1989); that the dramatic growth of shrimp production in Ecuador has left 100 000 hectares of mangrove patches useless for any other purpose (Ríos Pintado 1989), and that in Chile and Mexico, the use of chemical products has greatly increased as a result of sanitary measures in fruit (Silva and Bruna 1989) and vegetable growing (Vidali 1989).

In discussing the need for sustained development and for modernizing agriculture as a means of attaining it, with consideration being given explicitly to a commitment to equity for future generations, we must not fail to mention the role which the market plays in the allocation of resources. The most notable modernization exercises have been oriented

by the search for competitiveness on the market and, hence, have given priority to efficiency and cost reduction; in some cases, however, there is already evidence of the difficulty of keeping costs down because of the deterioration of the natural biological balance.

In discussing market behavior and the management of economic policy tools that affect agriculture, one finds that neoclassical theory has inconsistencies and limitations when it comes down to reality and dealing with the challenge of improving environmental conditions. For example, the whole theory of externalities has become increasingly popular; however, it is still treated almost as an appendix to neoclassical economic theory. Another extremely important issue is the management of the discount rate (and its relationship with the interest rate) in evaluating projects in which priority is given to short-term returns. Fortunately, the limitations of the economic theory that has prevailed until now are finally being pointed out (Goodland and Ledec 1987), and some contributions are being made to drawing up a conceptual framework that will incorporate market theory into the theory of sustained development (Redclift 1988). It must be remembered that modernization is sought to increase production for export to generate foreign exchange, as well as to solve the serious domestic problems of food and nutrition.

In one of the most successful cases of modernization, that of poultry production in Peru (Palomino 1989), the multiplier effect on economic activity was low; however, per capita consumption increased substantially as poultry prices fell in comparison with beef at a time when per capita income was at a standstill and income distribution was deteriorating. Thus per capita annual consumption of chicken rose from 3.2 kg in 1969 to 9.8 kg in 1987. In other cases, such as those of Chile and Mexico, the increase in export production and the raising of quality standards for exportable products have made it possible to offer on the domestic market good quality, attractively packaged products which, even though not fully meeting export standards, are better than the products produced in areas that are not influenced by production technology of export marketing. In the cases mentioned above, per capita domestic consumption of fruits and vegetables has tripled in 15 years, with the positive implications this has for nutrition and health. It must be remembered, however, that these products require high levels of agrochemicals; so far, no study has been made to show whether chemical residues are greater or lesser than in cases where less advanced technology is used along with agrochemicals.

The positive or negative effect of the increase in production as regards availability for domestic consumption is not always clearly shown in aggregated data. In Costa Rica, for example, Camacho (1989) reports that per capita milk production has systematically increased over the last 20 years. What this study does not show is that a growing proportion of such production is used to make by-products such as cheese, ice cream, yogurt and others which are not subject to price controls and which have a greater income elasticity. As a result, per capita consumption of milk has fallen, and this may have a greater effect on children and on the lower-income strata of the population. Moreover, since milk is pooled in rural and semirural collection centers and processed mainly in urban areas, it is also possible that per capita consumption in the rural areas may have fallen.

It is also important to point out how the modernization of a subsector or of a product brings about changes in the consumption of substitute products, thus affecting producers who for agroecological or technological reasons are not able to participate in the modernization process. In Brazil, for example, there is a strong tendency to replace peanut and cotton oil with soybean oil. Between 1969 and 1985, the production of soybean oil rose from 100 to 1 411 tons per year, while the production of peanuts and cotton fell from 170 to 4 and from 179 to 89 thousand tons per year respectively.

In other cases, there is a marked segmentation in production for the domestic and external markets, as noted in the case of shrimp. In Ecuador, per capita annual domestic consumption of shrimp has been minimal, ranging between 90 and 480 grams from 1975 to 1986, with an average of 200 grams per capita per year. It was not until 1987 and 1988, when production and exports increased considerably (although with problems in adequate exportable quality), that per capita domestic consumption rose to 1 300 grams.

The task to be carried out over the next few years will be to extrapolate the knowledge gained from modernization experiences. What is known so far regarding the interaction of technology, management and organization in creating improved capacity must be disseminated, in the context of a renewed strategy for agricultural development. It is important to stress that what is learned about a given product in one country can be extrapolated to the same product in other countries and to other products in the same or other countries. One cannot claim that

modernization is being achieved within a context of equity if the knowledge and skills gained are not shared with other farmers.

The point that must be stressed here is the importance of a commitment to sharing knowledge on how to improve a producer's ability to cope in modern times, not necessarily how to produce a given product for export. If this is not understood, there will be natural reactions of jealousy and fear about sharing knowledge, which would jeopardize social reciprocity within individual countries, as well as cooperation between countries.

Within the framework of the PLANLAC, in which countries have committed themselves to carrying out joint actions, there is ample opportunity to contribute to modernization with equity. There are high expectations that the knowledge that is being generated by modernization experiences will help make international cooperation more effective, and contribute to the development of new forms of horizontal cooperation between the private and public sectors of the countries of the region.

### **Challenges for Public Sector Policies**

In this day and age, in order for small-scale farmers and larger-scale enterprises to invest in agriculture and follow it as a way of life, they must be convinced that it can be a lucrative and sustainable undertaking. Agriculture has been shown to be a viable activity, especially if technology, management and group action are used. The profitability and sustainability of the undertaking will depend on how the government acts in several respects: for example, it must prove to be credible and trustworthy; it must set economic policies that do not penalize the sector; it must be able to rely on legislation and public institutions that operate with a spirit of service; it must foster an effective and fair financial system; it must make strategic public investments and it must provide guidelines for food consumption.

If agriculture is to be modernized while ensuring maximum equity, the role of the state must be reoriented. This would allow for changes to be made in policy management, in reforms and modernization of institutions, and in the orientation of investments. It is evident that the modernization of institutions will be the central focus of efforts to achieve policies that fit the model proposed, to orient private investment and to set priorities and manage public investment.

Several recent papers have discussed the need to revise and reorient macroeconomic policies with a view to ensuring that they are consistent with the proposed reactivation of agriculture (Pomareda *et al.* 1989). This calls for an on-going strategy of seeking agreement between those responsible for macroeconomic policy and those responsible for agricultural and industrial policies, which will provide better consistency between macroeconomic policy and sectoral policies, and strengthen the linkages between different sectors of the economy.

In order to achieve this harmonization, it will be necessary, on the one hand, to develop mechanisms for coordinating decision making in the area of economics and, on the other, to have sufficient information on intersectoral linkages, in order to allow for an assessment to be made of the impact of changes in economic policy. In addition, new ways of organizing public sector institutions must be found, in order to ensure adequate participation of the agricultural authorities in the formulation of policies which affect the sector.

It is difficult to ensure consistency in policies designed to offer incentives for production because such policies are often implemented by different agencies throughout the public sector of agriculture. In many countries, different agencies (ministries of agriculture, state corporations, autonomous agencies), often operating with a high degree of independence, handle farm credit, the marketing of inputs and products, public investment in agriculture and the levying of taxes. The existence of a decentralized institutional system for the administration of incentive-policy tools and related programs must be balanced against the need for an adequate system of overall coordination of such policies so as to ensure their internal consistency and set the guidelines for decentralized action.

It is worthwhile noting that in most of the LAC countries, the state not only directs policy but is one of the main economic agents of agricultural production. The public sector provides services, administers goods, operates on the market and carries out a number of other activities pertaining to the economy and to rural development. The public sector has traditionally assumed responsibility for socially necessary activities not undertaken by the private sector. Thus, over the last few decades, state enterprises have often been created to distribute credit, market products, generate and transfer technology, and provide inputs. This role as an initiator of activities has been a common pattern followed both in the LAC countries and in other developing countries; unfortunately the

state has often not fulfilled its role properly, and has been rejected by society because of the lack of credibility of many public institutions.

Questions have been raised as to whether the public sector should play such a leading role in the development process, including its direct participation in economic activity. In their structural and sectoral adjustment programs, the international financial agencies are now seeking to reduce state participation in economic activity. This idea, however, needs clarification, since what is needed is a stronger state that is more able to play a guiding role and that will be highly respected, as well as a public apparatus which, although possibly smaller in size, will be more efficient and service-oriented, and will enjoy the trust of society.

As regards direct participation in economic activities, there are areas in which the state's initial action has allowed for the subsequent development of private enterprises and cooperatives that provide equivalent services, thus making public sector presence unnecessary. This would also release resources for other activities in which the state's participation is essential. It is also important to assess the potential for joint public- and private-sector activities, this being an alternative not properly appreciated in the past but which has now become imperative. In order to open the way for such ventures, it will be necessary to revise the legal regulations which often hinder them, and to seek more flexible mechanisms for establishing the linkage.

Another important aspect to be considered in modernizing agriculture is the need for modernization of the public sector itself, essential if efficiency is to be improved. Efforts to modernize agriculture and make it more dynamic are directly related to activities of the public sector, as much as there is no point in improving efficiency in production if public-sector activities which affect agricultural costs are not competitive. This modernization must cover a variety of aspects, and must include changes in the organization of institutions and the application of management techniques in their administration.

In view of the importance of the financial markets as a means for mobilizing resources for investment in agriculture, the institutional system responsible for mobilizing resources faces a tremendous challenge. This system is made up, in principle, of the central banks, the commercial banks, the development banks and other organizations such as savings and loan funds and cooperatives. This institutional system calls for a



comprehensive and concerted effort to be made in the channeling of resources. The 1989 World Development Report includes a thorough analysis of the institutional problems encountered in the area of financing. If there is a trend towards the establishment of uniform interest rates in a country, with the gradual elimination of the prevailing subsidies, the concern arises as to what will be the role of the development banks. It has been suggested (World Bank 1989) that the national development banks might be merged with the commercial banks; this is tantamount to denying any specific purpose or goal for the development banks as we face the challenges of development over the next few years.

The roles of the development banks, the institutional systems that provide financing, and each individual institution must be assessed with a view to determining what changes may be needed. If development and modernization require more qualified human resources, more and better information, and improved technology and management skills, the national development banks might consider reorienting their operations, with a view to supplementing the work of the rest of the institutional system. Thus, they might direct their efforts more toward investing in the formation of capital (human, physical, technological) and less toward financing farm credit and expenses. An area that deserves attention is that of special financing for the commercial production of technological innovations.

Over the next few years, great efforts will be needed to design and manage public investment, in keeping with the policies adopted, in such a way as to enable the state to fulfill its role in the development of agriculture. An exhaustive analysis of the management of public investment for the reactivation of agriculture in the countries of the region must cover many aspects, including the criteria to be applied in establishing priorities for state investment and the close relationship between public and private investment.

These are not the only aspects that must be stressed; there is also a need for serious discussion of the amount of public investment that should be made in agriculture as compared with public investment in other sectors (whether related to agriculture or not) which indirectly contribute to the development of the sector by promoting and facilitating investment in agricultural products. A full understanding of the role which agriculture plays in the national economy will lead to the allocation of more resources to this sector and to certain components of

other sectors, such as investment in rural infrastructure, rural education, and training in nutrition. In any event, rather than proposing drastic reductions in public expenditure, it is essential to identify investments and expenditures that the state must make in order to fulfill its role more efficiently.

### **Summary and Final Remarks**

The political and economic environment at the national, regional and world levels is in a state of constant flux, as evidenced in the instabilities of the system and the opportunities and challenges being faced by those who are involved in agriculture. This means that we must devise a development style based on a growing capacity to participate efficiently in this scenario, without assuming that frequent and abrupt changes of direction are possible.

Agriculture is already being perceived as an expanded sector that includes the agricultural-agroindustrial complex and it is increasingly interrelated with other production and service sectors. It is worthwhile to examine the entrepreneurial and social structures which determine its operation, how the effects of economic policy measures are transmitted, and what is the actual potential of each country and of specific regions in each country to generate economic activity by way of intersectoral relations.

It is suggested that modernizing agriculture is the way to improve the capacity of producers at the farm and /or enterprise level for self-reliance, in these times of economic disruption, rapid technological change, intense competition and difficult living conditions. It is also explicitly suggested that we should try to modernize agriculture as a means of contributing to rural development. Studies on the experiences of a number of countries must be further developed in order to show the close involvement of the private sector in modernization processes.

Modernization entails the formation and improvement of the capital stock, in human, physical and natural terms, as a means for achieving greater capacity at the unit level. To this end, technology, management capacity and group organizations or trade associations are the most important factors that must be developed. Thus, it is essential to do away with the traditional approaches of microeconomics, which are based on an analysis of the production function, and move on to improve the

principles of enterprise theory. In particular, the still unexplained residue of econometric analyses must be studied in depth in order to develop the investment in human capital formation, which translates into technological know-how and management capacity.

From the standpoint of public policy, it is important to develop an economic policy that will set aside the concept of competition between sectors and instead seek to develop complementarity between them. In addition, there is an extremely urgent need to imbue public institutions with a spirit and mystique of service. In this regard, the major challenge is to devise forms of state participation as progress is made towards the adoption of market economies. It is especially important that the move towards a market economy be made with a commitment to social responsibility, with benefits shared equitably within producers and consumers.

The issues we have discussed are not dealt with in prevailing economic theories or in academic training curricula, although these are the normal spheres of action of our profession. The challenge is for all of us who are involved in the academic field, research, advisory services, management of public enterprises, private enterprise and political leadership. A concerted effort of inter-American cooperation will greatly facilitate the growth of knowledge and experience, and each one of us must be committed to a well-defined collective cause.

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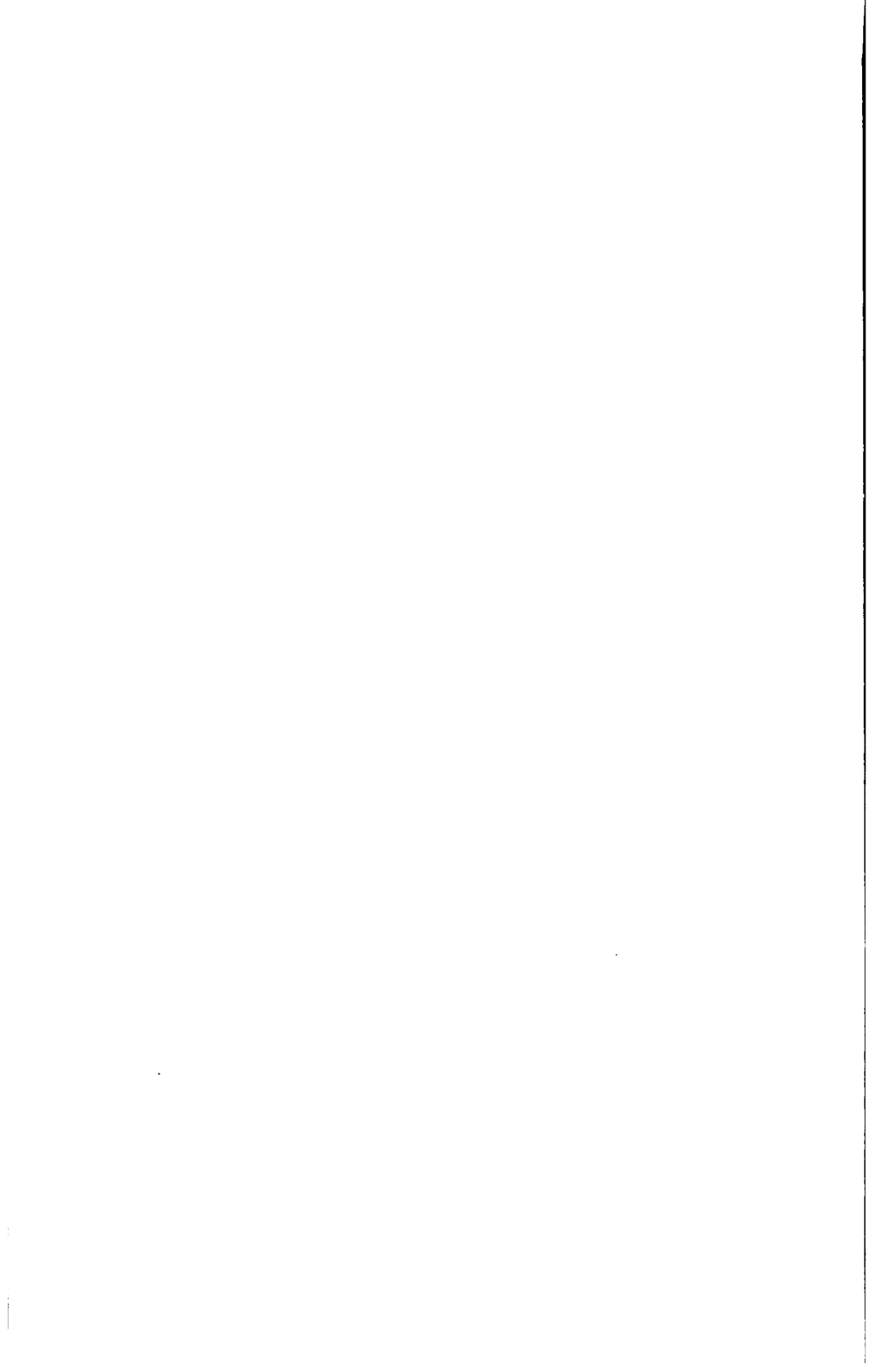
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**SESSION ONE  
RESPONDENTS**

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## **Respondents to Dr. Carlos Pomareda**

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**JAY BRUNS**

Allow me to offer some comments on Dr. Pomareda's talk and also to say a few words about the United States' Agricultural Policy.

As a career diplomat who goes from one place to the other and learns a little bit about everything, I do feel I am a Jack of all trades, but rarely a master of any. Certainly, agriculture is not an area which I have fully mastered. I have the feeling that even if one spends one's entire lifetime, one never fully masters this archaic and complex subject. (At least it's archaic when it comes to trade.) Therefore, I think what I would rather do is give everyone a very simple overview of US policy, so you can understand what US policy-makers are grappling with when they think about agriculture and trade. Perhaps when you deal with specific issues related to the Caribbean and Trinidad and Tobago and Latin America, if you keep in mind what US policy-makers are thinking, it may help in your deliberations.

First, I was delighted, no I was relieved, that I could easily agree with many things said by Dr. Pomareda. Let me highlight a couple of these items. One was the interest in wanting to have open markets in agriculture; another is that any policy one tries to make with regard to agriculture should fit into the larger context of the other industries in the country and with what's happening with agriculture elsewhere in the world. I also liked his comments about the fact that North Americans are spending more on food, but that when it comes to the food we are buying, we are more concerned about quality. He also mentioned a key word in US vernacular these days when it comes to any type of trade: "opportunities". There are opportunities, but it is up to individuals and their governments and their businesses to take advantage of them.

Finally, I certainly agree with the need for greater management and the need to strengthen private organizations. And as Dr. Pomareda pointed out, it is not something that simply happens. You have to proceed carefully. The word "privatization" does not mean much unless you back it up with something substantial and the word "cooperation" goes very well with privatization. I think US agricultural cooperatives are one of the keys to our success. Finally, he mentioned that protection with regard to agriculture is a fact of life that we must all live with, and that is very true.

I would like to point out how my government would like to make a concerted and common effort with other agricultural nations to eventually eliminate this protection. Agriculture is very important to the United States and it makes an important contribution to US policy. The United States' priorities in agriculture are a more equitable open trading environment, greater cooperation on food aid and security, and agricultural development in developing countries. One major manifestation of our interest in greater cooperation is US membership in a large number of organizations which have to do with agriculture. These include the Food and Agriculture Organization of the United Nations (FAO); the World Food Programme (WFP); and the International Fund for Agricultural Development (IFAD). We are also members of the International Coffee Organization; the International Sugar Organization; and the International Cotton Advisory Committee, all commodity organizations.

The United States, as I am sure you are aware, is the leading exporter of coarse grains and soya beans, and is also a large supplier of commodities such as wheat, cotton, meat and horticultural products. We have, in recent history, always been a strong agricultural exporter, but the US share of world agricultural trade fell in the 1980s. However, it bottomed out in 1987 and, since then, it has been rising. By 1989, we returned to a point where United States' exports comprised 15 percent of world agricultural exports. That same year, agricultural products comprised 12 percent of US exports and earned us US\$40 billion.

But this is two-way trade, as we also import a great number of agricultural commodities, although not nearly as many as we export. In

the same year, 1989, we imported US\$21.5 billion in agricultural commodities; not a small market by any means.

I think one of the explanations as to how we got where we are today in terms of agricultural protection, is that the industrialized countries, the United States included, protect their farmers in many ways, and at a great cost to taxpayers and consumers and to development efforts in developing countries. If you look back to the 1980s, the world market for agricultural products shrank. In many parts of the developing world there were problems with deficits and suddenly many products could not be purchased. But competition among developed countries for the shrinking market then rose, leading to a proliferation of policies on the part of industrialized countries to support agriculture.

We are now at the point where the Organization for Economic Cooperation and Development (OECD) estimates that in industrialized countries alone, consumers and taxpayers pay about US\$275 billion for import restrictions and high domestic price supports. That is a great deal of money for taxpayers and consumers, and reduces the chances for developing countries to compete. I do not want to imply that developing countries are wholly responsible for this problem. The United States is also responsible. In 1981, we spent US\$4 billion on our farm programmes, and by 1986 the number was US\$26 billion. I would, however, say that we are improving our record: in 1987 it went down to US\$22 billion; and in 1989, possibly because of the drought, it fell to US\$10.5 billion.

I think I have laid out a stark general picture of the cost of agricultural protection and US agriculture in particular. What do we want to do about it? The United States Government is fully committed to agricultural reform, both multilaterally and bilaterally. In the multilateral context, I think the proof of the pudding is in our major push within the Uruguay Round of GATT to seek, in the words of the agreed language of its 1989 Agricultural Negotiating Group, to "substantial progressive reductions". As you know, we are still trying to find a formula whereby all within GATT can agree on how this might finally look.

The US proposal seeks to reform trade in four key areas: market access, export competition, internal support measures, and sanitary and phyto-sanitary measures. Lest one questions US sincerity and resolve to put in place a scheme whereby we all agree to reduce this heavy protection on agriculture, I would just point to the event in recent months

where we put everything on the line. We risked the substantial progress that all GATT contracting parties had made since the Uruguay Round began in 1986. We said to other GATT members, and to the European Community specifically, that if we cannot reach an agreement on agriculture where we say we are committed to substantially reducing, and perhaps one day eliminating agricultural distortions through protection, we will not stand by any other agreements we have made. In the Uruguay Round, we have so far reached substantial agreement in fourteen areas. So from President Bush down, we basically said we need this agreement in agriculture taking on an all or nothing stance. We are way past the eleventh hour in these negotiations and it is still very unclear as to how things will develop; but I see no indication within my government that our resolve has lessened. We simply need that agricultural agreement for the Uruguay Round to be a success.

Finally, I would just note one other initiative which has been mentioned by Dr. Davis which, though it does not directly address agriculture, may well one day have positive implications for agriculture. That is President Bush's Enterprise for the America's initiative, which represents a long-term vision, so that one day we may have a fully open trade and investment regime throughout the entire hemisphere. This therefore implies that trade and agriculture will also be totally free between all countries of the hemisphere. This is a grandiose vision, but one worthy of concerted effort.

## **BRUCE MOTTA**

I would like to thank Dr. Pomareda for providing us with an excellent presentation. His broad knowledge of this subject has enabled us to acquire a much clearer understanding of this most complex issue. Not having Dr. Pomareda's extensive and renowned experience in this area, and not knowing in advance the scope of his paper, my presentation will just reflect the Canadian Government's perspective. I must also point out that my knowledge of agricultural policy issues is very limited and my comments reflect information provided to me by Earl Stewart, Director of the Agricultural Trade Policy Division, External Affairs and International Trade Canada in Ottawa.

There is frequent reference these days to the "crisis" in world agriculture. Some say it is the worst since the great depression of the

1930s. In any case the situation is severe, characterized as it is by slow growth in demand in many countries; rapid technological developments; excessive subsidization of farm production by both government treasuries and consumers; and increasing protectionism against imports. This has led to overproduction and extensive surpluses in key commodities, and the resultant export subsidy war as countries strive to unload the overproduction onto world markets, thus driving down world prices to even lower levels than they would otherwise be. In countries where the farm sectors are exposed to these ruinous world prices, farm asset values have dropped and rural communities are experiencing severe economic hardship.

It may come as somewhat of a surprise to suggest that until very recently there was no international consensus either on whether there was a problem, or on the causes underlying the progressive deterioration in the agricultural trading environment. In fact, throughout much of the 1970s, many observers thought that the conventional trade policy issues, such as improving access to markets, had been overtaken by the key concern expressed at the 1974 World Food Conference, that the world may not be able to feed itself. In 1980 the Global 2000 report concluded that the world's demand for food would continue to increase faster than supply over the rest of this century, and forecast that world food production would fall, except in certain areas, and that real world prices would double.

With the benefit of hindsight, it is not surprising that the 1975-79 Tokyo Round of GATT negotiations failed to deal effectively with agriculture. There was little inducement to tackle the extremely sensitive political, social and economic issues associated with farm trade reform, when world agricultural markets were expanding at record rates; world prices for many products were at very high levels; and the general perception of most people was that the real problem of agriculture was not enough, rather than too much food.

As we all know, agriculture is a difficult sector and readily lends itself to extensive government involvement for both political and economic reasons. From its inception, GATT had much less effective rules and, in some cases no rules at all, to govern agricultural trade. Even the rules it does have, have been circumvented in some instances. Shortly after GATT came into force, the US obtained a waiver from the very GATT obligations it had helped to draft. This waiver was open-ended in time and allowed the US to restrict imports of a range of key farm

commodities for which it was providing price support. Japan joined GATT with a range of import restrictions intact and we still have not been able to remove them.

In the early 1960s, the newly formed EEC came forward with its revolutionary Common Agricultural Policy (CAP). In order to implement this policy the EEC negotiated its way out of a range of border measures, some of which were bound in the GATT, and replaced them with a completely undisciplined system of variable import levies and export restitutions designed to provide maximum protection to its farmers. Other GATT countries including Canada, have maintained or increased import barriers over time, covering a number of agricultural products. New measures are becoming commonplace, such as "voluntary" export restraints and the increasing role of state trading enterprises.

It can therefore be fairly said that, in practice, over the past 40 years GATT has not worked very well in certain sectors and, in agriculture, it has scarcely worked at all. In the days when the tariff was the principle border measure, negotiated reductions were meaningful. This is no longer the case. Little or no progress has been made in recent GATT negotiations in reducing non-tariff import barriers such as quantitative restrictions and variable import levies; and no attempt has been made to limit the trade impact of agricultural subsidies.

Why is agriculture so difficult? Part of the answer lies in its complexity which arises from the inter-commodity linkages and the biological nature of the industry; in the close relationship between domestic farm policies and their associated border measures; and in the tendency of virtually all governments to regard the agricultural sector as special, both for social and political reasons and from the perspective of ensuring food security. By refusing to confront these issues—in effect saying that agriculture is too difficult to negotiate—problems were being stored up for the future. Each country's policy makers came to believe that they were not accountable for the international consequences of their domestic policy actions. We are now reaping the results of this attitude.

Some people would still argue that the recent supply pressures facing world agriculture are largely technical, that is, they reflect the massive technological advances and rapid productivity gains which are a feature of the industrialized countries and which are also influencing agricultural output in certain developing and centrally-planned countries. No one would dispute the importance of technological advances and their impact

on supply. However, these advances alone do not explain the current agricultural trade crisis. The reason why virtually every major agricultural commodity is in structural surplus cannot be solely attributed to productivity gains. A significant part of the supply pressure has come from output which has been stimulated by excessively high price supports.

Over the past few years there appears to have been a gradual recognition by a number of governments of the close linkage between domestic farm policies and trade measures. There is an increasing realization that farm policies cannot be operated in isolation from the international economy but that they must take into account the trade impacts. Some of this greater understanding is due to the path-breaking work of the OECD under its ministerial trade mandate of 1982. This work clearly demonstrates that the magnitude of agricultural adjustments associated with unilateral changes in a single commodity policy are significantly reduced if one approaches the issue within a multi-commodity, multi-country context. There is also an awareness by ministers of finance around the world that record high farm support costs at a time of budgetary restraint are simply not sustainable over the long term. Also, as foreign ministers are aware, the proliferation of agricultural trade disputes constantly spills over into non-agricultural areas and can be a serious impediment to good relationships between countries. In short, there are some signs that after 40 years, governments may now be prepared to consider the first tentative steps in reforming the agricultural trading system. In this connection, through the medium of international meetings of trade ministers, foreign ministers, heads of state and others, there is probably greater political momentum behind reforms for agriculture than ever before.

It was against this background that, at the launching of the Uruguay Round in September 1986, in Punta Del Este, agricultural exporting countries fought hard to ensure that the negotiating objectives for agriculture were clear, unambiguous and ambitious. This effort was very successful. It was agreed at Punta Del Este that the objectives for agriculture were to liberalize trade and bring agriculture under more effective GATT rules. This is to be accomplished by addressing three major elements:

- improving the securing access to markets, i.e. a reduction in tariff and non-tariff import measures;

- improving international disciplines on all subsidies affecting agricultural trade; and
- improving international disciplines to prevent the use of technical regulations as disguised barriers to trade.

The overriding aim of the reform of GATT rules would be to bring under effective international discipline all policy instruments which affect agricultural trade. It is thus essential that waivers and other exceptions from GATT rules be phased out or brought into conformity with it. Similarly, new rules will need to be agreed to discipline measures not currently subject to GATT rules, such as variable import levies, voluntary export restraints and agricultural subsidies.

This is indeed a very ambitious program of work, but I want to be clear about one thing. I do not think that any governments are prepared to withdraw all their assistance to the farm sector and countries are not willing to adopt identical agricultural policies. However, I do believe that there is a growing weight of evidence to suggest that governments are willing to explore alternative farm income assistance policies; ones which are more market-responsive and less trade-distorting than current ones. This being said, most governments clearly believe that if they are to reform domestic agricultural policies, they must retain flexibility in choosing the instruments. Governments will want to retain the capability to tailor policies to the particular production and marketing characteristics of their respective countries. Policies appropriate to a commercial, export-oriented agricultural sector are not necessarily appropriate to a country whose agriculture is more domestic oriented, that is, whether a country is a net importer or a net exporter is relevant to policy formulation.

To conclude, Canada thinks that GATT can provide a global trade policy framework for agriculture, although it will clearly require some new rules and disciplines. The issue of international rules and disciplines applying to domestic farm programmes and policies is politically very sensitive. The desire —indeed insistence— of governments to determine their own domestic agricultural policies (as opposed to having them made in Geneva) will not easily lead to agreement in the Uruguay Round to anything more than perhaps a rough-and-ready guideline in this area. If there is to be a framework arrived at through the GATT process, it will focus primarily on improvements in trading rules, such as border measures and export subsidies, and only secondarily on getting some



constraints on the use of trade-distorting policies. However, even a modest result, such as this, could start to reverse the chaotic situation we are now in, and would be well worth achieving.

## **ANTHONY GOODWIN**

### **Background**

The Common Agricultural Policy (CAP) was created at a time when Europe was in deficit for most food products. Its mechanisms were devised to meet this situation. In essence, they support internal prices and incomes, usually through intervention, by the European Community authorities, or border protection.

The Policy has made an important contribution to economic growth and has been successful in providing European consumers with a wide range of quality food products at reasonable prices. Nevertheless the system, which corresponded well to a deficit situation, has revealed a number of deficiencies as the Community has moved into surplus for most of its agricultural products. Firstly, the prices and guarantees provided through intervention and production aids stimulate output at a rate increasingly beyond the market's absorption capacity; between 1973 and 1988 the volume of agricultural production in the EEC increased by 2 per cent per annum whereas internal consumption grew by only 0.5 per cent per annum. This development has led to a costly build-up of stocks (valued at ECU 3.7 billion in the 1991 budget.) It has forced the Community to export more and more onto a stagnant world market; which partly explains the existing tension between the Community and its trading partners.

A second deficiency is that a system which links support to agriculture to amounts produced, stimulates production growth and thus encourages intensification of production techniques. Where intensive production takes place, nature is abused, water is polluted and the land impoverished with abandonment and the creation of wilderness.

In addition, income support, which depends almost exclusively on price guarantees, is largely proportionate to the volume of production and therefore concentrates the greater part of support on the largest and

the most intensive farms. So, for example, 6 per cent of cereals farms account for 50 per cent of surface area in cereals and for 60 per cent of production; 15 per cent of dairy farms produce 50 per cent of milk in the Community; 10 per cent of beef farms have 50 per cent of beef cattle. The result is that 80 per cent of support provided goes to 20 per cent of farms. The existing system does not take adequate account of the incomes of the vast majority of small and medium size family farms.

Another deficiency is that the per capita purchasing power of those engaged in agriculture has improved very little over the 1975-1989 period. This development is all the more worrying in that over the same period the Community's active agricultural population has fallen by 35 per cent. This situation is particularly difficult to accept in the context of ever increasing expenditure. In 1975 the European Agricultural Guarantee budget was ECU 4.5 billion; this had risen to ECU 11.3 billion in 1980 and to ECU 31.5 billion in 1991 (i.e. ECU 11.5 billion at constant 1975 prices). The contrast between such a rapidly growing budget on the one hand and agricultural income growing very slowly on the other, as well as an agricultural population in decline, shows clearly that CAP mechanisms, as currently applied, are no longer in a position to attain certain objectives prescribed for the agricultural policy under the Treaty of Rome. These were to ensure a fair standard of living for the agricultural community, stabilise markets, ensure reasonable prices to consumers, and take account of agriculture's social structure and the structural and natural disparities between the various agricultural regions.

Notable socio-economic features are that over half of the Community's farmers are over 55 years of age; there are large contrasts in income levels between member states; the best placed having three times the per capita income of the least favoured; one in three farmers working part-time; and significant differences (ranging from 4 to 62 ha) in average size of holding per member state.

### **Reforms Undertaken**

The above analysis is not new. It has already been made on several occasions, notably in 1985 when the Commission launched a wide debate on the future of agriculture in Europe. At the end of this debate the Commission adopted a number of guidelines including the progressive reduction of production in surplus sectors, by means of a price policy

reflecting market demand; taking into account the income problems of small family farms in a more effective and systematic manner; supporting agriculture in areas where it is indispensable for regional development, to maintain social balance and protect the environment; and promoting an increased awareness among farmers of environmental problems. Based on these guidelines, market organizations were reformed. These reforms had the common aim of lowering prices when the quantity produced exceeded a given threshold. A ceiling was placed on agricultural expenditure, so as to link it to trends in the Community's gross domestic product.

This market policy, based essentially on price policy, was to be accompanied by measures with a double objective: to reduce the volume of production through "set-aside", extensification, conversion of production aids and pre-pension aids linked to non-utilization of land freed on retirement; and to cushion the effects on the incomes of the most vulnerable farmers on price falls, aid schemes for small producers, and the reduction of co-responsibility in certain market organizations (milk, cereals).

## **Overall Evaluation**

These measures have had some impact in so far as the rapid expansion in production has been halted. The most notable example has been in the oilseed sector where production seems to have stabilized around 11-12 million tonnes. This trend, accompanied by a relatively favourable world market situation in 1988 and 1989, allowed the Community to go through two marketing years without any great problem, while reducing stocks and budgetary costs. But this should not give rise to any illusions. Some markets are already well out of balance or threaten to become so rapidly.

Beef production is increasing and stocks in this sector are approaching the record level attained at the end of 1987; stocks of butter and skimmed milk powder are increasing; production of sheepmeat is increasing constantly and budgetary requirements have doubled over a four-year period; and tobacco production is now some 30 000 tonnes in excess of the maximum guaranteed quantity and the cost of the regime has risen by over one-third in recent years. As regards wine, the underlying production potential coupled with the continuing decline in consumption risks adding further to the public stocks of alcohol. The need to maintain the competitive position of sugar and coherence with other regimes

requires that the present arrangements be reviewed. Finally, the trend on the cereals market is especially worrying. While total production has remained constant two major problems remain. Because of competition from substitutes, consumption of cereals in animal feed is declining constantly by between 1.5 and 2 million tonnes annually. In addition, over the last three years, wheat production has increased by 10 million tonnes while the world market has been largely stagnant over the last 10 years. Intervention stocks of cereals are rising sharply and early indications are that stocks could increase by 10 million tonnes by the end of the next marketing year (1991/92) compared to the current one.

All these developments are reflected in budgetary costs. Without going into figures, a double-digit increase is foreseen. Without doubt, a significant part of this increase in agricultural expenditure is due to external factors (fall of the dollar and of world market prices) but the fundamental problem—internal to the Community—arises from the growth of surpluses which, as the figures show, has not been resolved.

The accompanying measures envisaged by the European Council of February 1988 have been applied only to a limited extent, as the following figures illustrate. Only two per cent of the cereals area has been set-aside; most often it is the land with low yields that has been withdrawn; the extensification scheme, up to the end of 1989 at least, did not operate; under the income aid arrangements, no payments have been made in 1989 and 1990, although these are beginning to be applied in three member states; and the pre-pension scheme applies in one member state only.

The following factors help to explain developments relating to the markets and the accompanying measures. In the first place the stabiliser policy has not involved—and indeed did not have as an objective—a fundamental reform of the Common Agricultural Policy. As its description suggests, it was a policy to stabilise production and spending, through a largely automatic mechanism whereby the price and the guarantee was reduced beyond a certain production threshold. This policy did not attack the underlying problems already identified, that support remains proportionate to the quantity produced; this factor preserves a permanent incentive to greater production and further intensification. The reductions in prices needed to re-establish market balance cannot be achieved unless accompanied by significant compensation measures not connected with volume of production. Although the European Council had envisaged compensating measures,

they have played only a marginal role as they have been tacked on to a system whose mechanisms have not changed. To be effective, measures covering direct aids, on the basis of area or livestock units and linked to temporary fallow or extensification requirements, should be part of the market organisations themselves. They should perhaps constitute the substance of the market regimes.

Having been applied to a limited degree only, the accompanying measures have not played their expected moderating role. This has made it more and more difficult to operate the market policy and have it accepted by the producers. The reforms of the years 1985-1988 have not been implemented and are themselves incomplete. It is not surprising that under these conditions the CAP finds itself once again confronted with serious crises; an internal confidence crisis with confused and worried farmers who find their situation worsening, with the markets again out of balance; and an external crisis where criticisms and conflicts are becoming more frequent. The European Commission's trading partners, many of whom themselves support their agriculture less and less, accept a CAP whose increasing surpluses weigh more and more heavily on world markets.

It appears in these conditions that the Community's agricultural policy cannot avoid a succession of increasingly serious crises unless its mechanisms are fundamentally reviewed so as to adapt them to a situation different from that of the sixties. The Commission's thinking as to how to deal with the difficulties I have tried to illustrate, is likely to centre around considerations of an agricultural structure based on the family farm; protecting the environment in the context of rural development and encouraging secondary production activities in the rural sector; and the increasing use of agricultural output for non-food purposes, plus of course, those of an economic nature. Important among the latter will be: the reality of international interdependence; acceptance by the Community of its responsibilities as the leading world importer of food and the second leading exporter. This requires policy objectives which guarantee competitiveness and efficiency of Community agriculture. Such a policy would also envisage the encouragement of growth in consumption.

The result of a new strategy will, hopefully, be to correct the excesses which have developed over the years but nevertheless, retain the principle of the single market and community preference all within a reasonable budget. It may well be that "direct aids", based on the

number of units of agricultural inventory held by the farmer, rather than the "price guarantees" based on volume of output, can more directly influence farm size and thus address one of the main objectives. One cannot say which sectors (cereals, livestock) would be preferred at the expense of others but some form of "land set-aside" inducements are likely to be included. These are the elements which are said to shape the Commission's present analysis to date.

This scenario needs to be set against a world market background which shows that exporters of primary products are expected to register a relatively pronounced slowdown in fortunes in the present three-year period. Equally, it has to be admitted that the world's poor spend a high proportion of income on food, the domestic supply of which can fluctuate quite wildly from natural or other causes. Thus transfers from the developed world to stabilise these variations are frequently called for. Developing countries themselves also adopt sharing policies of available food to offset these risks.

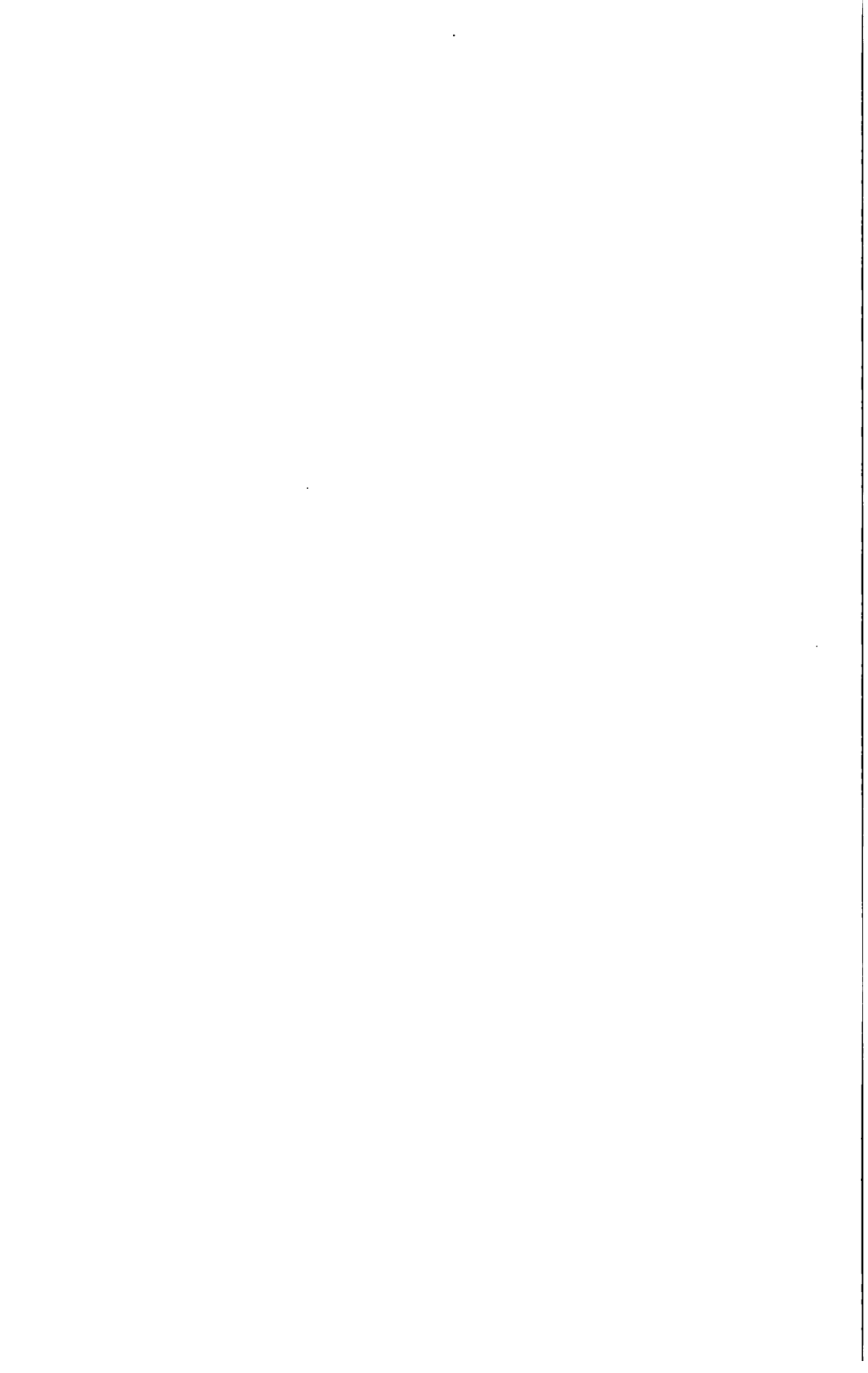
Such developed country policies, including those of Europe, have to be seen against a background that food requirements in developing countries are increasing as a result of population growth, rising incomes in some countries, and the high rate of urbanisation and environmental deterioration. Rural development, in this respect, must form part of an overall strategy which each state has to work out for itself. This strategy is not confined solely to increasing agricultural production but also to providing small farmers with the means to ward off poverty while taking into account the traditional ways of life and attitudes of the rural communities concerned.

I can only quote data arising from aid provided by the European Community under the Lomé Convention. Concentrating on the African, Caribbean and Pacific (ACP) states (66 in number for the purpose of my analysis), agriculture accounts on average for more than half the national product of these states and employs 80 per cent of their total population. Aggregating development aid resources and those from the STABEX fund allocated under the Convention in its first ten years (1975-1985), 40 per cent went to rural development, whilst agriculture tops the sectoral table. In this period, the absolute sum I refer to was between US\$2.25 - 3 billion. Over 1 000 rural developmental projects were assisted as a result of the Lomé Conventions I and II.

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**SESSION  
TWO**

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## **Agricultural Overview and Identification of Alternative Scenarios for the Future**

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*Ronald M. Gordon*

### **Introduction**

"The rationale for PLANLAC lies in the fundamental issue and new awareness of the role agriculture can play in development" (IICA 1989). Everyone wants development, but what does it mean? Denis Goulet states "It matters not how much information we possess about the development if we have not grasped its inner meaning" (Goulet 1971).

Development was traditionally perceived in strict economic terms and over the past two decades has referred to the capacity of a national economy, whose initial economic condition was relatively static, to generate and sustain an annual increase of its gross national product (GNP) at rates of about five percent or more. Per capita GNP and "real" per capita GNP were extended measures utilised to compare output with the population growth rate and to isolate the effect of inflation, respectively.

However, in light of the experience of some developing countries, which in the 1960s and 1970s achieved relatively high rates of growth or per capita income but which simultaneously showed little or no improvement or witnessed actual declines in employment, equality and the real income of the bottom 40 percent of their population, the concept of "Redistribution with Growth" became popular. Within this context the basic questions about the meaning of development were posed by Professor Dudley Seers when he asserted "the questions to ask about a country's development are therefore: What has been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three of these have declined from high

levels, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, then it would be strange to call the result "development" even if per capita income doubled" (Seers 1969). If one were to embrace this philosophy then, development goes beyond the mere sustained increase in gross national product.

Governments of developing countries (LDCs)<sup>1</sup> are generally concerned with improvement of the population's economic well-being, measured not only by the per capita real income but also by factors such as degree of equity in income distribution, reduced unemployment and nutritional well-being. The concern of LDCs over improving their economic performance has generally focused on stimulating agricultural or industrial development and productivity, or both, or some other sector such as services.

With respect to agriculture, in pursuing goals of increased production and productivity and associated higher rural incomes, governments have made substantial investments in areas such as physical infrastructure, irrigation and flood control, and research and extension. With industrialisation, the initial policies of most LDCs are focused on import substitution which involves a regime of macro-economic policies intended to provide a favourable climate for the growth of fledgling industrial activity. Trade (tariffs and quotas), exchange rates, and fiscal and monetary policies are usually among those targeted to stimulate industrialisation by providing it with generous protection.

One must therefore review the performance and trends in agriculture, continuing with a discussion of alternative scenarios for the future, within the context of the current philosophy of economic development. This examination will point out that within the circumstances of the economies of the Caribbean countries, the most feasible future paths for the agricultural sector must consider its linkage with other sectors such as industry and tourism and, in this regard, it is imperative that governments review their policy positions more carefully vis-à-vis the

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1 Countries whose economies have a per capita gross national product (GNP) of the order of US\$480 in 1987 are considered developing countries by the World Bank. Low income economies (LDCs) are those with a per capita GNP of US\$480 or less, while middle-income economies (MDCs) are those with a per capita GNP of more than US\$480 but less than US\$6,000 in 1987 (World Development Report 1989).

agriculture sector so as to stimulate the correct market mechanisms towards the desired growth objectives.

## **Global Economic Review**

Up until 1989 OECS member countries recorded, on average, favourable to high growth rates. These small countries retained their basic features as farm economies with the exception of Antigua and Barbuda where tourism dominated its economy. During the 1980s, tourism increased rapidly. In contrast, the rest of the member countries of CARICOM and Suriname recorded low growth rates and even sharp reductions in their gross domestic product (GDP) in the 1980s.

In 1988, the GDP of the English-speaking Caribbean ACP countries grew marginally when taken in aggregate. From 1980-1988, several of the smaller countries achieved excellent growth rates, but these results were offset by a decline in the GDP of Trinidad and Tobago and Guyana and the extremely low growth rate recorded in Jamaica.

During the 1987-1989 period, expansion in economic activity was stimulated by higher export earnings facilitated by higher export prices and an increasingly higher level of earnings from tourism. During this period, tourism and tourism-induced construction were the largest contributors to the region's aggregate gross domestic product. The contribution of agriculture to the region's aggregate GDP appeared to have increased due to greater production by some countries and very favourable export prices. During this same period domestic prices rose moderately with the exception of Guyana and Suriname. Pressure was exerted on domestic prices by imported inflation, but aggregate demand management policies, as a result of structural adjustment programmes, dampened these increases. Developments in the external sector were also affected by the implementation of structural adjustment programmes in some member states. Higher prices for exports, favourable exchange rate movements, and increased earnings from tourism, together with a positive import/export ratio, facilitated some reduction in the deficit on the aggregate current account balance by 1989. Many member countries had begun to accumulate increases in their international reserves.

However, by the end of 1988 the official external debt of Caribbean ACP countries, then estimated at close to US\$9 billion, became a high-priority issue. Since 1988, the interest and amortization payments have

risen substantially and the ratio of debt to export of goods and services is now extremely high in some member countries. This has put a tremendous strain on the resources of these countries and has become a serious encumbrance to development efforts. While most of the debt is owed by the large member states, the share of the debt shouldered by the smaller member states has been increasing rapidly over the last four years. This has been caused by decreased capital inflows to the region and resultant increased borrowings to fund capital expansion.

### **Agricultural Overview (1980-1988)**

The broad objectives of the regional agricultural sector are to increase food security and food self-sufficiency; to decrease food imports and increase foreign exchange earnings; and retain and diversify exports.

It was envisaged that these objectives could be achieved through efforts directed towards increased production and marketing of non-traditional export crops, such as rice, bananas, sugar, coffee, cocoa and citrus; increased production and marketing of non-traditional food crops, such as spices and aromatic herbs, edible legumes, roots and tubers, and fruits and vegetables; and increased production of livestock and livestock products.

Presented below (Table 1) is a comparison of the relative importance of the agricultural sector in terms of the production of national goods and services (GDP) of the Caribbean ACP member countries for the period 1980-1987, with the measurement of value of production in constant dollars.





Table 1. Agricultural contribution to GDP<sup>1</sup> at factor cost in constant prices. (Cont.)

COUNTRIES	1980	1981	1982	1983	1984	1985	1986	1987
Dominica (EC\$) <sup>1</sup>	92.2	98.1	100.5	102.1	108.6	110.9	117.5	122.9
Agriculture contribution	23.7	28.9	29.6	29.8	31.5	30.7	36.5	37.4
Agriculture as a % of GDP	25.7	29.5	29.5	29.2	29.0	27.9	31.1	30.4
1974 <sup>2</sup>								
Dominican Republic (DR\$) <sup>1</sup>	6 174.0	6 114.9	6 511.1	6 817.4	6 688.5	6 606.9	—	—
Agriculture contribution	1 087.7	1 145.6	1 196.2	1 228.8	1 225.2	1 182.9	—	—
Agriculture as a % of GDP	17.6	17.9	18.4	18.2	18.3	17.9	—	—
1980 <sup>2</sup>								
Grenada (EC\$) <sup>1</sup>	194.5	198.5	209.1	212.0	223.4	234.4	247.3	262.1
Agriculture contribution	40.6	43.1	38.8	39.7	44.9	42.0	41.8	45.4
Agriculture as a % of GDP	20.9	21.7	16.8	18.7	20.0	17.9	16.9	17.3
1980 <sup>2</sup>								

1 Gross domestic product in millions of indicated currency.

2 Base year.

The value of agricultural production experienced a downward trend in Antigua and Barbuda. In 1980, agricultural production was valued at EC\$13.9 million or 7.1 per cent of national gross domestic product. This declined to EC\$11.3 million or 3.8 per cent of national GDP in 1987.

In 1980, the real value of agricultural production in Barbados was BD\$82.6 million or 10.3 per cent of national GDP. This decreased marginally since 1986 with the value of production estimated at BD\$78.9 million or 9.6 per cent of GDP in 1986.

Belize also experienced a downward trend in the real value of production recording BZE\$71.7 million or 22.7 per cent of national GDP in 1980. In contrast, value of production was estimated at BZE\$68.5 million or 19.7 per cent of national GDP in 1986. Except for 1985, Dominica has experienced an upward trend in its real value of production for the period 1980-1987. Value of production was estimated at EC\$37.4 million or 30.4 per cent of national GDP in 1987 versus EC\$23.7 million or 25.7 per cent of national GDP in 1980.

The value of agricultural production peaked in 1982 in the Dominican Republic with an estimate of DR\$1,196.2 million or 18.4 per cent of national GDP. The estimated value of production in 1985 was above the 1980 level - DR\$1,182.9 million or 17.9 per cent of national GDP. Although the real value of production increased in 1986 by DR\$95 million, the sector's contribution to the national GDP only increased marginally.

Although the value of production increased in 1987 in Grenada, when compared to 1980, the agricultural sector's contribution to the national GDP displayed a downward trend. It contributed 20.9 per cent of national GDP in 1980 versus 17.3 per cent in 1987.

In contrast, in Guyana the real value of agricultural production was less in 1987 (G\$210 million) than in 1980 (G\$214 million), yet as a contribution to the national GDP it increased from 22.1 per cent in 1981 to 25.1 per cent in 1987.

Jamaica's agricultural production experienced a fluctuating trend influenced by its growth trend in the gross domestic product. In 1980, the real value of agricultural production was estimated at J\$152.6 million versus J\$143.8 million in 1982, J\$168.6 million in 1984 and J\$159.6 million in 1986. In spite of this fluctuating trend the agricultural sector's



contribution to the national GDP has increased from 3.2 per cent in 1980 to 8.5 per cent in 1986.

The value of agricultural production in Montserrat increased in 1987 by EC\$10.6 million above 1980 levels of production. Agriculture's contribution to the national GDP declined from 4.2 per cent in 1980 to 3.9 per cent in 1987.

Saint Lucia's real value of agricultural production has experienced an upward trend for the period 1980-1986, peaking in 1986, at EC\$39.1 million versus EC\$22.1 million in 1980. In 1987, the value of production declined to EC\$37.4 million. The national GDP increased annually for the period 1980-1986 with agriculture's contribution at 12.3 per cent in 1980 and 16.8 per cent in 1986. As in the case of value of production, agriculture's contribution to GDP declined to 15.7 per cent in 1987.

The value of agricultural production in St. Vincent and the Grenadines has experienced a continuous upward trend from 1980 to 1986 moving from EC\$12.5 million to EC\$24.2 million in 1986, but declined in 1987 to EC\$22.7 million. As a contributor to the national GDP, agriculture peaked at 17.5 per cent in 1985, but then declined to 15.6 per cent in 1987.

The real value of agricultural production in Suriname was highest in 1981 with an estimate of SF138.94 million. This was followed by a continuous decline during the period 1982-1985. It increased in 1986 to SF134.25 million. As a contributor to national GDP agriculture has stayed within the range 9.1 to 10.5 per cent with marginal increases or decreases for the period 1980-1987.

In Trinidad and Tobago the value of agricultural production achieved its highest limit in 1985 at TT\$783.7 million. It was estimated at TT\$595.7 million in 1982 and TT\$638.8 million in 1987. As a contributor to national GDP agriculture also achieved its highest level in 1985 at 4.3 per cent. In 1982, it was estimated at 2.6 per cent and 3.9 per cent in 1987.

A review of Table 1 shows that, in terms of contribution to national GDP, agriculture continues to be vitally important in the economies of Guyana, Dominica, Belize, Dominican Republic, Grenada, St. Vincent and the Grenadines and Saint Lucia.

Regional imports of goods in nominal dollar value, decreased in 1988 in comparison to the year 1980 (Table 2). Intra-regional food imports have also decreased in nominal dollars over the corresponding period (Table 3).

Table 2. Nominal value of regional food imports.

Year	(EC\$ million)
1980	2 013
1986	1 575
1988	1 755

Table 3. Nominal value intra-regional imports.

Year	(EC\$ million)
1980	283
1986	163
1988	198

Within the individual member states (Table 4) food imports increased in the Bahamas in 1988 by B\$80 million or 112 per cent of 1980 imports. Substantial increases were also recorded during a similar period in Antigua and Barbuda with a 45 per cent increase; and St. Kitts and Nevis with an increase of 43 per cent. In Jamaica there was a substantial increase. However, due to the devaluation of the Jamaica dollar, based upon nominal dollar value, the increase cannot be measured precisely.

The increase in food imports in some territories, especially Antigua and Barbuda and the Bahamas, can be linked to increased tourist arrivals for the corresponding period.

With respect to the region, the major categories of food imported during 1988 were:

Cereal and cereal preparations	25%
Meat and meat preparations	18%
Dairy produce and eggs	16%
Fruit and vegetables (fresh and preserved)	13%

Table 4. Food imports - Caribbean ACP States 1980-1988.

Country	Currency unit (millions)	1980	1981	1982	1983	1984	1985	1986	1987	1988
Antigua and Barbuda	EC\$	56.7	84.8	59.2	57.0	67.7	-	-	82.3	-
The Bahamas	B\$	88.6	83.4	74.3	75.6	148.6	154.2	163.1	186.0	-
Barbados	BD\$	163.5	169.0	153.1	148.7	159.7	147.9	149.2	167.0	245.5
Belize	BZ\$	65.7	79.8	58.9	46.8	56.0	61.1	58.0	63.1	-
Dominica	EC\$	25.7	29.6	30.0	27.0	32.4	28.8	32.7	35.3	42.9
Dominican Republic	DR\$	193.8	-	-	-	-	-	-	-	-
Grenada	EC\$	39.2	41.4	41.9	-	42.9	-	49.1	57.5	60.0
Guyana	G\$	62.3	73.4	38.9	21.0	13.0	-	-	-	-
Haiti		193.8	-	-	-	-	-	-	-	-
Jamaica	J\$	129.5	408.2	390.6	397.2	751.2	902.9	902.9	-	1 000.6
Montserrat	EC\$	9.3	-	13.9	10.7	11.5	10.3	11.3	-	-
St. Kitts and Nevis	EC\$	23.1	25.1	23.1	25.4	27.6	29.6	30.5	33.2	-
St. Lucia	EC\$	60.4	71.2	67.2	74.8	76.4	74.9	83.2	97.4	108.9
St. Vincent and the Grenadines	EC\$	46.2	43.2	48.1	48.3	50.9	50.4	49.2	-	-
Suriname	SF	-	58.0	59.0	51.0	39.0	-	-	-	-
Trinidad and Tobago	TT\$	707.8	834.7	904.7	923.8	794.1	764.2	782.0	834.8	720.0

Source: 1) ECLAC - Agricultural Statistics, Vol. VIII - 1988.

2) CARICOM Secretariat. Unpublished data.

Regarding food imports originating from intra-regional sources, the following were the major categories:

Cereal and cereal preparations	31%
Fruit and vegetables (fresh and preserved)	27%
Miscellaneous products	18%
Fish and fish preparations	6%
Coffee, cocoa and spices	6%

However, a significant amount of some food items in certain categories, especially cereals and miscellaneous products, was based upon the processing of extra-regionally-imported raw materials.

During the 1980s based upon nominal dollar value the more developed countries (MDCs), with the exception of Guyana, imported less food from within the region. Guyana's position cannot be adequately evaluated because of unavailable statistics.

In contrast, the less developed countries (LDCs) imported more food from within the region. The most significant decline in intra-regional trade was a drop in cereal imports from EC\$154 million in 1980 to EC\$52 million in 1987. This was caused mainly by the decline in the volume of rice produced in Guyana and increased exports from that production to EEC preferential markets rather than to the region.

Intra-regional trade in sugar was reduced as production declined within the region, and most regional producers geared their production towards preferential markets in the EEC and the United States of America. Much of the surplus production, which previously existed, was virtually eliminated. In 1980 the sugar-producing member states of CARICOM produced a total of 904 500 metric tonnes of sugar, while in 1988 regional sugar production had declined 26.3 per cent and only 667 600 tonnes were produced.

The 1980s was a period when the region's overall value of food imports in nominal dollar value declined. Correspondingly, the intra-regional component of those imports also declined. The region began in 1980 with a negative food import/export ratio. The indications are that by the end of 1990 the region will have a positive import/export ratio. This would have been achieved mainly through increased access to preferential markets with favourable prices and some increased production through

concerted and structured regional agricultural development. This development was facilitated by strong institutional and policy support from member states.

This trend should be further enhanced by the implementation of the programme of projects within the Regional Agricultural Action Plan through the CCPAD, the OECs Agricultural Diversification Programme and the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean.

In 1980, although the region was expected to have a positive import/export ratio, it still imported in excess of EC\$2 billion of food. This could be dramatically reduced through sustained, structured and coordinated agricultural development and effective utilisation of available resources with resultant increased productivity. This in turn would facilitate increased intra and extra-regional food exports and more import substitution based upon nutritionally adequate and cost-effective domestic food production.

### **Designing an Agricultural Strategy**

In his work on agricultural transformation, Peter Timmer identifies several main lessons from the experience of the last two decades, concerning the functioning of the agricultural sector and its potential role in the developmental process (Timmer 1988). These include the emergence of the agricultural sector into a general equilibrium perspective; the recognition of the impact of macro-economic policy on agricultural performance; the need for (and feasibility because of the potential for technical change) rapid economic growth to address the human welfare concerns of poverty and hunger; and the superior performance of trade and market oriented systems in achieving this growth. From these lessons he identified three distinctly different paths apparently suitable for agricultural development as a means towards catalysing the development process.

One path embraces the philosophy of the 1950s that benign neglect of agricultural policy was the way to stimulate the process of economic growth. It was thought that policy would be irrelevant to farmers, and that pursuit of such a philosophy would result in agricultural incomes being determined by employment opportunities outside agriculture and, in the long term, a decline in the proportion of output of the sector, the

absolute labour force and commodity prices, owing to signals that society is best served by getting resources out of agriculture. Clear examples of this view of the world are the OECD countries, as well as some middle-income countries and even a few poor states, which are faced with the problem of declining real incomes in the agricultural sector under the impact of rapid domestic technological changes and lower world prices for the resulting output.

A sharply different path was advocated by Mellor and Johnston (1984) who called for an "inter-related strategy" that improves nutrition while fostering the broad growth process. The approach requires a major role for government in strategic design and programme implementation which is in marked contrast to the free market approached outlined above. They wrote "We have, therefore, emphasised that improvements in nutrition (one of their key objectives for agricultural development) require a set of interacting forces: accelerated growth in agriculture; wage goods production; a strategy of development that structures demand towards high employment content goods and services; increased employment; and increased effective demand for food on the part of the poor. Agricultural growth not only satisfies the need for food to meet nutritional requirements (which is the other side of the wage goods coin), but fosters a favourable employment-oriented demand structure as well. Agriculture's role in generating a structure of demand, favourable to rapid growth in employment, is central". (Mellor and Johnston 1984)

Mellor and Johnston argue for a unimodal development strategy in which a broad base of small holders are the central focus of agricultural research and extension services and the recipient of the bulk of receipts from agricultural sales. They perceive the dualism of bimodal strategies—which stress modernization of large progressive farms while neglecting the "backward" small holders as the major obstacle to the initiation of their set of interacting forces.

Meier observes that this inter-related strategy must be directed by government planners and ignores the private sector other than small farmers. The analysis assumes closed economy considerations and pays little attention to domestic market activities or their relationship to international markets. It emphasises investment in human capital through nutrition, health and related services to rural folk, building rural institutional bases and rapid technical change appropriate to small farmers as the key to increasing agricultural output and rural incomes simultaneously. Little concern was expressed for the structure of

agricultural incentives relative to industry or for the country's tradeables relative to foreign competitors. In addition, the influence of the macro-economic setting remains outside the scope of this strategy. It is the vision of agriculture linked to the macro economy and world markets by powerful market mechanisms which provides the third potential path for agricultural development strategy for the immediate future.

The third approach, contrasting with those of the "free market" and "inter-related strategy", calls for government policy intervention into market outcomes but uses markets and the private marketing sector as the vehicle for those policy interventions. Timmer argues that this "market policy" approach takes cognizance of both "market failures" in agriculture as well as "government failures" in implementation of economic tasks (Timmer 1988). The challenge in the pursuit of this policy is how to cope with segmented rural capital and labour markets, poorly functioning land markets, the welfare consequence of sharp instability of prices in commodity markets, the pervasive lack of information about current and future events in most rural economies, and the absence of many important markets, especially for future contingencies involving yield or price risks. Post-war development experience has shown that direct government intervention in current market failures frequently makes matters worse by inhibiting possible market responses without stimulating greater output or more efficient resource utilisation. Timmer further observes that the agricultural sector in particular, is vulnerable to well-intentioned but poorly conceived and managed state organizations that attempt a wide array of direct economic activities, including monopolistic control over crop marketing and processing. In order to avoid aggravating the situation through this approach it is necessary to gain a clear understanding of the interaction between the public and private sectors. This "market policy" path thus argues that the achievement of the previously-cited development objectives are best served through carefully considered interventions into prices, determined in markets rather than by leaving markets alone or striving to reach objectives through direct activities by government.

In comparison, the free market approach incurs heavy political costs with skewed income distribution away from the poor while the inter-related strategy incurs considerable managerial and administrative costs as government becomes directly involved in economic activity. The market policy approach incurs heavy analytical costs arising from the need to understand each country's path of structural change, the workings of factor and commodity markets and the potential impact of

macro and commodity price interventions on those markets and ultimately on the path itself. It requires that government intervention be based on an empirical understanding of economic responses to a change in policy and their political repercussions.

Hayami and Ruttan (1985) in examining the slow and uneven spread of agricultural growth world-wide concluded that the major constraint limiting agricultural development was policies that impeded rather than induced appropriate technical and institutional innovations. Consequently, the gap widened between the potential and actual productive capacities of LDC agriculture.

The Caribbean economies are small, open, and strongly influenced by the mechanisms of the world market. Industry and tourism are important in some states while agriculture though pervasive, is dominant in a few. Within this context, the perspective of the above analysis leads us to conclude that the factors needed for inducing the agricultural transformation to "get agriculture moving", involves a complex mix of appropriate, new technology, flexible rural institutions, and a market orientation that offers farmers material rewards for the physical efforts they expend in their fields and households and for the risks they face from both nature and markets.

## **A Look at the Influence of Some Key Variables**

### ***Macro-economic Policies***

Policies related to exchange rate, trade, and fiscal and monetary issues have an affect on the entire economy by influencing the allocation of resources such as capital and labour and, consequently, indirectly affecting the performance of the respective sectors. For example, by maintaining an over-valued currency through foreign exchange-rate controls, developing countries confer benefits on the non-tradeable goods sector at the expense of the production of tradeable goods. The consequence is a contraction of the export sector and a reduction in the capacity to earn foreign exchange, adversely affecting the country's balance of payments. Constraints on foreign exchange earnings cause a restriction of imports of all goods and related price increases. There will be a negative effect on investment, in human resource development and infrastructure. Agricultural production would be adversely affected because of the negative impact of these trends on sectoral inputs, prices



and infrastructure. Further, recent research conducted through the auspices of the International Food Policy Research Institute (IFPRI) on trade and exchange rate regimes, with regard to the Philippines and Zaire, confirmed the significant bias against agriculture arising from exchange rate over-valuation (Hayami and Ruttan 1985, Bautiste 1987).

Some LDCs sought to promote industrialisation by providing protection to industries through trade policies effected by means of tariffs and quotas. Some protection, within the context of an import substitution industrialisation policy is generally extended to all "infant" industries irrespective of their longer term comparative advantage potential. Protection of the domestic industry serves to increase prices of industrial import substitutes relative to agricultural imports and exports as well as the prices of the protected agricultural inputs. This simultaneous lowering of the relative output prices while increasing the prices of inputs translates to an implicit tax on agriculture reducing its relative profitability. Table 5 compares the protection accorded to agriculture and industry in selected developing countries. The ratios show the extent to which value added in agriculture has been protected relative to that in industry. Except for Korea, agriculture is discriminated against fairly severely by Brazil and Colombia. This would create a disincentive to agricultural production.

Another instance of policy discrimination against agriculture relates to the parastatal margins by state marketing agencies which are established with the initial intent to provide a benefit to the farming community through stabilised prices to the producer and the prevention of producer exploitation by the private sector. In practice, these goals are not achieved, since the bureaucracy of these agencies limits their flexibility making it difficult for them to respond with differentiated pricing policies to complex markets where small farmers predominate. This situation is starkly illustrated by the experience of Ghana which in 1957 was arguably the richest country in Africa with a per capita income of US\$490 as compared to South Korea's US\$491 (1980 dollars). Ghana was also the world's leading exporter of cocoa with a 40 per cent share of the world market. The Cocoa Marketing Board, which has a monopoly on buying, transporting and exporting cocoa used its monopoly position to extract significant tax revenues from export sales. Producer prices in Ghana were considerably below those in neighbouring states and fell to the point where cocoa farmers were receiving 13 per cent of the world price in the early 1980s. Not only did cocoa production fall from 425 000 tonnes in the late 1960s to 178 000 tonnes in 1982-83 but, was also

affected by economy-wide policies and extensive smuggling to neighbouring countries such as the Ivory Coast. Ghana now ranks third behind the Ivory Coast and Brazil as a cocoa exporter<sup>2</sup>.

**Table 5. Protection of agriculture compared with industry in selected developing countries.**

Country	Year	RPR*	Year	RPR*
Mexico	1960	0.79	1980	0.65
Philippines	1965	0.66	1974	0.76
Brazil	1966	0.46	1980	0.65
Korea	1968	1.18	1982	1.36
Colombia	1969	0.40	1978	0.49

\* Relative Protection Rate (RPR calculated as  $(1 + \text{EPR}^a)/(1 + \text{EPR}^m)$ , where  $\text{EPR}^a$  and  $\text{EPR}^m$  are the effective rates of protection for agriculture and manufacturing respectively. A ratio of 1.00 indicates equal effective protection in both sectors, a ratio greater than 1.00 means that protection favours agriculture.

Source: World Development Report, 1986.

### Production and cropping systems

One ought not to address the question of the development of agriculture without examining the issue of enhanced performance of actual production. There are two ways to improve performance of a cropping system. This can be done either by more efficient allocation or management of resources and inputs that are presently available or by increased use of inputs. One is input-neutral while the other is input-demanding. Farmers use internal (on farm) and external resources of both a durable and consumable nature. In this context inputs are considered to be consumable resources which may be used at varying rates or in varying quantities to improve productivity, measured by yield, efficiency or profitability.

Since the total area of cultivable land is fixed, in order to increase production it is necessary to work towards the more efficient utilisation

<sup>2</sup> Data on Ghana was obtained partly from the World Development Report (1986) and partly from a personal communication with Prof. Kaneda, University of California, Davis.



of available land. To this end polycropping systems ought to be examined more closely. Polycropping refers to when more than one crop species is growing simultaneously and in close association on the same piece of land such that individual plants of each species compete for resources with plants of the same species and with plants of a different species. This is in contrast to monocropping where a single crop species is planted in a pure stand such that all plants in the stand are competing for resources with plants of the same species. Polycropping has its advantages and disadvantages. However, it is important to note that most small farmers traditionally follow this practice of cultivation so as to reduce risks of crop failure.

In seeking to improve on the performance of a cropping system care must be taken to review all the potential interactions among the management operations in a cropping system as depicted in Fig. 1.

### **Technology: Suitability and Diffusion**

The suitability of the technology to the local environment is most critical to the achievement of the goals of efficient, economic and increased production. Arising out of the green revolution a number of high yielding varieties (HYV) of various crop species were produced and this contributed immensely to increased agricultural production. However, most HYVs are intensely input demanding with the consequent limitation on flexibility with respect to time as regards the supply of the inputs. In instances within the region where farmer production is rain fed and not highly mechanised, considerations like these ought to be addressed.

Nitrogen, a major plant nutrient and input, is thought to be responsible for up to 35 per cent of the total productivity of all crops. Most plants obtain their nitrogen from the soil but legumes can fix nitrogen, that is, convert atmospheric nitrogen into compounds such as ammonia which the plant then uses for growth. On an annual basis cropped leguminous plants are estimated to have fixed 35 million tons of nitrogen compared with 50 million tons fixed industrially. Given the demand within the region for nitrogenous fertilizer, the use of legumes, intercropped or in rotation with other food crops, should be examined in an effort to reduce production costs without negatively influencing yield.

There is also a need for greater attention to the application of mechanisation to improve productivity and reduce drudgery, appropriate to the circumstances of the majority of farmers. An excellent example of this is the development, commercialisation and adoption of the portable rice thresher of CARIRI design. My understanding is that the use of this machine has cut this phase of rice production by one fourth while quadrupling output.

Notwithstanding the necessity for the development and or adaption of technology that is appropriate to our circumstances, considerable thought must also be given the efficient diffusion of technological innovations. To set the context two quotations seem pertinent.

*To get the bad customs of a country changed and new ones, thought better, introduced, it is necessary first to remove the prejudices of the people, enlighten their ignorance, and convince them that their interests will be promoted by the proposed changes; and this is not the work of a day.*

Benjamin Franklin (1781)

*There is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new order or things.... Whenever his enemies have occasion to attack the innovator, they do so with the passion of partisans, while the others defend him sluggishly so that the innovator and his party alike are vulnerable.*

Niccolo Machiavelli  
The Prince (1513)

One reason why there is so much interest in the diffusion of innovations is because getting a new idea adopted, even if it has obvious advantages, is often very difficult (Rogers n.d.). Innovations require a lengthy period, often several years, from the time they become available to the time they are widely adopted. Scurvy control provides an interesting historical case of how slowly an obviously beneficial innovation spreads. In 1601 an English sea captain, James Lancaster, discovered from simple experiments that the addition of lemon juice to the diet of his sailors prevented them from becoming ill with scurvy, the scourge of the seas at that time. It was not until 1747, about 150 years later that James Lind, a British navy physician who knew of Lancaster's

result, carried out another experiment confirming the earlier findings. Still, the British navy did not adopt this technological innovation until 1795, a further forty-eight years later.

Diffusion scholars have determined that the typical diffusion process is as depicted in Figure 2.

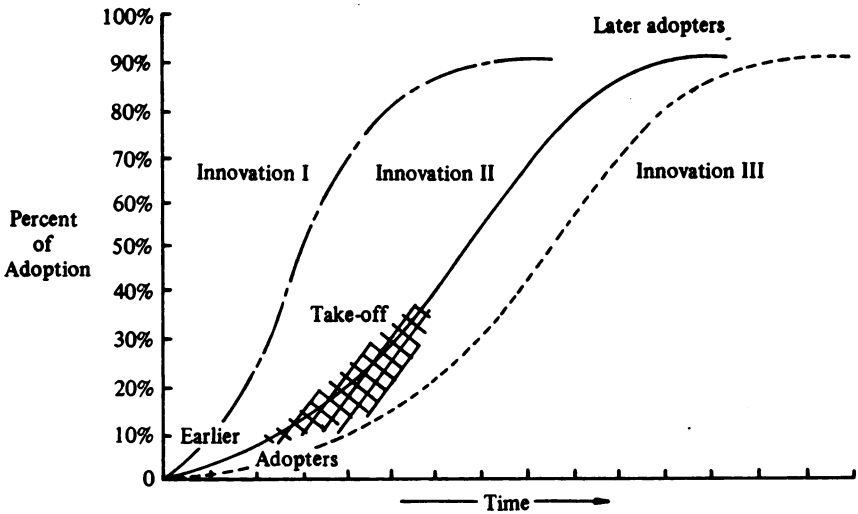


Fig. 2. Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system.

Even the rather rapid adoption of the use of hybrid corn by all but two of 259 Iowa farmers between 1928 and 1941, followed this pattern. Communication channels play different roles in the innovation - decision process. Within the context of the social systems being targeted there is a need to identify appropriate channels to catalyse the rate of adoption of desirable technological innovations.

## Market Factors

The CARICOM countries currently benefit from preferential access and associated price premiums in a number of external markets. As a result,

some of our traditional export crops have experienced high prices to the ongoing benefit of the farmers and the economies. Recently, however, a few cautionary signals have been observed.

The current trend in GATT discussions is toward the removal of discrimination with respect to trading arrangements. This, together with the moves towards the establishment of a single market in Europe in 1992, and the initiatives of our Latin American competitors to enter the European market, would result in our exports facing greater competition in some of our traditional markets. In light of the disadvantage that CARICOM producers face vis-à-vis Latin American producers, whose labour costs are 50 per cent of those which obtain in the region, and the inefficiencies induced by the above preferential treatment, there is a need to vigorously pursue reductions in our production costs as well as the identification of niche markets.

In this regard another path which could be pursued is the strengthening of the linkages between primary production and the region's agro-industry through the catalysing of increased agro-processing, utilising primarily indigenous raw material, in contrast to the current practice of sourcing inputs for processing from external suppliers.

### **Additional Considerations**

It is recognised that issues such as land tenure and credit also influence agricultural productivity, despite their not being discussed in this presentation. Some attention must, though, be given to the question of sustainable agricultural development. This complex issue is raised in several fora but what does it mean?

By sustainable agriculture I refer to production systems which optimise yield per unit input while providing an acceptable total output (whether measured in protein, calories or cash) or net return to labour or capital, that is, competitive with other opportunities. In achieving this, the resource base on which agriculture depends must be maintained or improved and any deleterious effects of off-farm resources should be limited. In addition, the economic and social welfare of the community must be promoted by the activity.

There is an ongoing debate as to whether the above objectives ought to be pursued through modernised and highly mechanised production

systems or through appropriate small modifications to traditional production systems. I have no immediate proposals on this but I do think that the Caribbean's pursuit of sustainability must be within the context of its peculiar environmental circumstances.

## Conclusion

It is evident that the agricultural sector has subscribed to the economic development of the region. It is also clear that the potential contribution of agriculture, in this regard, has yet to be realised. It would thus follow that there is a need for recognition among policy makers and planners that, within the macro-economy the agriculture sector does not exist in isolation; there is a dynamic interaction among the various sectors. In order to optimise the output of the overall economy, there is the definite need for a greater understanding of the various factors and commodity markets within the region and the interactions of these with macro-economic and price interventions. This appreciation is possible only through more attention to empirical analyses. Such an approach, together with, among other things, increased local involvement in planning and implementation, would serve to catalyse optimum output from agriculture leading to the ultimate realisation of the development goals.

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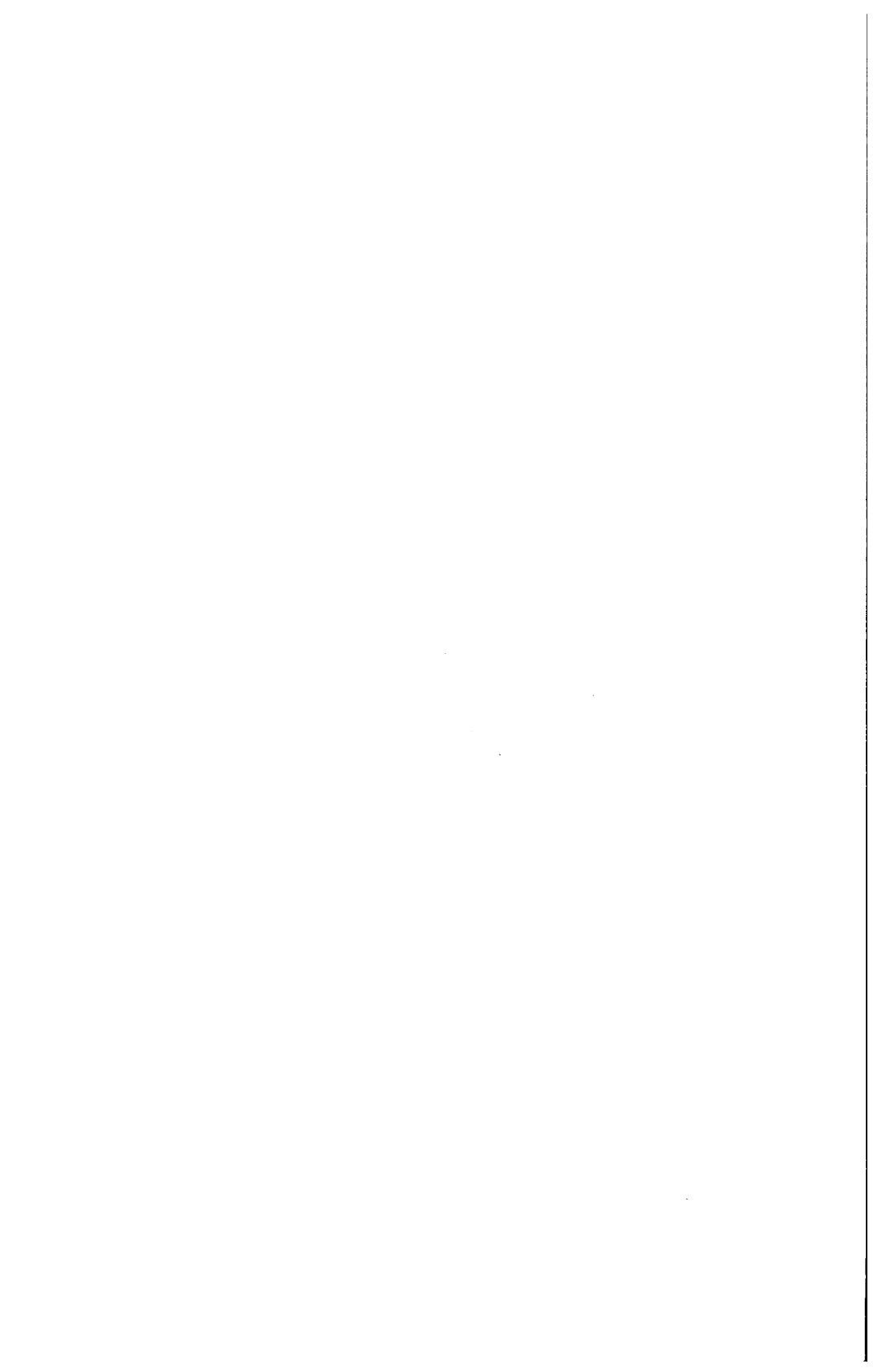
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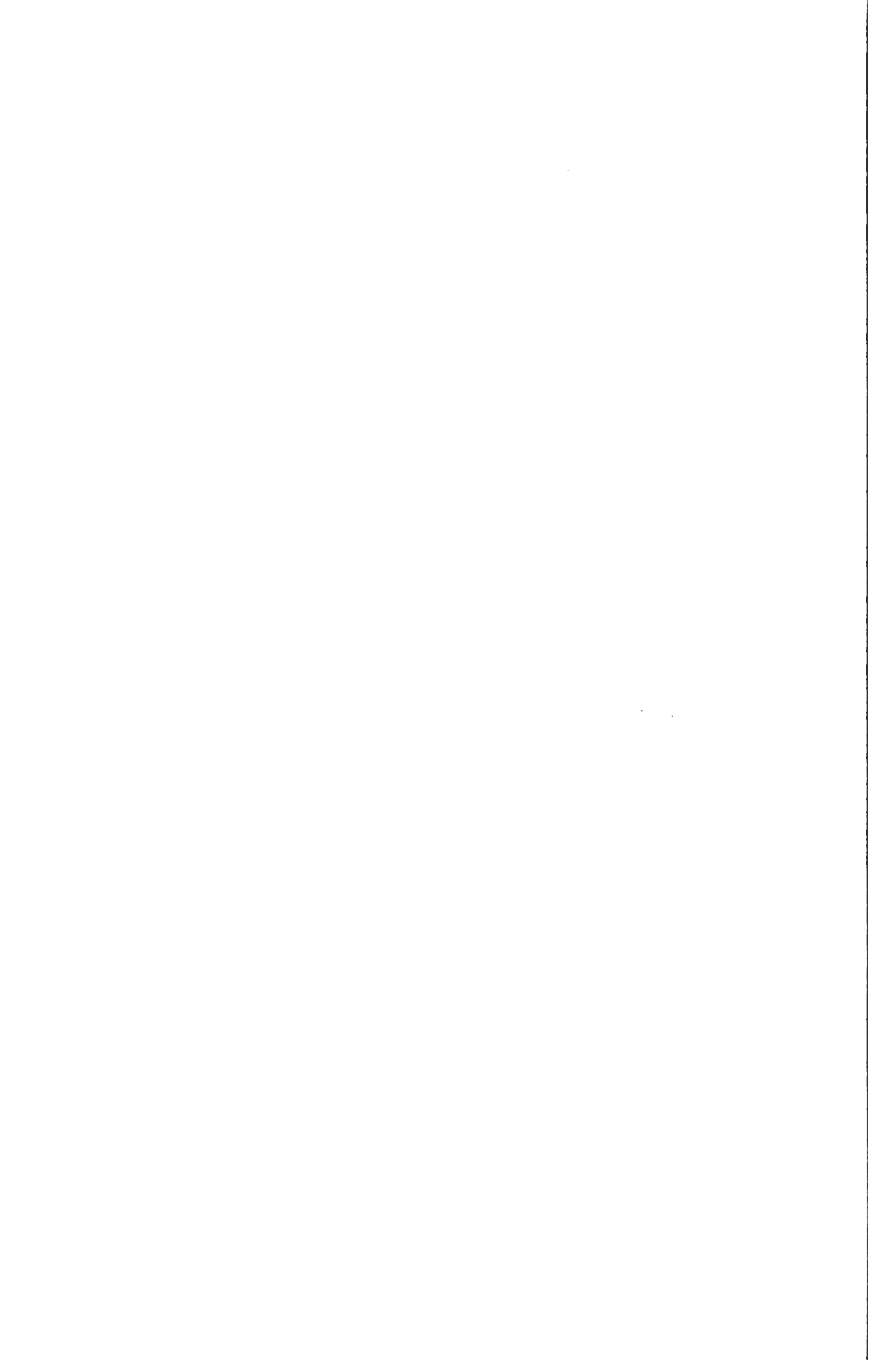
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**SESSION TWO  
QUESTIONS AND  
COMMENTS**

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## Questions and Comments

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**Question:** Is it a question of ideology versus technology and agriculturists making agricultural policy decisions as far as agricultural development is concerned?

**Answer:** If we define ideology by the way we see and interpret things according to our background, then the answer in certain ways is "yes". It is a matter of ideology. The main constraints to agricultural development have to do with infrastructure, transportation, marketing channels and pricing, so in this sense it is ideology. It must be noted that the farm lobby with respect to agricultural policy decisions is very weak. In addition, most of the people making the decisions about the future of agriculture are not farmers—they are all working people.

**Q:** Why is PLANLAC not dealing with women's issues?

**A:** Women are not specifically identified in any PLANLAC project title but are included in the case of youth and the rural development. When dealing with development there is no gender. However, women comprise approximately 50 per cent of the heads of farms and by tackling the broader issues of production and marketing creating a better overall condition for agricultural production both women and men would be included in the development process.

**Q:** Given the economic situation, if the government creates opportunities, will young people move into agriculture?

**A:** If deliberate policies are developed which identify the constraints of young people getting into agriculture such as finance and security of land tenure, perhaps it will work.

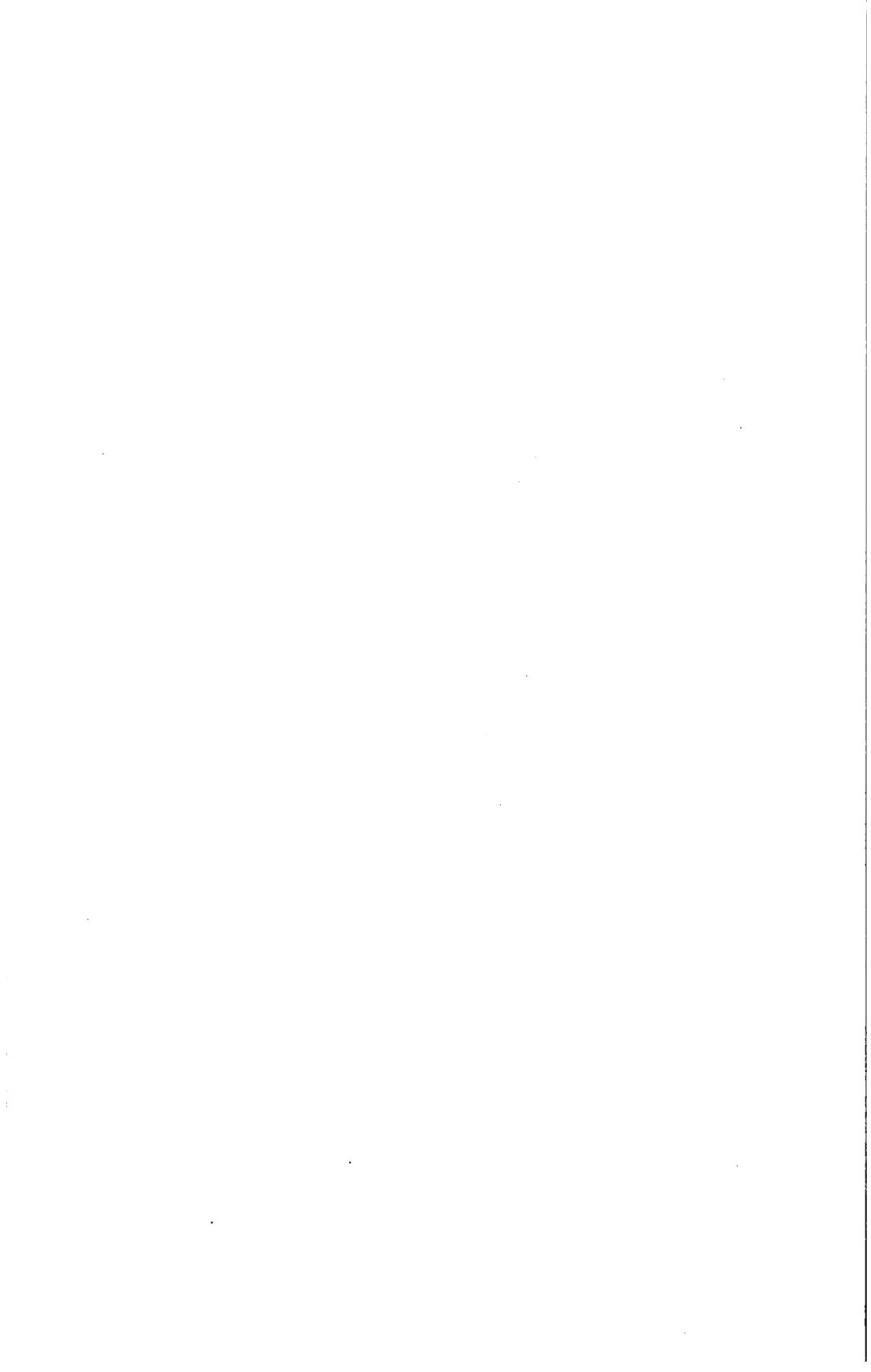
- Q:** Can flour from "local" root crops be used entirely or in combination with wheat flour for producing bread as a mechanism for increasing self sufficiency and agri-diversification?
- A:** Existing technology has identified that a 10 per cent combination of other flours does not change the taste of bread and Professor Sammy, some years ago, identified that a combination of 25 per cent can be successfully used. What is needed is a strategy and policy decision to influence bakers and other entrepreneurs in the production and use of local root crop flour by way of protection or tax relief. These are policy instruments for which farmers must lobby. To the extent that this happens, local root crop flour can make a contribution. To go one step further, what may be needed is for intervention of genetic engineering to be utilized to give root crop flour the consistency provided by the grinding of wheat flour so a good quality bread can be produced. Biotechnology has provided the system for this to be attempted.
- Q:** One area of focus for agricultural development in the region is getting into intra-regional marketing, but on a more micro level. What is the situation with respect to intra-regional activities?
- A:** Strong national entities must be developed which can then meet on a regional front. The whole issue of a regional plan from experience seems to work. (Personal opinion of speaker.)
- Q:** Can the small farmer survive in the future with the "free market" orientation, without some form of association or lobby?
- A:** The survival of the small farmer is dependent upon the strength of his association and hence lobbying power to the extent that he would be able to inform and influence appropriate policy decisions. In addition, his survivability will to a great extent depend upon the concerted empirical evidence showing that small farmers in totally free markets cannot survive. However, small-scale specialist producers with proper resource utilization and marketing can and will survive.

### **Comments:**

1. It was suggested that more policy measures which encourage investment in the use of locally-available resources and at the same

time discourage agro-processors from using imported materials be developed.

2. In order to stimulate utilization of under-utilized land resources (abandoned lands or estates) taxes which penalize the owners should be introduced.
3. The recommendation was made that Caroni (1975) Limited can develop the 2 000 acres of citrus it has and lease this out to private farmers in blocks of up to 20 to 25 acres based on a sound business arrangement as a method of stimulating agricultural development. The same can be done with cocoa, rice, etc. This activity would make it unnecessary to run state farms. This may be a way for governments in the Caribbean to intervene in agricultural development.





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## Respondents to Ronald Gordon

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### GONZALO ESTEFANELL

I would like to make some comments, beginning with the specific case of the Caribbean, then move on to dealing with the scenarios and possible scenarios, and place the Caribbean within that picture.

First of all, judging from the figures presented by Mr. Gordon, there is no doubt that agriculture is important in the Caribbean. If we measure agriculture by means of GDP, per capita income, etc., in some places it may not be that important, but if you consider it in terms of the social fabric of the Caribbean, historically and today, there is no doubt that agriculture is important, no matter how it is measured.

As a matter of fact, there is empirical proof of it. Almost every person that makes money outside the sector, the first thing they do is buy a farm in the Caribbean. If they make money outside the Caribbean, when they come back they buy a farm. If they are professionals, as soon as they accumulate some money they buy a farm and become part-time farmers. This, I believe is a reality and something very important to bear in mind, because many times we see in development programmes analyses of the sector talking about part-time farmers.

The development plans currently being executed in the Caribbean, such as the CARICOM Initiative and the OECS Diversification Initiative, have provided the framework. I would like to touch on these briefly and also expand a little on what Dr. Davis explained about PLANLAC.

The PLANLAC is really framed by two development initiatives: the Caribbean wide CARICOM Initiative and the OECS Diversification Initiative. The strategy proposed in the original PLANLAC document was initiated to complement and support Caribbean initiatives. In other

words, PLANLAC is not trying to superimpose anything different, or undefined over and above what has already been established. In this sense some very specific projects were proposed, which were supportive of the initiatives already underway in CARICOM, and some of these projects are the direct responsibility of IICA, being paid for by IICA. I will take this opportunity to tell you briefly of the projects that we have, which I think important to set the pace, then move to the different scenarios and try to analyse the relationship between the proposed course of action and what some people think the future will bring.

The first project we are proposing within the PLANLAC development plan is the Design of Strategies for Policy Analysis, Planning and Management in Support of Agricultural Development. This is a regional project which aims at supporting the planning process and policy decision making at the country level, supported through case studies, information systems, and training when required. This is an on-going project which was started a couple of years ago.

In the area of technology we have two or three projects. Two of them are on-going. The first is Supporting the Development of Tropical Fruit Crops in the Caribbean, which started as a spin-off of an original project in Barbados and is now moving to the other islands. Its objective is developing the local production capability of exotic and non-traditional fruits for the local markets and in some cases for the export markets; we have had some important successes in this area. The second is Supporting the Organization and Management of Technology Generation and Transfer which started in the OECS and has spun-off from the OECS to the wider Caribbean.

The third project, which has just started coming out of the PLANLAC pipeline, and which to my mind is quite an important one, is Strengthening Caribbean-Latin American Linkages and Transfer of Technology for Agricultural Development. This project aims to bring together Latin America and the Caribbean, since it is felt that there are experiences in both sub-regions that merit interchange. These areas include livestock and food production and others that have been identified. This process has just started and will be closely coordinated by CARDI and the University of the West Indies.

There is another on-going project which I am sure everyone is familiar with, known as CARAPHIN (Survey and Monitoring of Animal and Plant Diseases and Pests to Facilitate Increased Production Efficiency in the

Caribbean), the objective of which is to monitor animal and plant diseases and pests, and increase production efficiency. It is not necessary to expand too much on this project, because it has been quite successful throughout the Caribbean. Basically, it's a communication network inter-linking the different islands to get information which is useful for trade.

Another project in the area of rural development aims at supporting the rural development strategy by increasing the youth dimension of rural development. This issue is of serious concern for the Caribbean due to the aging of the rural population; which is also a problem in Europe.

And finally, Strengthening Farmers' Organizations in the OECS is another on-going project that will expand into the Caribbean to strengthen farmers' organizations. This project is important because its focus is on developing the managerial capability of the small farmers' associations, one of the key areas for agricultural development.

So these are the PLANLAC projects for the Caribbean. Maybe I left some out, but you can see the list in the PLANLAC Summary and Update (June 1991).

On the subject of scenarios, I would like to make two or three comments on Mr. Gordon's presentation and on some of the discussions. It seems that the world is moving towards a setting which is totally different from the one we know, and I believe it is leaving many of us not knowing what to do or in which direction to go.

First of all we are moving toward a world of super-structures, in that countries are getting together in terms of large economic areas, be it the Americas, the European Community or the Eastern Bloc. What we don't know is how things will develop. Are the Asian countries to be led by Japan? Are there three or four large areas in which the national borders are beginning to fade away? Are those areas going to represent the economic forces that we will have to reckon with in the future? It seems too, that this type of outcome is almost the logical evolution of something that started in the middle ages. There has been a progression away from the economic needs of states to those of the new economic regions. The importance of this lies in the fact that big and small countries are beginning to realize that if they join forces they have a better chance of surviving. The most important aspect is, we hope, that there will be recognition by the bigger countries that it is in their own interest to have smaller countries with improved economic situations. I say "we hope"

because I come from Uruguay, and you know Argentina, Brazil, Uruguay and Paraguay have just signed a total integration pact, and in the next four years there is going to be free movement of resources. So I hope the big countries will look to the smaller ones and will really try to improve their well-being. It seems that that is the trend and a tendency which is quite important.

Another characteristic of the future scenario is that the cold war is finished, and there is going to be, as we said before, about three, four or five major trade blocs. Yet another characteristic that we can foresee at this point in time is the reality of increased trade, no matter what the final outcome of the GATT Uruguay Round talks. With the opening up of economies we, in Latin America and the Caribbean, are going to have to be ready one way or the other. Yet another characteristic of the future scenario is reflected in the famous term "the global village", the smallness of the world. Right now everything that happens in one part of the world is known and therefore has some effect in others, as, for example during the Gulf war. If you remember in the 1960s, Walter Cronkite brought the war into the living rooms, Cable News Network (CNN) now brings it live, which is quite different.

What is happening is of tremendous importance in shaping the future and in the technology that is coming. Because of communications, I personally believe that all the changes we have had these past three or four years —like the end of the Eastern Bloc, the end of the Berlin Wall and so on— is an after effect of the development of communication technology. It is no longer possible to kill the messenger if you do not like the message. Now you cannot stop the message from coming and it is impossible to keep a population under pressure for long because people learn what is going on in other places. I think that is one of the practical outcomes of this tremendous communications revolution.

Finally —in this brief account of what I feel are some of the elements of the future scenario— is change. It seems that things are occurring faster and faster. Of course the world has always been evolving and changing, but if you think of the tremendously important things that have happened in the four years since 1987, it seem that the changes are coming at a much faster pace. We had the end of Eastern Bloc in 1987; the end of the Berlin Wall in 1989; the unification of the Germanies in 1989.

If you look today, you do not know what is going to happen tomorrow. Take, for example, the cost of the unification which is apparently too high for Germany, because the German Mark is in trouble. Germany, therefore cannot have any military aspirations in the near future. If they do, what is it going to cost them? Changes are taking place very fast and I believe that somehow we have lost the capability of looking into the future and seeing things in the long term. I think Dr. Pomareda mentioned that we have been working more and more for the short term; and all the decisions being taken are short-term ones with very few people stopping and trying to have a look further into the future, which is most important.

Finally, I will try to look at the future scenario with all this in mind. What are the issues and what are the things we have for the region? And what do we have to look for in the near future? First of all, we see throughout Latin America, and I hope in the Caribbean, a resurgence of the integration movement. I mean we have been talking about integration, at least in Latin America, for a long time, but in many places nothing has really happened. Now in the past six months or over the past year, Latin America has started moving again and as opposed to previous discourses on integration, there is now a political will to move forward, and as mentioned, Argentina, Brazil, Paraguay and Uruguay signed an agreement for a unified market in four years and to remove tariff barriers and promote a free movement of human and capital resources. What is going to happen, we have no idea. I think we did it a bit too fast, and we have no idea what the implications are going to be. But it is a reality. The same is happening in Central America and the Andean Region. As I say, I do not know exactly what is going on in the Caribbean, but I would not be surprised if the same trend is followed.

A couple of days ago, we had a meeting in San Jose with some experts in this area and there was a former minister of foreign affairs from one of the Latin American countries. He said that right now, if you are going to negotiate with any country, or with any group of countries outside the region, if you represent less than 300 million people, nobody pays attention to you. I am sure he was exaggerating slightly, but it is something to bear in mind. This brings me to one of the changes which is one of the most important messages in my mind for the future. What will donor countries do in the future? It seems to me that for many different reasons they will not continue providing aid as in the past. That era is past. We are moving into a new situation in which we will not get as many concessionary terms as before.

My proposal, to see if we can open discussion on it later, is that we have to search for areas of common interest between the peoples of the South and the North. We have to look for a common agenda for which money will come, help will come, and cooperation will come out of common interest and not out of concessionary terms which, as I say, are fading away. The agenda, the area of common interest to be discussed will have to be ascertained. I believe that Dr. Pomareda already brought some of them up. They are areas such as natural resources, which worry people in the North and South alike, but for different reasons. In the North they have already exhausted most of their natural resources, especially forests in Europe. They know that if we do the same in the South, then we would no longer have a world in which to live, with air to breathe. This is an area of common interest which needs to be negotiated. We want to preserve these resources but there is a cost attached which we must share, together with the benefits of using or protecting those natural resources from exploitation.

This area of common interest also relates to agriculture. Natural resource usage in our countries is closely related to poverty. When there are people that are faced with a problem of lack of food, they obviously cannot care much about the trees for future generations. They are going to fell trees and cut plants as they have to eat today. What I am trying to point out is, given this problem of natural resource use versus conservation, arising from different starting points, we need to sit down and negotiate certain programmes in terms of equity and poverty alleviation in our countries.

Another area of common interest is that of migration which affects all our countries. The North is also interested in migration because it does not know how to stop so many people coming from the South. There are too many people crossing borders. If better conditions are created the problem can be solved at the source rather than at the destination. To finalize, we must forget about seeking concessionary terms in our dealings with developed countries. I think a better and more sustainable way of dealing with the situation is by looking for a common agenda, sitting down and negotiating how to develop that agenda which will benefit all concerned.

**PROFESSOR JOHN SPENCE**

I am going to try and look at the problem from a somewhat different angle to the way we have been looking at it to date. A few years ago, when I was asked by IICA to prepare a background paper which would start discussions on the reactivation of agriculture for the Caribbean, I was faced with the fact that we had had at least two or three attempts at devising a programme or plan for the Caribbean. We had had the Regional Plan, which was modified to constitute the Regional Food and Nutritional Strategy; and we had just completed the third programme of CARICOM, the Caribbean Community Programme for Agricultural Development: A New Plan. So we have had these three attempts. And it seems to me, there must be some reason why we are not achieving the progress that we had hoped for with these programmes. So, I thought perhaps we could try and find a few issues which might be concrete impediments to the progress that we were trying to make. And I must say that in looking at this, I was influenced by my experience in Trinidad and Tobago, and I shall restrict these comments to the Caribbean.

Firstly, it seems that we frequently pay lip service to the importance of agriculture, saying it is critical and we must do something about it; but we do not make any progress. And if you look at our past and present political structures, in colonial times the "plantocracies" ran the government, so there was a close linkage between the agricultural sector and the governments of the time. With independence, that linkage was broken; the "plantocracies" moved out or into other areas of the economy. Thus, the lobby that was previously there—more than a lobby it was actually a strong influence, a commanding influence on the economy—had been lost. So the first thing we have to address in the Caribbean is the fact that we no longer have a strong farmers' lobby. There may be some groups in the islands in the form of agricultural societies that have some influence. But if you look at the scene, particularly in Trinidad and Tobago, the agricultural sector does not have any real input into the decision-making process at the political level, in spite of all that we may say.

So the first issue then, if we are going to develop a farm lobby, is that we must look at where such a lobby should come from. As one of IICA's projects is in farmers' organisations, there already exists a possibility for addressing the issue. However, it seems that the issue is even more fundamental. How can we modernize agriculture without modernizing the farmer? And certainly the countries that have developed a strong

agricultural sector, have in fact changed their farmers. We are trying to do it without changing the educational level and the capabilities of our farming community.

In spite of the fact that we have tertiary level institutions producing large numbers of graduates, these people are not going into farming. Our agricultural sector is still in the pre-independence era, but because it has lost the "plantocracy", it is in an era of small farmers who do not have the lobbying capacities or the skills required for the modernization process. So, I would say that we must develop a new sort of farmer who will be capable of addressing the myriad of problems at the national and international levels that we have been discussing, as we move into this unknown future.

I would like to see a much greater and a deliberate effort made to ensure that our tertiary level institution graduates become farmers, so that the farmers' organizations formed by them will have a stronger influence. They should also form professional associations so that these may also participate in the lobbying process. Something that is most disappointing in the Caribbean is that our professionals are not contributing to the society which assisted them in their education.

Now, I am quite certain that the issue we have been discussing in respect to the media is an important one. I have no doubt that the media properly used, the television, the radio and the newspapers, could make a strong impact on the political scene, because I have no doubt that the media influences political decisions very strongly by creating a certain climate. But again, in order for us to influence the media, the farmers must have the wherewithal and the power to do so. They may then go to the Editor of the Guardian, as does the President of the Chamber of Commerce, and influence what appears in the newspapers.

There seems to be consensus on the fact that the private sector needs to be influenced if we are saying that there should be less government intervention. Then we must consider those areas of the private sector that need to be complementary to agriculture. We must also consider whether there are any issues in the private sector that will inhibit the progress we want to make.

Thus one of the issues we have to resolve in the Caribbean is the fact that our business community is largely made up of importers and distributors of many products, including food, and there is therefore an



immediate conflict of interest between the food producers and the importers. The importers are those who have a strong government lobby. We have to somehow persuade our commercial sector that the distribution of locally-produced food may be a profitable activity in which to be engaged, as is the importation and distribution of food that is produced abroad.

Linkage to other sectors in the private sector is also important. That of food processing is well recognized and is frequently spoken about, so I do not think we need to deal with it again here. Clearly, the raw material should not come from abroad, but from our own agricultural sector. But in fact, we have not addressed, to any large extent, the agricultural inputs in this regard, particularly machinery.

Reference has been made to the fact that there are small machines now being used by farmers that would help to modernize agriculture, but still preserve the small farmer as an entity, as opposed to large-scale mechanization. Again, some of these machines can be manufactured locally and our private sector should invest in this sort of input to form a linkage into the agricultural sector, giving them a vested interest in the agricultural sector market. Instead of having a car assembly industry—which is clearly an error on our part, and one which is dying—we should have a small machinery manufacturing industry in spite of the fact that we have a small market. This market is not as small as we may think, when we consider the possible linkages to Latin America; and it is interesting to note that CARIRI which has developed a small rice thresher, has received enquiries from Argentina. The development of export markets, even for small machines that we might produce, is thus also a possibility.

Previously, we talked about government intervention. Where should government intervene now that such intervention is being reduced? Governments still intervene in the economy to fix currency exchange rates. But the exchange rates are being manipulated in the Caribbean, none of the governments that make these changes consider that they may or may not have advantages to the farming sector, but clearly they must be made aware of this.

It seems to me that one element that we have not yet fully utilized is the presence of a number of agricultural development banks in the region. Recently there has been a great deal of discussion about the influence of the World Bank and the IDB in the region's development.

Clearly, the conditionalities which were attached to these organizations dictate to us what we can or cannot do in our economy. So, why should our agricultural development banks not dictate what happens in our farming sector? Surely, this is a policy instrument which governments can use, provided they have the right policies and provided the farmers have been able to influence the development of the appropriate policies for this sector. This has not been the case so far. To date, our agricultural development banks have only been lending agencies, especially to the small farming sector, and usually with little hope of recovery of loans. Although the situation has now changed somewhat, in the past these banks have lost large sums of money through lending policies that were not as rigid as they might have been. So it seems that one way of implementing policy is through your agricultural development banks. This could be the central agency through which you could influence a lot of other areas in the agricultural sector.

I think governments will always provide the extension services to the agricultural sector. This was mentioned with respect to the United States of America when it was suggested that we might contract out for many other things; but governments could certainly continue to provide extension services as a form of subsidy. But what sort of service should we be providing? If we are trying to make our farmers into businessmen, then the most important thing for us to do is to provide district extension officers, farm management or business management specialists; something which has been done in the past. We would expect district extension officers to be crop specialists, livestock specialists, tree crop specialists, soil specialists, and the like, to advise the farmer in all these different fields, as well as how to balance the books. What we need is someone in the district who can sit down with the farmer and ascertain, for example, the availability of land and labour resources, existing and potential sources of credit, and the best crop combinations. Then the technician would step in to provide the technology. This is not a problem in my opinion. Technology transfer is the least of our problems when it comes to organizing the farming sector. I repeat, if the government is going to intervene in that way, it must change the present system of addressing its farming community by extension activities.

Another issue that we have which causes serious problems is that we have not yet recognized that we have two sectors: a small farming sector and a large farming sector. So when we develop policies or undertake research or extension activities we do not make the distinction; and so, we may well be offering the small farmer inappropriate technologies or

advice. I believe that you cannot expect small farmers to earn a decent living if they are producing low-priced crops. So what we have to do is to wean our small farmers onto high-priced crops and let the larger-scale production systems produce the things that we need in large quantities for the urban poor. So that we should be producing carbohydrates and proteins on a large scale at low price; and vegetables and fruit, and export commodities, which may find market niches with higher prices, should be produced by our small farmers.

And so the services that we set up to address these two sub sectors can be geared to the fact that we expect them to follow these policies. Otherwise, we will have constant problems. Some years ago in Trinidad we were doing research at Chaguaramas on large-scale soya bean production with a fully mechanized production system, but the extension services were going out and asking small farmers to grow soya beans. Complete nonsense results if we do not address this issue deliberately.

The final point I want to make is to do with research. The Caribbean, starting with Trinidad and Tobago, spends a substantial sum, estimated at TT\$49 million annually, on agricultural research. Most of this is very conventional research and our agricultural production does not increase. So it seems we must take a serious look at this issue and decide whether we are doing the right thing. I would think that most production systems can get along fairly happily without intensive agricultural research. In fact most farmers get their advice from the agricultural inputs salesmen rather than from the research that comes out of the research stations, or the university. I would like to see us select a few critical areas where we could make substantial advances, and work on these.

I shall give just a couple of examples where I think if we made an effort we could get a big payoff. I shall start with the buffalypso and embryo transplant. I think we have to look now at what we are going to do in biotechnology. If we were able to substantially increase the size of Trinidad and Tobago's buffalypso herd, we would have an extremely valuable export commodity. The heifers are in demand all over the world and we would also be able to considerably increase our meat production. We might even milk them and produce Mozarella cheese for pizza. But some basic and then applied research in embryo transplant technology for the buffalypso needs to be undertaken to obtain these objectives and for which finance needs to be secured. Money would be better spent on these sorts of activities rather than on current routine activities which have no impact on agricultural production.

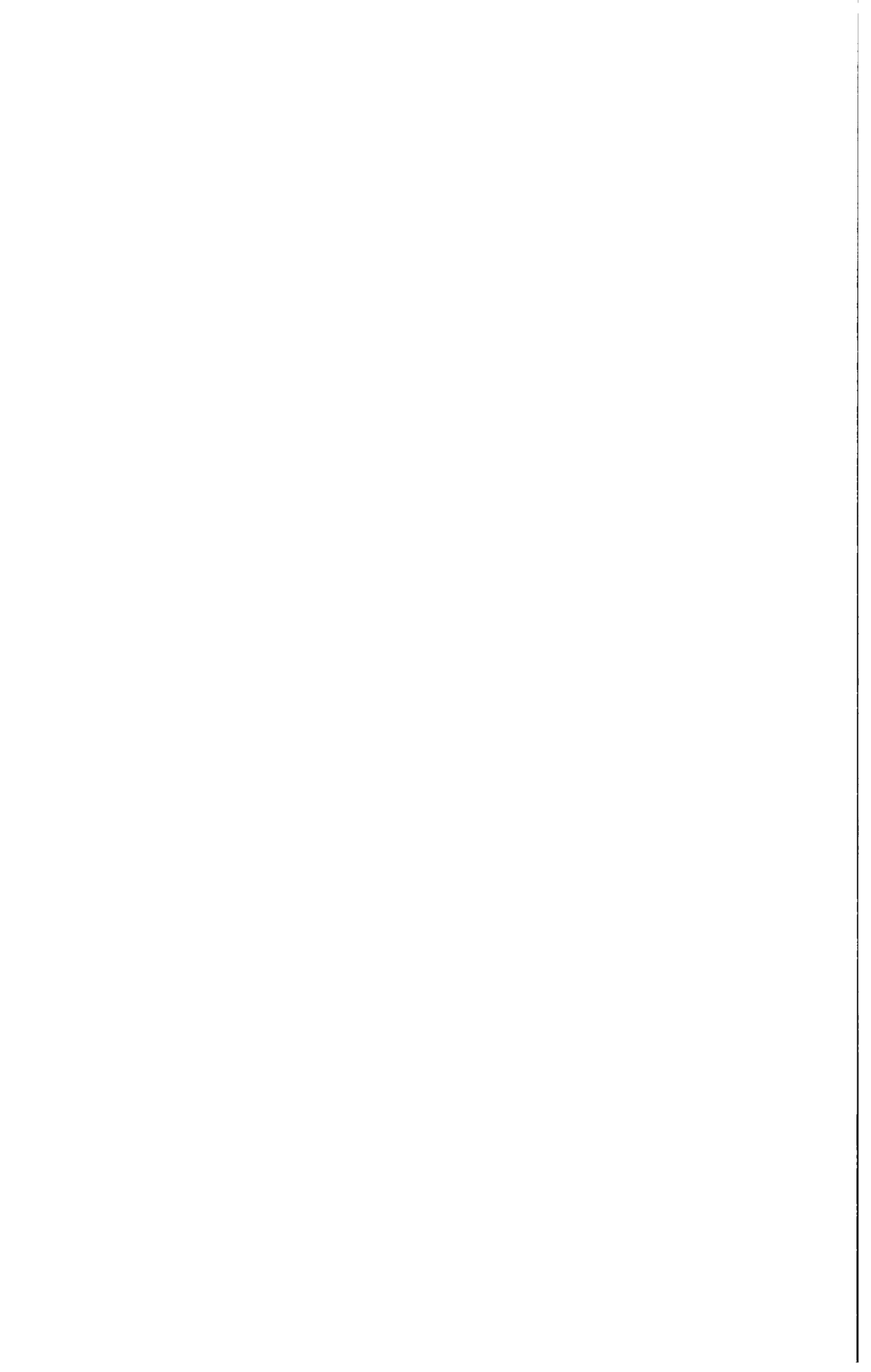
Another matter that I think we ought to look at seriously is that of import substitution. We may never be able to find a complete substitute for wheat which we import in large quantities for bread. But we need to be looking at the possibility of altering the composition of some of the present starch crops that we produce for breadmaking. With new technologies that are being developed, this is not so out of sight as it would have appeared five or ten years ago. And again, it needs substantial investment, although nothing compared to the TTS\$40 million that we are now spending on research. A couple of million, specifically designated, placing research students in laboratories abroad —not necessarily doing it ourselves— but contracting the work out, would probably suffice. If we can make that breakthrough, altering sweet potato or cassava, or what have you, in such a way that we will produce an acceptable bread, then we will be able to cut ourselves off from the importation of wheat.

So, Mr. Chairman, my position is that if we are going to modernize agriculture, we need to modernize the farmer. On the whole, to quote Arthur Lewis, "we need to live by our wits, which means we have to be better educated, we have to be better trained and we have to be constantly thinking of how we must change to meet the changing circumstances".

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**SESSION  
THREE**

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## **Creating a New Business Environment Conducive to Investment in Agriculture**

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*Dr. Suruj Rambachan*

I want to start by saying that the only job for which you don't have to be qualified is that of a politician. Even as a minister you do not have to have a qualification to win an election. You create the right image and the right climate and you can invest in the business of politics.

The topic "Creating a new business environment conducive to investment in agriculture" is a very interesting one and I had prepared a paper to deliver and then I decided that I was not going to present any paper, and for good reason. I picked up some newspapers and began flipping through them trying to capture the complaints people were making about agriculture and the business of agriculture. On Monday night I held a meeting in the very deep South with about 25 people engaged in agriculture, farmers, and the stories they told me perhaps provide a better basis for what I want to say now rather than the paper I prepared. So what I have are some scrappy notes from which I am going to talk. You might find that what I say to be controversial, or critical, even of my own government's policy; but then, nothing new and vibrant emerges unless one faces criticism of oneself. So that it is not intended to be critical of the Ministry of Food Production or anyone, but it is simply aimed at telling a true story.

Who is the investor we are talking about? For whom do we want to create this new business climate conducive to investment? I see the little farmer, with between one and three acres, or the farm labourer working a plot of land for some investor, the one putting in financial capital. One of the issues we keep battling with in Trinidad is the question of alienation from the means of production, the question of ownership of the means of production, in particular, land. I place equal emphasis (I

am tempted to say almost equal emphasis) upon both human capital and financial capital or physical capital as it is, so I do not want to make too much of a distinction between investors. I see them as all very important in the equation.

Now, how do we approach this problem of creating a new business climate conducive to investment? I think perhaps one approach might be, from the point of view of what constitutes impediments in the creation of this new business climate: the question of risk that the agricultural investor takes and the extent to which this agricultural risk is an impediment. Perhaps agriculture is one business in which you are never sure of the returns. You may plan for returns, you do the best things, but there are so many uncontrollable and unforeseen variables that affect the final outcome. In Trinidad our attitude to risk, and our entrepreneurial conditioning to risk greatly affects our decisions as to how much and how quickly we invest in agriculture. It would seem to me that people would choose fields in which to invest and make their investment in agriculture simply a sideline; a low risk activity.

If we are to create a new business climate conducive to investment in agriculture, I think we have to develop a long-term vision of the results of investment in agriculture in society and the entrepreneurial community. It is certainly not a question of short-term returns from agriculture. Yes, there are some types of agriculture from which you can get short-term gains; but, I think the real investment in agriculture demands a long-term approach which will require patience as regards returns on investment. In this regard, I believe there is a important role for education in terms of managing people's attitudes and beliefs about investing in agriculture.

So what might some of the solutions be? One is the encouragement of relevant attitudes through education, through success stories. But I believe we are yet to place the right emphasis on financial support systems for people involved in agricultural investment. I believe that there is just one bank in Trinidad, one commercial bank, that places great emphasis on investment in agriculture and loans, and actually hired an agricultural expert to deal with the farmers' problems. So I think there is an area that is lacking in the commercial banking system with respect to support for agricultural investment and, in particular, loans to small farmers.



I will tell you of something that struck me about two months ago. I picked up the newspaper and I saw a list of names published in the newspaper with a contact number to ring if you knew of the their whereabouts. I knew every single one of the persons on the list and I knew where they could have been found. Their simple crime was that they had borrowed up to TT\$3,000 (a little over US\$600) to invest in rice farming. The crop had failed because of floods and they could not repay, so they suffered the penalty of having their names published in the newspaper. Now, I am talking about the small investor. You do not create a climate for encouraging investment if as a commercial bank your intention is to embarrass a small farmer in that way. And this is a serious indictment I make upon the particular financial institution. These people came from the Siparia-Penal area in Trinidad. The attitude of the bank towards these loans and towards people like these must change, because here people who invest in agriculture are simple people and when you come down with a big whip in this manner then you discourage them. And that embarrassment defeats the very purpose for which you initiated the policy.

The whole question of loans and crop failures has to be rethought. Of course, there is also another kind of initiative: whether a system of guaranteeing these loans to small farmers should be considered or whether there should be a grants support system or whether we should extend what we are doing with the small business development company in terms of loan guarantees to accommodate a special sector for agricultural enterprises. The institution is there. Maybe we have to determine a broader policy. I think we also have to rethink and look carefully at the role of some government institutions in the development and financing of agriculture. It sometimes takes too long to process agricultural loans in this country, and also in a large number of cases the loans go to the wrong persons.

There was a time here when a number of professional people were borrowing money from the agricultural development bank but never went into the agricultural business. They borrowed the money to support the purchase of vehicles and as tax shelters and therefore wrote off agricultural losses on the lands bought against their professional income. And if you were to check the number of professional people who bought agricultural lands in the 1980s, you will find that there were a lot of loans, probably well-serviced loans, but the lands have not gone into production at all. This is therefore, a misdirected use of funds. In other words, the people who probably wanted to go into agriculture

never had the deposits and the means to start. One therefore, has to talk about seed capital and where it comes from, and whose responsibility it is to promote it for the small person moving into agriculture.

Too often, agriculture is considered a sideline business in Trinidad. We still have to develop the notion of agriculture as a mainstream business. You probably can count on your fingers (let's not include the large cocoa or coffee farmers) the number of people who have gone into large-scale agriculture in the country. There are not many. So we have to somehow destroy the myth of agriculture as just a sideline business; we have to destroy the notion of agriculture as a mere tax shelter, not to attract the wrong kind of investor.

I also think that many people are not fully aware of the possibilities to be derived from agricultural investment; and here we have a considerable educational task on our hands; and the media has an important role to play in this effort. You have to develop ways and means through conferences and seminars, not at this level, but within the environment of the agricultural people themselves, to let them see the possibilities, to let them see the figures; to get successful people to come and talk and encourage them in their activities. I feel we have a problem in creating this environment for new business; a problem of transferring what we do in seminars and reports into reality on the ground. We develop beautiful training programmes but whether that training becomes a reality or whether it is taken into the field, through the motivation of other people, remains the question in my own mind. Knowledge of agricultural investment possibilities among agricultural workers themselves therefore seems to be quite a problem.

The question of entitlement, of the small man, is primordial. How many people really believe they are entitled to a loan from the Inter-American Development Bank. Am I entitled to training? Am I entitled to subsidies? Am I entitled to go to the farm demonstration units? Is it possible for me to invest? Is investment only for the already established businessman? And believe me, these are questions that people ask you all the time.

The other area that I think is still of critical importance in Trinidad, and maybe also in Latin America, is that of land as a basic input into agriculture —security of tenure. In south Trinidad I recently met with about 40 people. Their problem was that their probationary leases, held since 1984, had expired and they could not get the extension officers to

deal with their extension. If you have a probationary lease and you are not sure you are going to get it extended or renewed, it is difficult for you to invest because you are not sure from one moment to the next what is happening. So from 1984 to 1991, seven years, there was no sense of security in terms of what you were investing in both human and financial resources on that piece of land or indeed on the security of tenure.

The creation of the new business climate involves inputs. It is not just a question of creating institutions. There are many other inputs. Sometimes I feel that people at the top, people involved in planning and in policy formulations can write the best reports, dealing with access roads, infrastructural development, and drainage requirements; but if you go into these areas you will see reality. Absence of access roads continues to plague agricultural production. Over the last six months, I myself, have been begging county councils to grade access roads. The person willing to invest in agriculture should not have to keep begging for an access road because someone does not see its importance. The plans are there, but it seems that no one is taking the trouble to translate them into reality. It seems that a lot of the planning is taking place independently of the critical needs identified on the ground. In fact, sometimes I believe our whole approach to development is wrong in that we are planning from the top, but we are not down there looking at what people really need. You will see that they are the small services that people need which make the ultimate difference to production, and their motivation. So when we talk of alienation in a business environment, the alienation of people, it is simply because we have failed to really identify people's true needs. Investing in agriculture is one thing, planting the land, putting in financial capital is another. Whose responsibility is it for the access road that you need to get the production out? I do not think that people should seem to be beggars for service. You should remove this concept because once people feel they are beggars for service, they are not going to want to invest. I think there is a major responsibility to identify those problems and to deal with them appropriately. There is some shortcoming, in my view, in the manner in which extension officers identify and deal with problems.

I would also like to talk about training and who benefits and share a recent experience of mine. While in Brazil, I saw so many opportunities and linkages that could have been made between what had already been done in Brazil and what was possible for Trinidad, and spent a lot of time and effort sending some researchers to Brazil from Trinidad. They

returned and wrote a report of approximately 140 pages, but not a single thing has been implemented in the last year and a half. Now if we had done it another way, identifying people in the field, and sent them to look at what was happening, would we not have gained more? Would these people not have been more motivated rather than the so-called experts who wrote the report? There is a psychological distance between "office" people and "real" people investing in the field.

I said some things might sound very critical. Forgive me, but we have to talk about this if we are to decide on the environment we really want. So again, we must transform seminars and training into reality, and be clear in our minds as to who will really benefit from training? How do we identify this new training environment? How do we identify the people who should gain from training?

There is the role of experts who come into the country. Too many experts come into countries like ours and assume a "know it all" role with preconceived views; and again engage in report writing. I think that we have to decide what is to be the role of technical assistance experts who arrive with grants. I am not for one moment denying that there is an important role for experts; but, I am also saying that we have to review this role. I believe that we still have the best agricultural institute at the University of the West Indies (UWI) in terms of tropical agriculture. But, our University researchers are not provided funding from overseas agencies to do their own work. Perhaps our people at the University are in a better position and appreciate some of the things I am saying than the experts, as they come from among the people. So, one has to review the presence of the expert, his role, his attitude, and so on.

I have a problem with international funding agencies which provide grants but tie it to the use of their own experts. This might be at total variance to local needs because the expert frequently comes on a learning experience. So, in a new business climate conducive to investment, we must review such tendencies. How should grants really be used? What should be the role of financial institutions who are providing finance from overseas?

I want to say that agriculture demands empathy and a great deal of sympathy for investors. Recently I met a distraught, successful businessman, from south Trinidad who had invested TT\$800,000 in a farm. He bought an abandoned estate and had spent TT\$800,000 of his own resources. Having built the infra-structure he had difficulty in

convincing the IDB that he was serious about his investment in agriculture for a loan of half a million dollars. Why? Because the bank is insisting he appoints a manager, the condition upon which his loan was being determined. Here is a man who had started as an agricultural worker selling vegetables he had produced, knew what it was to plant and everything, became a successful businessman and decided to move back into agriculture. He was then told he was not a good manager!

Who knows the field? Who makes the decisions? You are putting a strain on the gentleman who could manage his own business to employ a manager at a further cost of between TT\$40,000 and TT\$60,000 a year, in a risk environment in which the returns are not immediate. These are some of the things I want to talk about—the empathy, the sympathy and the reasoning.

In this new environment what is the role of institutions like the Export Development Corporation (EDC) and the Industrial Development Corporation (IDC)? The EDC might be very good at identifying markets, but does the IDC encourage investment in products for the identified markets? I think, too often institutions like IDC, get away by defensively saying "look, our role is ...". I think in developing societies such as our own, the role of the IDC goes even further, For example, Caroni Limited undertakes lots of research and has physical assets and resources but is perhaps lacking financial power. In this country, I see no reason why Caroni cannot start to develop its own joint ventures with the local business community, rather than seeking joint ventures from overseas. Maybe, that is one of the impediments to agricultural diversification at Caroni.

There are many people in this country who are investing in agriculture in Guyana, big businessmen, putting their financial resources into Guyana. Why not put them into Trinidad? There must be some reason why they feel more confident, or some attraction, or package of attractions, that causes them to put their funds into Guyana. I repeat, Caroni Limited is right here and should be trying to invest and set up joint ventures with the local financial community. There is no reason why it cannot be done.

Profitable state enterprises in the country go into agriculture with local agriculturalists. There are people with the land and the know-how but they do not have the financial capital. Maybe there is a role for the state enterprises, the profitable ones, in terms of encouraging and spawning

the agricultural sector in that way. It needs thinking about, even in terms of the state enterprises sector.

Finally, in creating this environment, what about the role of the media? What does television do to promote investment in agriculture? When did you last see a good, well-produced documentary of a success story on local television? There is nothing like a good success story to motivate people. What are we doing in the education system, in the school system? Why can't cooperatives be set up in the schools for school leavers? Yes, we have the Youth, Training Employment Partnership Programme and yes, we have other programmes, from which people should be directed towards agriculture. Do not think that people do not want to be involved in agriculture. Two weeks ago 15 young men from Agostini village in Trinidad approached me for help in obtaining fifteen acres of land from Caroni so they could go into agriculture. Again, the problem became one of land resources.

If you are creating this new climate, you have to show people what to do, you have to lead people almost by the hand. Too many people put to do these things are not making that extra effort to lead people by the hand into the agricultural business. We have to deal in this business with, among other things, financial systems, financial and banking policies, loan accessibility, initial capital, and support prices. How about tax holidays for investors in agriculture? How about income tax freedom for workers, working in agriculture, since the wages are already so depressed? How about strong incentives to encourage people to work in agriculture? How about a social security system for agricultural workers?

If you want investment in agriculture then I think you have to improve the quality of life in agricultural communities. In Gopie Trace, and Suchit Trace in south Trinidad we are working on a self-help project in a rice farming community where 7 436 people in 1 367 households are without running water. If people do not see their capacity to improve their quality of life, how are you going to get them to try to invest in the business of agriculture? The first thing they will want is to invest in their own quality of life.

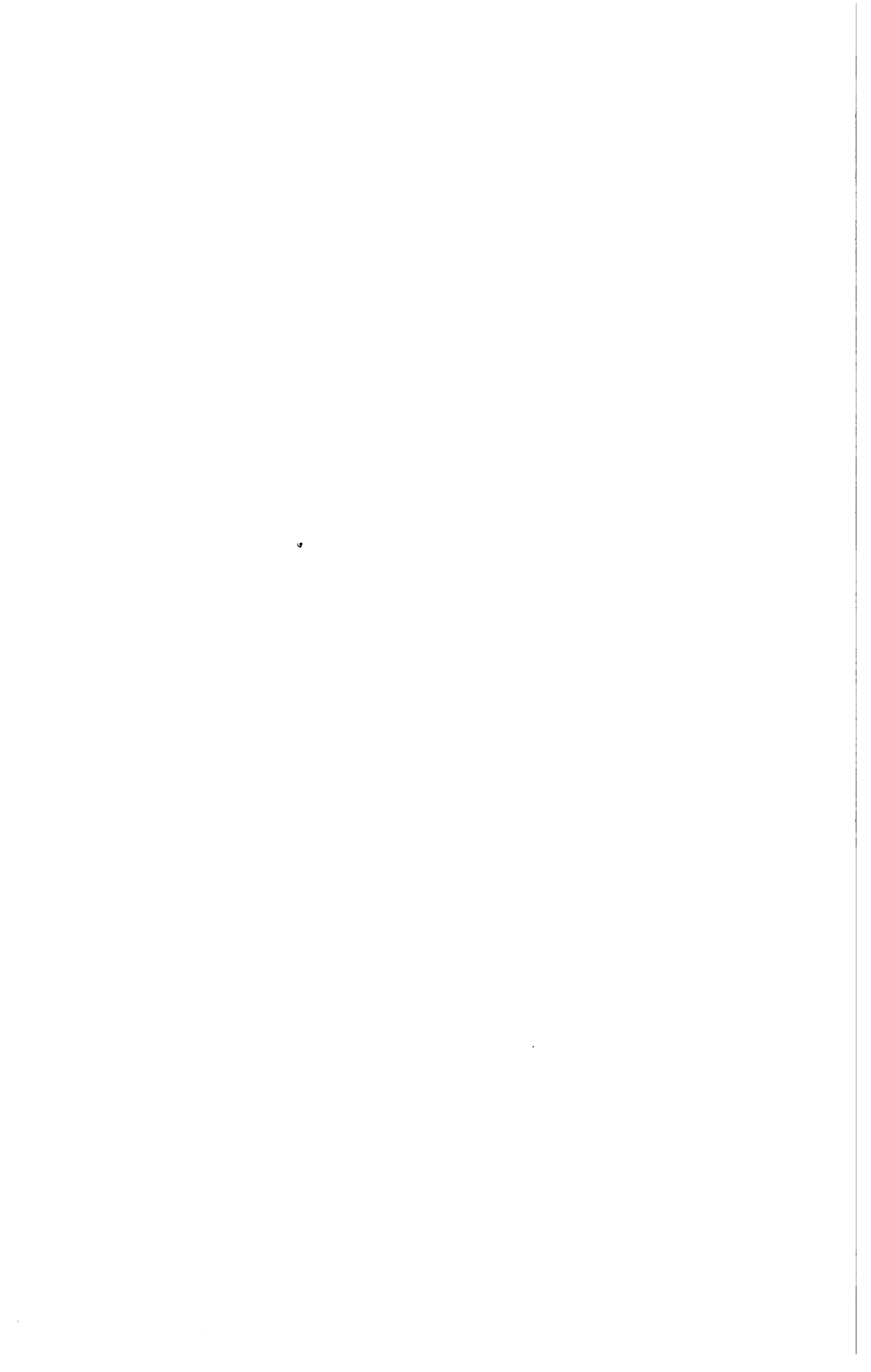
Finally, how about trying out this new climate? I am talking about Trinidad at the moment. How about trying in the National Service Programme to agricultural rehabilitation?

These are some of the ideas that I wanted to share. The importance of culture in this whole process is not to be overlooked.

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**SESSION THREE  
QUESTIONS  
AND COMMENTS**

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## Questions and Comments

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**Question:** Is continued investment in infrastructure, such as access roads, provision of credit and other ongoing projects having a major impact on agriculture in Trinidad and Tobago? Are there some macro-economic changes relating to marketing, extension and training, etc. necessary before land?

**Answer:** In Trinidad there are four factors affecting agricultural investment. One is the need for diversification. Second, there is the need to reduce the import content of the food bill; thirdly, agriculture can contribute significantly to employment creation; and fourthly, no society can transform itself into a true industrial economy unless it has a strong agricultural base. Such a base will provide linkages with other sectors of the economy.

Much money has been spent by international organizations in Trinidad but it is not clear how much has been spent on infrastructure. What one could venture to say is that a lot has been spent on studies and there seems to be an ongoing process of duplication of studies. Whether the recommendations in these studies have been implemented is also not clear.

On the question of macro-economic policy changes, there is always going to be a need for changes because the environment is always changing with sectors impacting upon each other. The Ministry of Planning and Mobilization has done quite a good job with respect to national planning as reflected in the recent planning document. This document is not only a policy document but also incorporates sound practical ideas for implementation of macro-policy.

## Comments

1. Responding to a statement which Dr. Rambachan made about state enterprises becoming involved in agriculture, a participant made the observation that there were two farms run by oil companies which, to quote him, were "demonstration farms on how to lose money". He also indicated, using some examples, that oil companies should not get into agriculture or any activity outside their area of expertise; and that state enterprises which do not have expertise in agriculture should not become bankers for agriculture.
2. Dr. Rambachan responded using the example of apparently abandoned lands of oil companies which could be utilized for animal husbandry in the La Brea area (Antilles Field) indicating that there must be some corporate responsibility through support of agriculture.
3. For people working in agriculture and small farmer developments, the points made in the presentation do not contribute to a new awareness of the role of agriculture, as these are well known to such people.
4. Another participant made the observation that the SUNDEO experience, which is a rapid reconnaissance system, using a multi-disciplinary investigative approach to problem identification on farms, could be added to the plethora of agricultural studies and enquired whose responsibility it was to implement the recommendations. Continuing the comments, the participant indicated that both state and private institutions which control the resources held that responsibility. Given the experience of the failure of past and present governments to implement the recommendations it was suggested that there must be some structural change or "we will continue like a spinning top in mud", since the small farmers and investors are not getting the support mechanism from the state and private sectors.
5. Dr. Rambachan agreed, indicating that the government through its ministers set the broad policy framework, and it is the permanent secretaries who should be giving direction to personnel and providing leadership to implement the policies. Perhaps there is an absence of leadership at the level of the permanent secretaries and below in getting things translated into action.

6. Mr. Bellefeuille commented that what seemed to be happening was a difficulty in translating rhetoric into reality, and that perhaps there exists some schizophrenia in the national psyche regarding the attractiveness of agriculture versus the petroleum sector, indicating that it was not only wanting but actually setting the right investment climate. In addition, it may be that the problem has its roots in tradition and history. The government needs to take these factors into consideration when establishing the necessary policies and regulatory framework so as to encourage the investor. Toward this end the functionaries and technocrats have a role to play in convincing their superiors of the position the government should take.
7. Another comment regarding the creation of a suitable business climate revolved around the issue of not allowing professionals to be involved in agriculture as an alternative activity, and to write off business losses against salary or pensions. It was suggested that some cut off period be used for the writing off of such losses and that an assessment be made of farms by professionals so involved.
8. Comments also centred around the use of local consultants indicating that, firstly more local consultants should be used; secondly, that for this to happen, as in Jamaica, there must be strong coordination and cooperation at the political and bureaucratic level to allow strong local agricultural consultancy firms to develop. In other words, there must be a deliberate policy by government to encourage local consultants. This will decrease the level of alienation of local consultants who have to work with the foreign companies.
9. Other comments dealt with the impact of the GATT talks and the issue of tariff and duties as barriers to trade and agricultural activities which are export oriented.
10. A slightly different comment focused on the vision of agriculture as small business. If so defined, then, the empirical evidence shows an extremely high rate of failure of small businesses and that a country has to be prepared for this if it seeks to promote agriculture through small business. In addition, where small scale agri-business is promoted, there must be some form of government protection.

11. It was noted that the country, as well as the region, is unable to compete with countries of the Far East with respect to export orientation policies and that for agriculture to compete in the free market system, production efficiency must improve even at the expense of being labour negative. The positive result of this approach would be labour and employment creation in the areas of service industries, inputs and agro-processing. Another positive factor was that the Trinidad population is highly literate which would allow for easy acquisition of skills in the linkage areas mentioned.
12. Another comment on the subject of the new business environment for agriculture revolved around the issue of agricultural incentives, suggesting that with respect to incentives in other areas of the economy, agricultural incentives ought to be increased, not decreased if agriculture is to continue developing.

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## Respondent to Dr. Suruj Rambachan

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### ROBERT BELLEFEUILLE

First of all, I want to thank IICA and Dr. Wallace in particular, for giving me this opportunity to take the first chunk out of the apple, an apple that might be a little bitter to some.

I must confess however, that I am not an expert on anything, much less on agriculture. However, having listened to Dr. Pomareda I do eat, therefore I have an interest in commenting. I am also obviously interested in commenting, because I represent an organization, the Inter-American Development Bank which has provided some US\$10 billion to agriculture in Latin America and the Caribbean over the last thirty years. The results of those investments are at best questionable, and I think part of the reason is that in the past we have ignored the global issues, world issues as they relate to agriculture and the macro issues as they relate to a particular country.

Dr. Rambachan gave us a broad view of questions of land usage, questions of infrastructure and access roads, irrigation, questions of credit, questions of public versus private ownership of land, and I found his comments and suggestions as to what could be done, quite creative. But I am not yet sure how to react.

I did find one thing missing. I would like to bring up the question of the context for agricultural investment in Trinidad and then pass it on to the audience, people who know the agricultural sector in this country much better than I and who I am sure have a lot of questions. Why should Trinidad go into agricultural investments? What is its purpose in doing so? Is it to diversify the economy? But what about the point raised that where you have an economy that has been driven by one single product —oil, that influences prices and exchange rates. I would

have liked to have heard some comments in terms of how that macro-picture here is affecting what is happening to agriculture in the country.

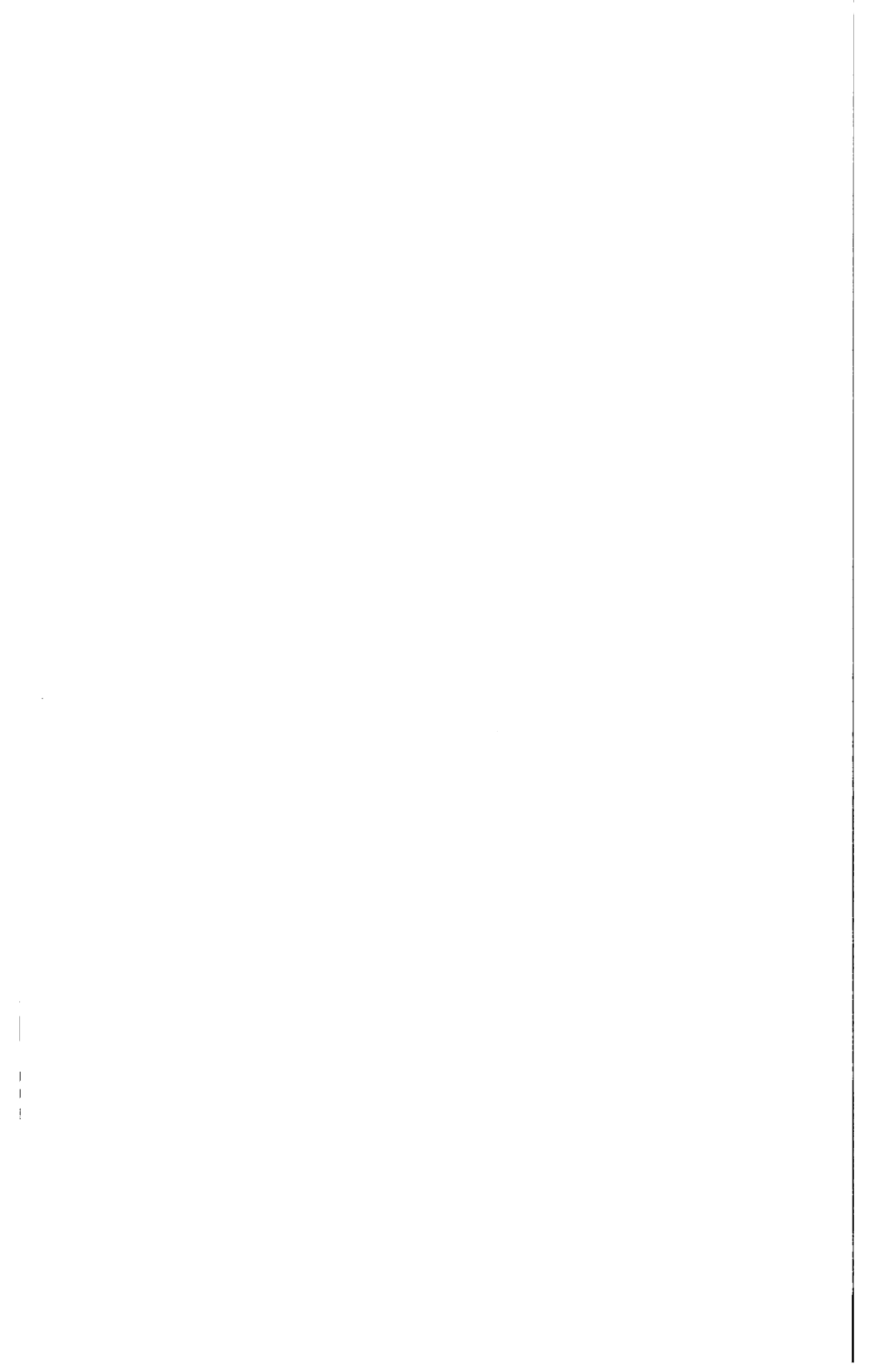
I mentioned that IDB has lent more than US\$10 billion, over the last thirty years, but much more than that has been invested in the sector. You have to assume that the investment has been to the order of US\$30 to 40 billion in the region. And yet you do not see much effect.

We have provided credit to help build access roads, irrigation systems, and yet the impact is not what the country and IDB would have hoped for. I would like to ask Dr. Rambachan if he feels that continued investment in projects, building access roads, providing credit, is going to have a major impact on agriculture in Trinidad and Tobago? Or if he would view that there are some changes of a macro-economic nature that might be required beforehand, related to pricing, marketing and extension.

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**SESSION  
FOUR**

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## **An Approach to a Public Communications Methodology for Agriculture**

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*Roderick Sanatan*

### **Introduction**

I should like to recall some key elements which I think have enriched my own understanding of what I shall present today. The first comment came from the Honourable Minister of Agriculture, when he asked whether there was "information" coming from the media, but not necessarily "communication". The important challenge that comes through to us is that there is a clear disjuncture. We are getting things to affect our cognition, but not our behaviour. It seems to be a theme with which we need to grapple if we want to talk about media—however that may be defined—doing something about agricultural transformation.

Dr. Wallace then raised an interesting question: What picture are we getting? Or what picture would we like to see? By the end of today's discussion we need to ask a further question. Who are we in this?

A third theme came from Professor Spence when he talked about the absence of a farmers' lobby to come to centre stage and inform the media, and in a sense, to assist public opinion by including the points of view of the farmers. We need to ask a further question that is implicit in Professor Spence's comment. What is the media doing to help identify farmers as an interest group?

Lastly, Mr. Estefanell pointed to the haunting spectre of the "global village". It is true that studies are showing certain kinds of homogeneity in news that we all receive; that perhaps our hours of relaxation and the working day seem to be standardized across the world. More recent studies show that although the generalities of the global village are true

the specifics are different. In a recent work, Alvin Toffler's *Power Shift* points to a developing underclass, for example, in the United States. A parallel television study on the global village concept showed sports being very popular all over the world: Soviets are watching European football, and the Caribbean is watching basketball from the United States. I think that we have to look at the specifics within the global village.

### **Applying Modern Communications Theory**

Having said that, I would like to go back to the theme of the three questions we posed. Firstly, we need to face up to the theoretical problem. Communications, as a discipline, in the Caribbean and around the world, has been new in terms of generating its own ideas as to what is possible and where change can be made, through the format of what we call communications media. In fact, that area has borrowed from several other disciplines. It is remarkable that it was agriculture —and through a lot of work done by people like Everett Rogers showing how we can effect change in farmers' practice— that has informed much of modern communications theory about behavioural change.

One of the key things that Mr. Rogers himself has recently reversed is much of the theory we have been accepting as the diffusion of innovations. The critical point he makes is that there is a process by which we create awareness and can have, by trial and error, some successes. But it is a process that omits a number of people from participating because they are "resistant" to change. For many years in literature, especially in the developing world, they were considered cultural residues or "laggards". We now know in the Third World that that is an impossible condition. Development is a long-term sustained struggle, through which people with different backgrounds have to grow to accept consensus. In other words, we have to review our own notions of what shapes public opinion.

The one-shot approach of the information media cannot therefore meet the complete challenge of addressing the long-term sustained transformation of people's attitudes. The second thing we have more recently learned from the literature is that campaign theory—where we believe we can intervene with a blitz of media— may have some very useful elements. But this does not sustain an entire approach of looking at what brings people from different backgrounds and different cultural to develop a consensus. I am making two points: that we can benefit from

literature, that indicates that an approach to communications in agriculture, as anywhere else, has to be long-term and sustained, with clear target groups; and that it has to be rooted in certain cultural variables.

### Agricultural Information

How can we transform the agriculture sector? Implicit in this is that the subject matter itself is a structure that has to be changed. What follows as a consequence is that we are really saying that people's relationship to that structure has to change. It is from that point of view that their behaviour itself —this is what we are talking about in communications— is in need of change (Fig. 1).

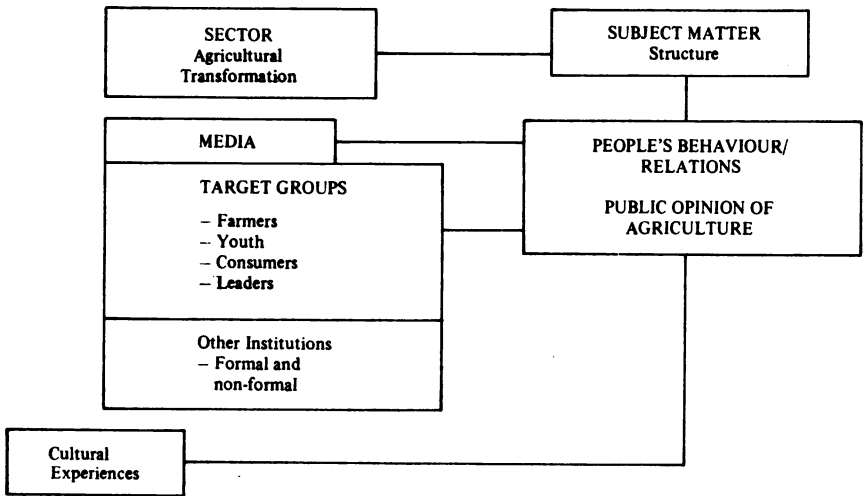


Fig. 1. Public opinion of agriculture.

There is a big gap there. We are saying that the media is shaping public opinion but you can see the gaps. What we can see from literature is that media are merely part of the picture which would modify this behaviour for the new structure. The whole range of key target groups, calling it abstractly the agricultural chain: consumers, farmers, youth and leaders, —there is a whole group of other institutions whose jobs will be to impact on the new set of behaviours. The suggestion is that perhaps we are a little improper in simply saying that there is a role for the media: an all-pervasive role to impact on this structural change for agriculture.

There is a whole range of other things we need to look at. I have added one other dimension which I think we need to explore —what are those cultural experiences? If we can develop them from the Caribbean, not necessarily from one country, perhaps we may get a more global picture of what goes into that mix for public communications as a method for engaging people in transforming themselves, towards whatever structures we need to establish.

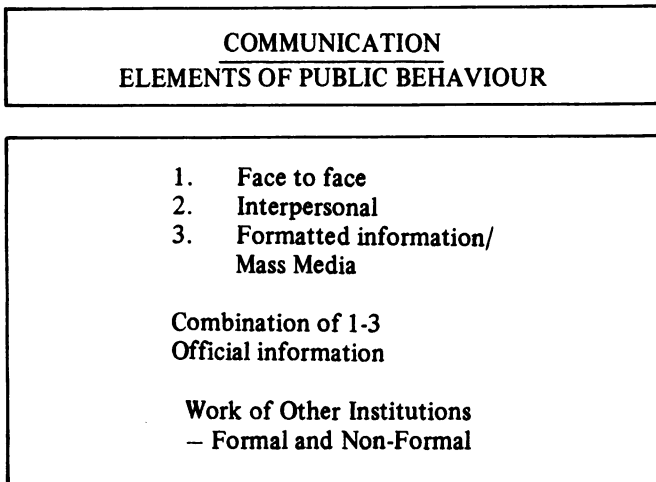


Fig. 2. Media methodology.

## **Media Methodology**

From the media point of view, we have been looking at formal techniques that we know: face to face and interpersonal forms, formatted information of the mass media; or we can combine them in a programme in order to impact on people. We can use official information and other kinds of information from "helping" institutions that are formal and non-formal. We make an assumption that these will be the mix to have this great impact for agriculture. My suggestion is that perhaps these things need to be infused with another dimension, drawing on a certain kind of experience or reality within which we might situate them. In other words, there is a tendency to describe media infrastructure as an assumed process, in which institutions and structures might play a part. Therefore, media structure is a necessary, but not a sufficient condition for the transformation (Fig. 2.).

The second point I wish to make, by way of an introduction, is that the Caribbean has had a relatively short history of social engineering using mass communications or the media. There are very few experiences for us to draw on. From my own memory, there are two key ones that have been useful and well-documented. One took place in the early 1970s, when the Bahamas wanted to promote tourism as one of the main planks of its economy. It established an extensive infrastructure, from telephone lines to links with banking systems abroad. The government initiated a tremendous amount of programming with the media and with people on the ground in order to transform attitudes towards the tourist. The message was that the tourist is somebody and supports your taxes, and therefore supports the family income. This media effort continued for about two or three years. This is one area of successful social engineering, using the media to promote structural change.

The other was Trinidad and Tobago, pioneering —long before we had talked about environment as a global issue— in the early 1970s, some cultural ideas for engineering social change and correct attitudes towards the environment through the creativity of the Solid Waste Management Company. The point I am making is that we are fairly new at the game. We cannot therefore be too selfrighteous indicating the way forward.

### Media Structures in the Caribbean

Let us, first of all, describe the formal structures of media in the Caribbean and see whether in fact there are any cues from those things that have gone wrong and things that are going right, and then see where they fit in with this subject of agriculture (Fig. 3).

NATIONAL/DAILIES	WEEKLIES – LDCs and BELIZE		REGIONAL
Trinidad & Tobago	Broadening into national	Partisan	Caribbean : contact
Jamaica	1 Belize	X	EC News
Barbados	2 St. Lucia	X	CANA Wire
Bahamas	1 Grenada	X	Caribbean Business
Guyana	2 St. Vincent	–	
	1 Dominica	–	
	1 Antigua	X	
	1 Montserrat	St. Kitts	

Fig. 3. Print media structure.

That is something like the print media structure. In the so-called MDCs<sup>1</sup> or big countries e.g. Jamaica, Trinidad, Barbados, the Bahamas and Guyana we have formal national daily newspapers, and in some cases two; in the smaller countries of the Caribbean what we call the LDCs<sup>1</sup>, which would be Belize and all the others in the Eastern Caribbean, in general there are no daily newspapers. So if we are thinking about a message that would be on agriculture, and we are

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1 See note on page 86.

thinking about the use of newspapers, there has to be a different focus for the two "parts" of the Caribbean.

What is an interesting phenomenon in the LDCs is that the weekly newspapers—one in Belize, Granada, Dominica, Antigua and Montserrat, and two in St. Lucia and St. Vincent—are broadening their own interests and coverage to look at more national issues. Even though they are "weeklies" they are really becoming national in scope. That is separate now from the partisan "weeklies" which either come from political parties or trade unions which might be important focal points when the issue is specific, such as agro-processing or health.

It seems that when we are talking about using the formal print media in the Caribbean for the LDCs, we have to talk about the broader weekly newspapers that are available. In fairness to the daily newspapers in the five countries mentioned, we should say that they have a broad formal coverage in terms of editorial content, pure columns, good photography and interaction with the farming community and consumers. Of course, we have to ask whether this is enough. Or why is it that they do not seem to be making much difference?

Regionally, there are some areas we can better utilize. The Caribbean Contact is printed monthly. It is severely under-utilized in terms of a focus on agriculture, unless it is something on Haiti.

That is a weakness on our part. The EC News, defunct for a couple of months, has an important news function. It sells all over the Eastern Caribbean, and is certainly not utilised at all to talk about agriculture. CANA Wire becomes a service that we use insufficiently. It feeds in to computer links to all the region's newspapers. Caribbean Business which comes out of Puerto Rico is not used at all. There are thus a couple of things happening in the formal print structure that could give us more visibility.

If we look at the structure of radio in the CARICOM member states (Fig. 4), we see a very sharp difference. In virtually all the countries, government has controlled the electronic media. This has to do with the post-war period and governments coming into power and taking important instruments like radio and television into their hands. Governments control in some way the electronic media and certainly radio in virtually all the Caribbean countries. That means that there is the possibility of allocating time on each one of these stations for a focus on agriculture. It works well in some countries.

the possibility of allocating time on each one of these stations for a focus on agriculture. It works well in some countries.

**Fig. 4. Radio media structure**

GOVERNMENT CONTROLLED	NEW LICENCES	FM STATIONS	REGIONAL	
MDCs x All	Jamaica	All	Caribbean	Ext
LDCs x All	Trinidad and Tobago	All	VOB (Barbados)	RS (All)
			ZDK (Antigua)	RC (St. Lucia)
			CANA Radio	RCI
			CBU (Barbados)	VOA (Miami)
			RA (Mont-serrat)	Radio Dentsch

A second point is very interesting. In recent times, two countries, Jamaica and Trinidad and Tobago, have undergone a process of widening the participation in the electronic media by granting licences. That means there is a wider participation. We need to look a little more closely at who are getting these licences. There is a world picture that finds a parallel in the Caribbean; there are monopolies and conglomerates, albeit local, which have international links and with whom they may be sharing these licences.

We therefore, have to confront the issue that if we did not have too much success or visibility in the government-controlled media in promoting agriculture, shall we get it if a particular interest group now controls this new participatory model? It is a question we shall have to look at in the Caribbean.

The FM stations are interesting. In every country of the Caribbean FM is available on all national stations which has a great deal to do with the terrain: mountainous, using boosters across places. The possibility exists that we can have an impact on the agricultural problems of the region. FM is a severely under-utilized facility for radio around the Caribbean.



Regionally, two stations stand out. Within the Caribbean the Voice of Barbados has daily coverage of regional news. It is perhaps the only station that focuses heavily on Caribbean news. It also has a very powerful transmitter that allows broadcasting to the Eastern Caribbean. Our own research has not indicated any agricultural focus on that station.

ZDK in Antigua is a privately-owned station, and interesting in that it is the only station in the Caribbean which has a 60 minute daily newscast, involving a range of world news from countries of the South, all of the Caribbean, and including CANA. It does not focus on regional agriculture. We therefore have some untapped radio facilities around us. CANA Radio, heavily used, is centred in Barbados, from which it provides a daily service to everyone in the region. The Caribbean Broadcasting Union (CBU), again by distributing tapes, gets material out on radio. Radio Antilles will soon be back. It has the most powerful transmitter in the heights of Montserrat and it has the most important reach, at the best listening hour for people, six o'clock in the afternoon, around the Eastern Caribbean. This is an important potential vehicle.

But we have to watch out for external radio linkages. The British Broadcasting Corporation (BBC) not only has powerful relays around the Caribbean but there is also a special Caribbean Report carried out by expert Caribbean radio broadcasters, who operate out of the United Kingdom. That is an important focal point to penetrate, in terms of feeding back to ourselves news and issues on agriculture. RCI, which is a Martinique-based station, operating from St. Lucia, has a powerful transmitter which makes programmes available to four or five countries in that part of the Caribbean, is another under-utilized facility. There is also RCI Canada, which deals with migrant issues, particularly West Indian, and is relayed to about four or five countries in parts of the Caribbean. This is another station to which we could feed material.

Voice of America focuses very heavily through its transmitters in Puerto Rico and Antigua as a relay station on short wave to the Caribbean every evening. It concentrates on foreign policy matters which relate to the Caribbean. Radio Deutscheweller, from Germany, is linked with Radio Antilles and has some ten hours broadcasting time per week, and is also heavily under-utilized by us.

GOVERNMENT CONTROLLED	INDEPENDENT PRODUCERS	REGIONAL
<b>MDCs:</b> Trinidad & Tobago Guyana Jamaica Barbados The Bahamas	Trinidad & Tobago  Jamaica Barbados	CBU News (Satellite) CBU Features
<b>LDCs:</b> Belize St. Vincent Grenada St. Lucia Antigua St. Kitts	Belize   St. Lucia	
<b>OTHERS:</b> Montserrat Dominica		

**Fig. 5. Television media structure.**

There are some other things about radio that we should focus on. Listenership pattern in the LDCs is very much higher than the MDCs. About one in three persons listen to radio in any of the OECS countries and one in four in the MDCs. This indicates that it would be possible to regionalise agricultural messages by radio rather than by, for example the print media. There is therefore the possibility to extend more regional coverage and programming through radio for the LDCs, as against the print media in the more developed countries, where, by the way, advertising costs are also higher.

The third interesting point is that with the rise in telephone penetration and arrangements for increased infrastructure through the Caribbean, we now have a greater possibility for call-in programmes all over the region. This is one way to deal with agricultural issues.

Very similar to radio, television is government-controlled in all MDCs (Fig. 5) and all LDCs except Montserrat, which has no television. But

there are two other important phenomena in the Caribbean. Since most of our television stations, are reduced to being transmitters, with little capital and therefore little capability of producing low cost programmes, it is people who are outside the system, many of them ex-television programmers, who are doing the production through what are known as independent production houses. They feed local stations with most of the local material, except news programmes. Such people are very strong in Trinidad, Jamaica, Barbados, St. Lucia and Belize. So it seems that we have two alternatives for using television in the Caribbean: through the people who do the production work outside of the formal structure; and through access to government networks to ensure some input for agriculture through formal television.

Another aspect is the regional CBU news system which uses a satellite switch linked from Trinidad to the countries with uplink stations: i.e. Trinidad, Jamaica, Barbados, and Curaçao (which is outside our system). But this is very limited because most of our countries merely have the TVRO, which is one way receive-transmission only. CBU features, are then sent to them on a fortnightly basis by air.

Other interesting things are happening on television in the region, especially in the LDCs, where there are no earth stations; and cable TV is taking over. But what is the benefit of using cable TV, piped from somewhere else, linked to satellite transponders, especially from the United States, entering the Caribbean? Is there not a possibility, since they all have local operators in each one of these countries, to locate a point to enter the homes or households of our people?

✓ A second issue is that there is sufficient media material on agriculture and space for employment opportunities. Perhaps a syndicated news service, either coming through an agency such as IICA or a group of journalists which could bring together that area of specialization to be regionalised and marketed and thus generate income.

The third area is the change in foreign correspondents. Many years ago, we would hear about Messrs. Cronkite and Rather. A foreign correspondent was really somebody "foreign", who would tell us from outside what is happening. But if you listen to the news or look at Caribbean programmes, the foreign correspondent is now a well-trained Caribbean broadcaster, feeding material out. It seems there is a great opportunity to bring in foreign correspondents, groom and feed them on a regular basis the Caribbean point of view on agriculture.

There is an established telecommunications infrastructure in the Caribbean. In the Eastern Caribbean we now have a digital link, which means an upgrade in the telephone arrangements, there are thus new possibilities. This is also linked to computers, which ensures we are on line with a number of external databases. There are a couple of people, who have been linked to such systems and are bringing local information as well as other relevant data to farmers. This is another under-used facility in the region.

The follow-up to this would be to develop the role of an international news service which would provide an international and local news service. The utilization of the carrier on the ground already using the South-South arrangement, the Inter-Press Service (IPS) which is heavily linked in Costa Rica, at IICA headquarters, that is under-utilized, could also be improved.

### **Insertions for an Effective Methodology**

Because we have recognised the shortcomings and the incapacity of the media infrastructure to do much more than it is currently doing, we shall focus on other kinds of data that are available for in the Caribbean. I have a bit on the video here that you will see.

The use of official sources of information; ministry documents, agriculture statistics, etc. (Video Clip 1).

Other Agencies with agricultural information; CFNI, CARDI, NGO bulletins, pamphlets, extension newsletters, resource units of agriculture ministries, the farm record book, data bases –ACT, CARTIS, etc. (Video Clip 2).

Quite apart from the formal infrastructure in the Caribbean, there is a more timely interactive phenomenon with communications interaction taking place at the level of the street vendor, and in the minibuses, where urban clusters of people shuttle between work and home. It is perhaps a new way to reach people on a daily basis with quick information. There is nothing wrong with thinking through what agricultural message we should get.

What are the elements for the Caribbean experience that we may infuse in the media, in order to move agricultural information and to engage people to consider new attitudes to this new structure which we call transformation of agriculture? The first example from which I want to draw as a response to Professor Spence, is credibility. We can progress by having farmers themselves talking and giving their own views. But there is the possibility of moving the farmer onto centre stage. What happens in his household? How does he analyse his problems? He can develop that lobby at the centre stage. (Video Clip 3: Agricultural messages).

We have our artists and our local heroes who can couch whatever messages they wish in agricultural overtones, making the applications and finding them very acceptable to us because of the cultural links we make. I will play you an excerpt from Louise Bennett of Jamaica in her own style, with humour, talking about her love of local food and how she was pleased in the cold of Canada to get a pot of soup. This is what this kind of medium can do by way of transforming agriculture in the small-scale communities of the Caribbean (Video Clip 4).

The style of popular advertisements uses influential marketing of canned agricultural foods as in "Cock Soup" (Video Clip 5).

The format of agricultural information in the school system comes alive in this video; using some classical music in a school broadcasting programme, excellent photography and a step-by-step approach to understanding the mating of the queen bee. Let us look at this video called "The Castes of Colony" (Video Clip 6).

Story telling is part of the oral tradition, one of the cultural strengths of Caribbean people. Listen to a humorous story of Anansi's admonition: work the land if you want to eat food (Video Clip 7).

The public information environment programme made "Charlie" a household character, contradictory and lovable, who nags at the dirty environment. This successful programme of marketing solid waste disposal is worthy of emulation in agricultural promotion: borrowing advertising styles, giving a positive image to a negative cognition and identifying and correcting the real problem (Video Clip 8).

What is the role of the disc jockey? Can he not assist us in the promotion of messages, data, warnings, positively and enjoyably packaged? In the new music video industry, interactivity comes alive. Look at General Trees' example of dog meat, where we are cautioned about the laws of the government, hygiene, health and good agricultural practices (Video Clip 9).

A powerful new medium is in use in the Caribbean. Popular theatre, an education methodology at the local community level, animates the community on an issue, dramatises its conflicts and consequences, and seeks community action. This form of alternative media is well utilised in this example from Dominica, where there is a pesticide use problem (Video Clip 10).

There is another approach that is being used in the Caribbean. As a people, we are accustomed to satire and sharp humour, whether we are looking at politicians or the church. Cartoon work has been developing through a St. Vincent NGO group (CARIPEDA), linking media people, graphic artists, and really challenging people to come up with popular images in comic form to be passed on. I have an example with me, of a cartoon not yet on video. It is costly, but it is looking for a home, with a number of contributions about birds being lost and destroyed in the region. Very inexpensive as a tool, since children like comics; but it is an important indigenous medium for communication around the Caribbean.

It is strange that in Trinidad and Tobago where the carnival is a major event, and each year some band plays something about agriculture, yet we have not captured this as a communication technique. Maybe it is time we have a street band with a purposeful approach, looking at some area of agriculture. The elements are there.

Without trying to be theoretical, my examples are asking how to infuse this formal information function that we describe as media, using certain cultural variables and elements that are around us? What is this agricultural communication system? Figure 6 spells out the dynamics of the process. The subject matter is the transformation of a new structure and the implication is that we have to have a new social process or a new relationship of a whole set of target groups in the country through agriculture. What does this mean?

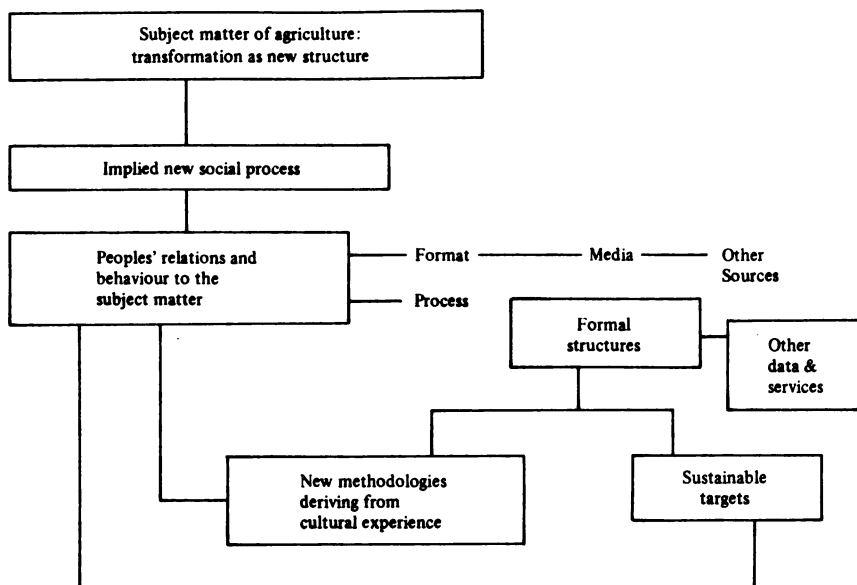


Fig. 6. Dynamics of the communications process.

This relationship to the structure would come through the formats that we see here, the reporting function in the media, that is one side of the process; the very formal structures. But there are other people who feed into the media, and from other non-formal sources we also get input. On what are they built? They are built on two branches. For communications, targets must be sustainable and long term, and not simply interventionist or campaign directed or one way as the information function. They must draw attention to the second aspect: the new methodologies that we can pull out of the ordinary interactive communication patterns in our culture. And it seems that these things are at work, feeding backwards into a process involving new awareness and relationships in the social structure. This is a way in which we can approach the public communications methodology.

### **Some Further Suggestions**

A few suggestions follow regarding further examples to which we may wish to pay attention. There are other resource bases we might want to tap into. One is to offer journalists a annual media award for the best agricultural report. What this does is not only stimulate awareness and knowledge, but also real productions. Another is to list all the persons, addresses and interest groups in agriculture to be fed out to all of our media people as a tool. There is a directory published by NGO groups in the Caribbean Network for Integrated Rural Development (CNIRD); which has gone a long way in developing that kind of compendium; but it needs updating. A third element would be the development of a training module on agricultural communications, within the university itself, where people are being trained in mass media and that can be used wherever there are media people around. A fourth area is the role of information dissemination. I have seen the daily notices coming out of IICA headquarters in San Jose, Costa Rica; it seems there is a role to be played here by IICA Country Representatives.

There is a need to evaluate the demand side of information, bringing back university graduates and agricultural extensionists to do the work. What is that demand for information? We must evaluate the whole process. Finally, perhaps somehow we have been able to develop elements in the model. We have no fast answers to what seems to be a wider, long-term pattern of communications for the Caribbean.

We hope we have contributed in some meaningful way to an understanding of the specifics of our own situation and have drawn up the outlines, in an incipient way, of a public communications methodology, based on the lessons of the Caribbean experience.

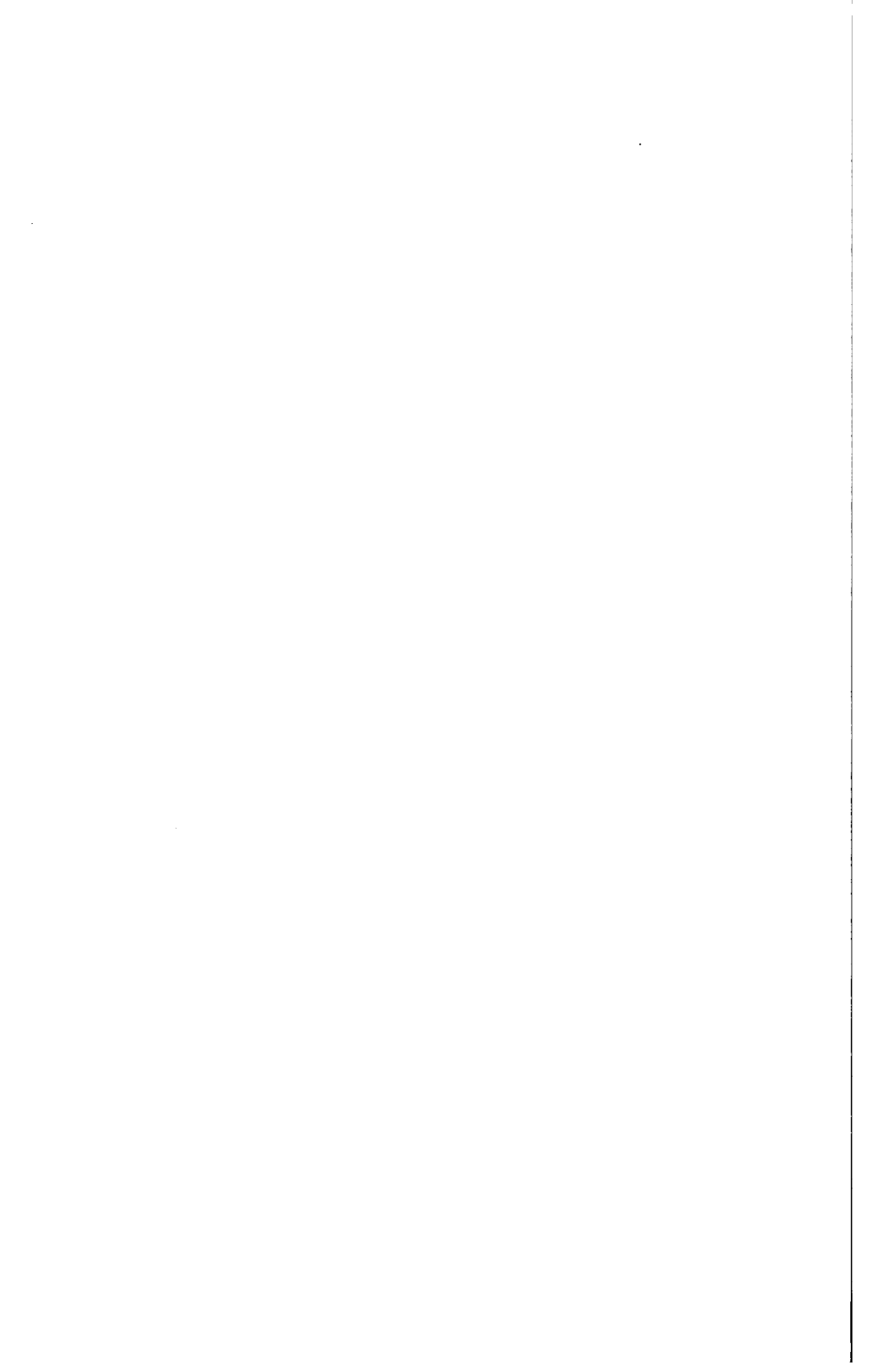
We would like to give special thanks to the following Caribbean institutions whose materials we have used in demonstrating our case. In Jamaica, the Government Agricultural Training Unit, and the work of the artists on videos; in Dominica, the Small Projects Assistance Team; in St. Vincent, the Caribbean Peoples' Development Agency; and in Trinidad and Tobago, the Solid Waste Management Company and the Department of Agricultural Extension, UWI.



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**SESSION FOUR  
COMMENTS**

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## Comments

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1. One participant noted that communication is much more than delivering a conscious message and that the audience must be receptive or this information will fall on barren ground. In addition, it was also noted that cognizance must also be taken of the roles people play in society when giving messages, this being especially important when those presenting the message and those receiving it come from backgrounds where roles are differently identified.
2. Another participant indicated that those who are to be influenced by communications fall into three groups; the farmer, the consumer and the potential investor, and that the real challenge is in developing means to reach all of them differently and at the right time. Proposals for the dissemination of information should be prepared and an avenue for funding of these proposals can be the international lending agencies.
3. Another comment dealt with the profitability of providing communication facilities in developing countries concerned about transformation. Governments must be sufficiently concerned to support the media financially so that they can provide the necessary and sustained information to make the effort effective.
4. Another comment revolved around the use of externally-controlled media, highlighting that without ownership, there is much less control of what is communicated. In addition, there is concern of the impact of other cultures on the local environment. Also it may be a lot easier to talk about using the media to put forward the farmer and his point of view, but it is much more difficult to actually get it done. The popular theatre pieces presented at the Regional Economic Conference was an example of this difficulty.

5. With specific focus on the newspaper as a medium, the comment was made describing the competition for space in the newspaper as to what constituted news, indicating that as things become important in the particular society, they occupy "holes" in the press which grow according to the relative relevance to the society of a particular issue. This phenomenon usually takes place at the expense of other issues. One economic rationale behind this approach is the cost of news print.
6. One other comment suggested that more information, especially the ADB Newsletters be circulated to schools as a part of the thrust in encouraging agriculture. A warning also came to exercise caution in the kind of message which is projected so that agriculture and agribusiness can assist in the sustained development of the economy, by focusing on the right target and objectives.

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## **Respondent to Roderick Sanatan**

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**DR. PATRICK I. GOMES**

I am going to make just a couple of points as I think that as we are talking about "communication" we have to have much more dialogue and audience participation. This is as badly needed in agriculture as in other sectors.

I think it is absolutely critical just to keep in mind our concern to recognize the importance of the media, and the tremendous resources available. But I think two things also have to come across in terms of communication; one of which you referred to, that is that campaigning cannot be a one shot intervention. If we are really going to communicate, we have to sustain the communication. We have to find ways to keep a process working. Secondly, it has to aim at a cumulative impact. This implies that ways and means are to be found to reinforce the message. All good teachers tell us that. I think the need for consistency is also very important in media campaigns. But I think even more significant, and what we have to really question from the point of view of being reflective on our part, is to clearly determine the "for" and "with whom" are we communicating. The essence of a lasting impact rests in clearly knowing what, for whom and for what purpose. I think we have to speak more explicitly now, of agricultural transformation from the farmer's perspective. In our campaigning, our signals cannot be mixed.

The other aspect of consistency may be illustrated by an example given earlier. The Minister indicated that there is an official policy restricting the importation of smoked herrings and salt fish, but endless quantities are available all around the country. Imported fruit is another example. A number of small farmers' groups are working to get local fruits into cakes and pastries, but imported fruits such as raisins and almonds continue to be imported.

Let us return to the point made by Professor John Spence. The distribution traders or the merchant class, wield a lot of power in the food import sector. The policy to restrict imports has to recognise this fact. It is necessary to emphasize this point that we cannot have inconsistency in national policies. We cannot be talking about food replacement, reduced food importation and food substitution and allow certain groups or individuals to counteract the established policies. It has been pointed out that the major powers at the Uruguay Round, who advocate free trade and trade liberalizations, are the most protective of their own agriculture. In the European Community farm subsidies are maintained, and as a result what we are doing when we allow "free trade of agriculture produce", we are not only confusing our signals to local farmers, we are also subsidizing the extremely well-off and heavily subsidized farmers of North America and Europe. Our policies therefore, have to be consistent.

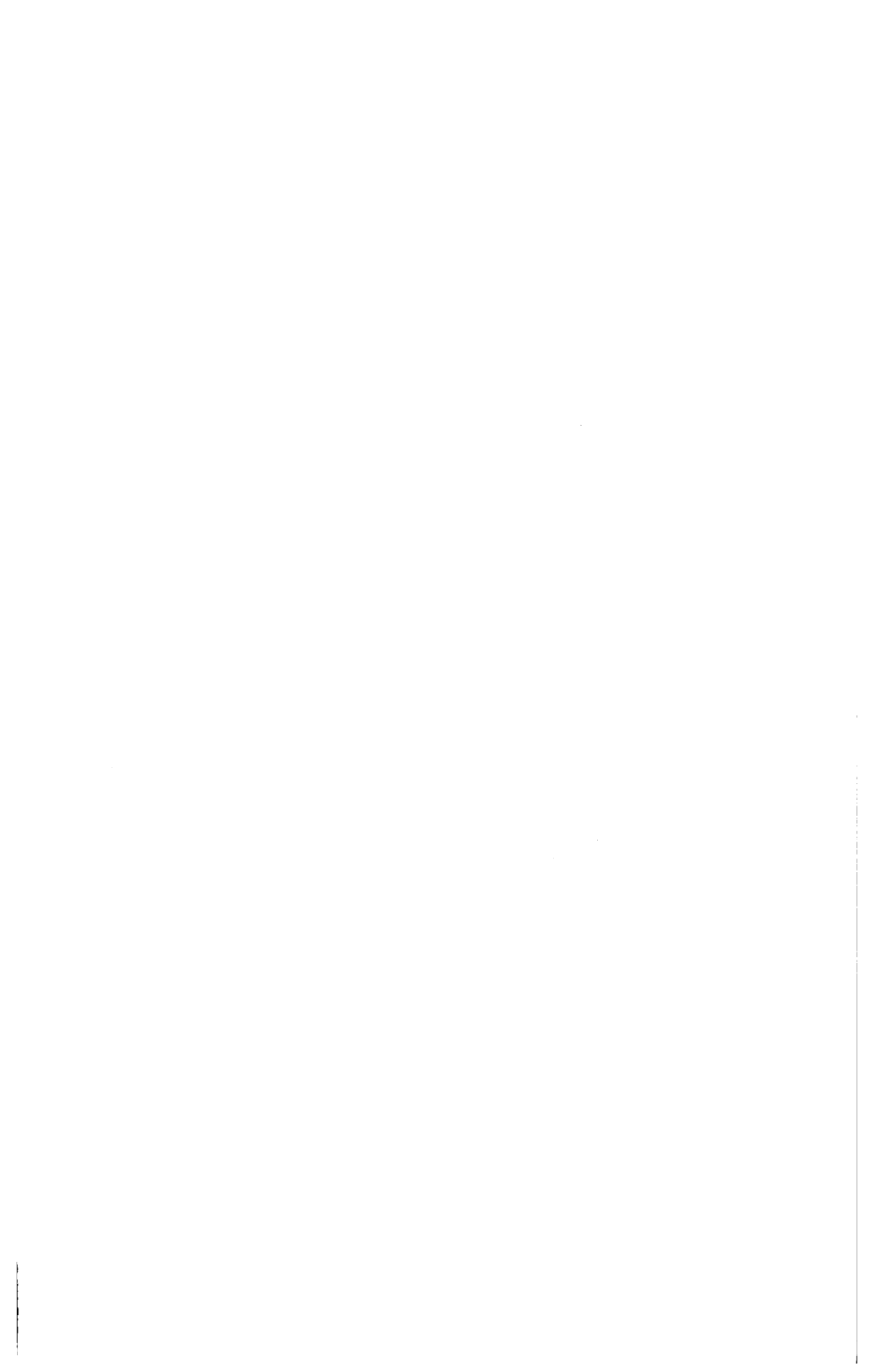
Lastly, in communication, credibility is absolutely essential. We cannot expect the farmers, the public at large, technicians or students to be committed to a transformation of agriculture, if the major institutions and agencies advocating agricultural development "talk plenty but do little": We have to make sure of our credibility by being on the ground, working where the difference has to be made, and building from the bottom up.

All of these concerns have been adequately and comprehensively portrayed in Mr. Sanatan's excellent presentation.

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**SESSION  
FIVE**

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## Strategies for Dissemination of Agricultural Information by the Media

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*Jones P. Madeira*

In sharing some ideas with you on strategies for dissemination of agricultural information by the media, I note with tremendous interest the general objective behind this particular exercise: that of sensitising policy, technical and media personnel on agricultural development perspectives for the future and I note also that this objective is intimately bound up in PLANLAC or the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean.

Let me say immediately that it is my hope that the procreators of PLANLAC, in perceiving a special relationship with the media, have accepted such an approach as just one aspect of a vital component of their overall strategy; that of communication. If they have not, then the acronym, PLANLAC, will truly attain meaning from its sound: the plan will lack an indispensable link with some of the principal actors, if not the principal actors, in striving for this new awareness of the role agriculture can and must play in general economic development, and will be doomed to failure even before its first practical projects get off the ground.

I notice that PLANLAC takes as its point of departure the CARICOM and OECS initiatives in this direction. Some of us who were actively involved in shaping those very initiatives underscored the point about the indispensability of a communication component in this type of activity, by designing a related programme with the purpose of achieving active support for and public participation in programmes in the overall programmes of what was then the regional food and nutrition strategy.

We said then: people are to be the central point of the strategy. Their support, commitment and involvement are vital elements in its planning and implementation. They are the ones who will benefit directly from the successes achieved. However, there is usually a discrepancy between the expectations of the people and the development aims and objectives enunciated by policy makers and planners. The strategy should be designed to bring together the experiences, concerns and problems felt at all levels of the community. These should therefore be brought to bear on the dialogue and the debate necessary in formulating programmes and projects, consequently narrowing the gap between planners and beneficiaries. The people themselves should be actively involved in the resulting programmes and projects. The communication component seeks therefore to actively involve all sectors of the community in the general planning process.

That was more than ten years ago. I would be greatly interested in knowing what has changed in the agricultural environment in the Caribbean to render this approach irrelevant today.

As far as this presentation relates to the media environment which is the subject of its focus, I can tell you that since then there have been some dramatic developments. There has been proliferation in media houses and their outputs. And the Caribbean media has been slowly but surely appraising itself of orientating its operations towards making use of the latest communications technology, and also forging new linkages and areas of cooperation with one another.

When we were designing the strategies, we did so with the realisation that, as a region, we had taken some bold steps in putting a media infrastructure in place to expand the flow of information with more relevance to ourselves, and to also train our own people in the art. As we speak today, that infrastructure has grown in sophistication.

The Caribbean News Agency has been able to modernise its plant and to expand its reach and its output. It now not only boasts a presence in every Caribbean territory to service its on-going news agency service, but it has diversified its operations to include a radio service which links the Caribbean via special radio programmes in news, sport and in culture. In a way, the Caribbean News Agency has absorbed most of the radio initiative of the former years of the CBU, but the CBU itself has attained unprecedented strides in the area of television, particularly in the last three years, via CARIBVISION. This is a project carried out in

collaboration with Freidrich Ebert Stiftung in West Germany, and one I had the pleasure of negotiating and designing for the region. It now facilitates news exchanges among systems in Barbados, Jamaica, Trinidad and Tobago and Curaçao on a daily basis via satellite, and a weekly television magazine highlighting developments in all territories including the non English-speaking countries which is now distributed weekly to 20 countries including Canada. And we now have the very exciting prospects of what is going to be called ECTN, or the Eastern Caribbean Television Network, where, because one of the small television systems in the region has acquired its own satellite uplink facilities, most of the sister systems will be able to institute their own television programme exchanges and have their respective audiences see the results. Apart from these regional developments, new policies have given rise to additional radio and television systems in individual territories not to mention additional newspapers and magazines and other media.

When I look back at the work we anticipated in the mid 1970s, when the environment was not as sophisticated as it is today, I see that we had targeted a range of activities, some of them specifically directed at the media. We spoke about sensitising media to the need for balanced relevant presentation of food and nutrition features, and also to create regular vehicles, via which relevant information on the strategy as it was then and its various programmes and projects, could be channelled for mass dissemination. We also projected designing and developing radio and television programmes and other material for regular, mass scheduling and for supporting inter-personal field exercises. Reiterating my initial comments to you, the use of media is but one part of a communication exercise that should support a programme like the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean.

I also go back to my initial question on what has changed in the agricultural environment to render all of the above irrelevant. If there have been changes, then as a media practitioner I am afraid that I am not aware of them and I want to hazard a position that the agricultural planners are not aware of the developments that have taken place in the regional media environment. It is this ignorance on both our parts that must contribute to the strategies we develop for increasing dissemination of agricultural information by the media: and when I speak of information, let me begin to plug instantly the requirements of the media. There is the tendency on the part of the planners and on the part of many a media professional to regard such information as details of the

development aims and objectives enunciated by policy makers and planners. And here I wish once again to return to comments in our initial work about the discrepancy that usually develops between the expectations of the people and the development aims and objectives enunciated by policy makers and planners.

Nothing by itself in a highly people-oriented activity could be more counter-productive than the badgering of an audience with fine words about policy. We need information that will inspire, information that will educate and encourage change, information that will not merely speak about plans but will also cover the implementation of plans; that will outline benefits that are actually being derived from such implementation by people for whom plans are intended; information that will enable the defined target groups to draw from the experience of others.

It thus has to be a strategy that begins with the closest partnership between the agricultural planners and decision makers and their media counterparts, and one that must carry on to incorporate those who are to be the beneficiaries of agricultural action. Where that approach has existed, the results have been most encouraging. Take, for instance, the decision by the Agriculture Venture Trust to use the services of CBU to produce and distribute features via the television programme, CARIBSCOPE. As a result of an agreement between these two organizations, Caribbean peoples are now able to see the results of projects being undertaken in a number of territories by the Agriculture Venture Trust and to assess the value of becoming involved in related projects. Agriculture could be seen as a worthwhile venture, and for a moment it could be translated as an occupation without the trappings of the heritage of slavery.

It was only last night via CARIBVISION that we were being told of the Barbados experience where labour has had to be imported for agricultural projects because young people were not interested, and this in a country where there is an unemployment problem. I remember the words of the speaker who was advocating the need for bold and creative steps to encourage wider involvement in agriculture in the Caribbean.

Accordingly, I suggest that herein lies the challenge for the people who are going to further refine PLANLAC, and in relation to the specific topic on which I have been asked to speak today, "Strategies for Dissemination of Agricultural Information by the Media", this creativity and boldness is also vital.

Given all of this, I trust I can at least stimulate some direction in your thinking by suggesting the following:

- There needs to be an immediate identification of who is doing what in agriculture, at both the national and the wider regional levels in the countries covered by PLANLAC. This identification should incorporate communication-oriented projects and activities and the related human and equipment resources deployed to carry these out.
- An accompanying survey should be undertaken of the dissemination of agricultural information by existing media at both the national and regional levels with an assessment of content and impact on target groups.
- Every effort should be made at the regional level to effect a mechanism to insist on and foster coordination of communication components of agricultural projects, and to liaise with regional media institutions for the systematic dissemination of information related to these projects. In this connection, discussions should be held with organizations like the Caribbean News Agency and the CBU on the possibilities of instituting regular features and productions for distribution via wire services and satellite to newspapers, radio and television systems. The material for such productions could come from research and the on-going field work being carried out by institutions such as the Faculty of Agriculture and the Caribbean Agricultural Research and Development Institute (CARDI) which could be made available to specialist communications personnel at the regional level for conversion into palatable print and electronic media packages.
- Similar efforts should be made at the national levels where, firstly, state organized and supported extension work could become a part of the schedule of print and electronic media packages that are developed as a routine for national newspapers, radio and television systems; and secondly, where institutions that are involved, say in the granting of credit to farmers for agricultural development, can incorporate as part of their efforts to sell such credit, the production and/or sponsorship of programmes that concentrate on the actual experience of farmers who have had to put such credit to work for them.

- I remember the combination of the world of work and the world of education being a major topic for discussion among heads of government in the 1970s. Emphasis should be placed in this regard as part of the training in communication for students both at the Faculty of Agriculture and at the Caribbean Institute of Mass Communication. Attachments could be sought from media houses for these students who could have as part of their studies, special media-related projects which could augment the usually sparse resources that exist at the media institutions for similar projects.

Madam Chairperson, I might well have been treading on ground familiar to all during the past few minutes; and I might have even been talking about ideas which are already being implemented or perhaps are about to be implemented. If that is the case, then I must apologise for boring you, but I want to seek details of such implementation immediately so as to take them back to my principals, with suggestions that as a major broadcasting institution in the Caribbean, we rid ourselves of our ignorance and become immediately involved.

If perchance, I have been able to stimulate some new ideas on strategies for dissemination of agricultural information via the media, let me re-enforce my point about the media aspect being but one part of a wider communications strategy by PLANLAC, and return to the work we did in the mid seventies for the following observation.

Communication becomes even more significant when one considers the peculiar characteristics of the CARICOM region: 12 states, at various stages of development with their own national institutions and organizations to address their domestic problems, and a web of regional institutions to which all countries contribute, seeking to enhance their developmental efforts through regional integration.

The communications approach, consequently, seeks to stimulate action at both the national and regional levels, with the ultimate aim of forging the type of cohesion necessary for strengthening already existing developmental infrastructure. Such cohesion will not only maximise already scarce resources, but through the interaction generated at all levels, and the resulting awareness of the issues in food and nutrition in the region, will also strengthen the capabilities of institutions in securing the widest commitment, support and involvement in tackling food and nutrition problems.

**The same philosophy, applied specifically to the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean, I feel, might see a redesignation of the acronym PLANLAC to identify a plan lacking in nothing.**





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**SESSION FIVE  
COMMENTS**

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## Comments

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1. The view was expressed that the image of agriculture in the media has to change if we are going to encourage development of the sector. In addition, it was also noted that the way information is packaged is vital in making it not only accessible but easy to digest.
2. Also offered as a comment was the idea that the media is not an organized body or even an organized concept but rather a "free spirit" which relates activities which go on and that each element in this mass adheres to the spirit of enterprise driven by the engine of economics.
3. The fact that the Caribbean Broadcasting Union can be approached and will readily examine material for dissemination in order to convert it into programmes was forwarded. One reason why this facility was not more often utilized is the perception of alienation that exists between the media and those who may wish to use it.
4. It was also expressed that it is a mistaken view that the best way to get information across is to have a Minister of Government enunciate the particular action and that it is not necessary to hear the voice of the people.
5. Agriculture is about people doing things. This was proposed as its focus. Yet, there is almost an absence of action programmes and that neither the media, the government nor the private sector takes up the challenge and produces such programmes. It was then suggested that perhaps it is the saleability of the programmes which dictated their production.
6. Also offered by way of comment was the idea that programmes about people and in which people (the literary audience) could

participate were far more popular than programmes with only rhetoric.

7. Also coming from the floor was the idea that a multi-media approach, as is already used in some countries, be utilized, conserved, and palatable, and attractive programmes and subjects can be presented to the agricultural community from which feedback can be received. The World Bank sponsors programmes such as these.
8. The negative image of agriculture has caused the lack of interest in agriculture and agricultural activities and frustration of those involved in agriculture. In order to promote agriculture a positive image must be projected to encourage youth and entrepreneurs. In this scenario, the role of the media can be to stimulate public discussions on long-term policies of agriculture. Topics such as land use and tenure etc., can be the focus of such discussions, in addition to creating awareness and participation in programmes such as the Regional Food and Nutrition Strategy and PLANLAC. On the question about promoting a positive image there is a need to stress success stories which can be duplicated. It was indicated that the mechanisms to stimulate debates were put in place but the coordination for their execution has been lacking.
9. A comment was made indicating that there should be an inter-relationship between the media and the other agricultural institutions, and that such an inter-relationship should allow the opportunities created by the media to be utilized by the institutions, vis-à-vis, presenting the media with the materials they require. For example, promotion of the university's communication system to feed the media, and other institutional projects which provide material for the media. It was however pointed out, by way of an example, that there may be obstacles in getting the material from the institutions to the media and finally to the broadcast stage.
10. Optimism about the use of the media now as against 10 or 15 years ago stems principally from the fact that it is easier to network experiences and reach people quicker through the use of modern technology. Factors militating against speedier developments hinge around the media being businesses and the need to be profitable. This duality necessitates government intention in order to assist the

media in providing the service necessary for the promotion of agriculture.

11. In response to the question about creating a positive image of agriculture and the seeming addictive concentration on the plight of poor, wretched farmers, it was suggested that the media portray the successful farmer and concentrate on issues in assisting the poor farmer in becoming a successful entrepreneur.



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## **Respondent to Jones P. Madeira**

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### **PROFESSOR LAWRENCE A. WILSON**

The topic to which you have asked me to respond is a difficult one. It is a difficult one for us in the Faculty of Agriculture. I guess it is also a difficult one for planners, as it is difficult for the media people, who have some responsibility for getting agricultural information across to the public. I think that this difficulty comes from two sources. First of all, the regional source which originates from the number of sovereign states with which we have to interact. And these states are at rather different stages of development, and in different circumstances with respect to agriculture and the dependence on agriculture for the national economic well-being. The strategies which are developed must therefore necessarily be different for each state. So picture the difficulty of a regional institution which tries to develop strategies to deal with all of these states at the same time.

The difficulties also arise from the fact that within a single country, the agricultural sector is very diverse in that there are a number of different kinds of farmers, for example, the small farmer, (I don't think we have any subsistence farmers in the Caribbean) but we have small farmers who are poor. We also have small farmers who are indeed very rich. There are medium-sized farmers who are both rich and poor, and we have large farmers of the nature of the old plantations who have various fortunes. Some of them are doing well and some of them are not doing so well. So there is a plethora of different kinds of farm situations that one has to think about when considering communications, both at the regional and at the national levels.

The other general point I should like to make is that we must consider what we want to communicate to the agricultural sector, a sector which

includes not only farmers, but marketeers, the middlemen, the processors, and the supermarkets. The sector has become very wide and varied. It also includes the planners, civil servants, public managers, private managers. What do we say to them? We must have a clear idea of what we want to get across before we can start to design a strategy for so doing.

Last week I was in Jamaica trying to persuade students to take up careers in agriculture because students are no longer coming to the Faculty of Agriculture in great numbers. Indeed, while the numbers in the Faculty of Agriculture are declining those in the Faculties of Social Sciences, Medicine, Law and Engineering are increasing. And herein lies one of the big problems of agriculture: it is a problem of image. So many years after independence, the image of agriculture is poor. And one must ask who is responsible for this? We can no longer blame that poor image on the traditional beating stake of slavery and indenture. We have been responsible for creating this poor image over the last thirty years or so. We must therefore assume the responsibility for what is happening in the community today.

We must then ask ourselves how can we go about changing this image. It seems that we have not yet agreed upon what is the major focus of Caribbean agriculture. Is the purpose of agriculture to supply ourselves first with as much of the food that we eat as possible, or is it to seek to earn foreign exchange? Or should we have an agriculture that tries to do both? And if it tries to do both, which objective takes precedence? The strategy that one develops would very much depend on which one of these objectives takes precedence.

I submit that over the years we have not come to a definitive decision as to what we want agriculture to do, and as a result we have not moved to change either the image of agriculture or the purposes towards which agriculture is put. Consequently, we have continued the same process which we inherited by trying to force agriculture into a mechanism which earns foreign exchange using crops that are traditional, when it is quite clear that these crops can no longer earn foreign exchange at the same rate at which they did in the past. Clearly there must be change. Clearly there must be diversification as has been said over and over again, but, what are we doing about this? We are not, in my opinion, pressing ahead to implement diversification to any great extent. And therefore, one must ask the question —What role can the media play in getting this idea of agriculture, this change in agriculture, accepted throughout the region?



The presenter, Jones Madeira, talked about a number of components of a strategy which might be used to address the problems of agriculture and perhaps I should repeat some of these. First of all, it should be people oriented. Secondly, it should be based on mass dissemination of field experience. Thirdly, it should be an innovative strategy which seeks to inspire, to educate, to be credible. Fourthly, it should involve a partnership between the planners and the media. And finally, it should be bold, creative, to jar the community at large into the kind of changes that are necessary to develop a new approach to agriculture.

Let me close this intervention by stating some of the components one might seek to achieve through the media for developing agriculture along new lines. It seems to me that in order to be effective, three major objectives must be included in a strategy for the media towards developing agriculture in Trinidad and Tobago.

First of all, one needs to achieve human resource development. The population must be made more aware of what is happening in agriculture, and more sensitive to the changes that take place, both nationally and regionally, so that it may react accordingly. And all of this can only be achieved through the education of the population at large. The second objective towards improvement of the performance of agriculture is the realization of improved management capabilities particularly in the farming sector. For this a lot more information about what is happening in the sector must reach the farmers, the marketeers and the processors in that sector through the media. And thirdly, there must be technology transfer because it is a fact that a lot of the technologies that are practised in the sector are archaic. Again, the media must become the powerful instrument for technology transfer for which it has the potential.

If these objectives are to be achieved through the media—and this is no small task—then I believe that the media will be fulfilling a major role in agricultural development. But it must be remembered that other institutions seek to do the same thing. The private sector companies seek to do it. The University of the West Indies is also seeking to do this. But, we need as we have said earlier on, a partnership of the institutions and the individuals responsible for delivery of communications material in order to realize the objectives that we all seek.



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**CLOSING  
SESSION**

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## **Summary and Closing Remarks**

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*Dr. Reginald E. Pierre*

I have been given the difficult task of summarizing and commenting on what transpired over the past two days.

Let me start by saying that, as the brochure indicates, the thrust of the seminar was to highlight the vital role of linkages in the development of the agricultural sector and the overall economy in the region. The general objective was to sensitize policy makers, technical and media personnel on development perspectives for the future.

Three specific objectives are stated as follows:

- to present and discuss the PLANLAC proposals and their relationships with agricultural development in the country, the region and the hemisphere;
- to discuss the importance of the agricultural sector and its association with other key sectors of the economy; and
- sensitize the media on the current initiatives for reactivating the agricultural sector in the region.

Madam Chairperson, we have had a wealth of information and some very positive ideas over the past two days.

The essence of the PLANLAC lies in the belief that agriculture can play a more meaningful role in the overall economic development and improvement of the welfare of the people of Latin America and the Caribbean. Often, we have heard that agriculture has the potential to play such a role, but with equal frequency we have heard that this potential has not been realised.

Just a short while ago, we heard that the role of the communications media and its support in fostering agricultural development were clearly defined several years ago in the Regional Food and Nutrition Strategy, but the implementation or shall I say, the lack of it, was the limiting factor. We seem to have this cyclic occurrence in the region where we get ideas, put them on paper where they remain and, after a few years, we come up once more with the same or similar ideas. Let us hope that, given the current climate, the ideas which were put forward over the past two days will not suffer the same fate.

Many of us are convinced that agriculture can indeed be a major engine of growth in the economies of the countries of the region. This hemisphere's ministers of agriculture made this clear in the Ottawa Declaration in 1987 and this is reflected in the mandate given to IICA to implement PLANLAC, of which this initiative is but a small part. The Caribbean heads of government and ministers of agriculture also made this clear when, in spite of past failures, e.g. the Regional Food and Nutrition Strategy, they mandated CARICOM to develop an agricultural sector programme for the region, which resulted in what is now known as the Caribbean Community Programme for Agricultural Development (CCPAD).

In the OECS sub-region, the heads of government also mandated IICA, CDB and CARDI to develop an agricultural diversification programme for the sub-region, a programme which is currently being implemented. Yet another indication of the interest and support of the political directorate is the fact that they have over the years established a number of agencies to deal partially or specifically with agriculture, agencies such as CARDI, CATCO, CFC, UWI and CDB. Clearly, there is significant political commitment to agricultural development. Over the past two days, we have heard about a changing world scenario and it is perhaps this changing world that has influenced our political directorate to develop a stronger commitment towards agriculture and agricultural development.

We were told of the many events taking place in the world and the emergence of a new political and economic order. Reference was made to the consequence of the Persian Gulf War, the internal situation in the Soviet Union, the unification of Germany, the democratization of Europe, the emergence of mega-economic trading blocs such as the EEC, US-Canada-Mexico association, the closer association of the Pacific rim countries and the more recent collaborative efforts in the Southern Cone.

In addition, significant difficulties being encountered in the Uruguay Round of the GATT negotiations were noted. This changing world scenario will have profound effects on the agricultural sector and the small economies of the region.

We were made aware of the changing priorities in the developed countries, because of which Caribbean countries are likely to become, if they are not already so, low priority countries for technical assistance and aid. This means that Caribbean countries will have to be very ingenious to be able to procure external aid and most certainly, they will have to generate most of the required resources locally, and use these resources very wisely.

The current high priority issues of concern in the developed countries were identified as the environment, drugs, migration and diseases. Agriculture is notably absent. A very interesting suggestion was put forward to the effect that we should try to identify common areas of interest within the North and South agenda, in an effort to find the basis of a strategy to attract aid. Take the case of migration. Why do people migrate? They migrate to seek a better life. If developed countries are interested in stopping migration it might be possible to influence them to provide aid to develop the region from which the migration stems. The area of drugs is interesting because, although it is so frequently discussed in terms of agricultural substitutes, it is difficult to find an agricultural venture that can favourably compete. Another idea is that of "debt for development", a concept which involves using some of the debt owed by Third World countries to finance initiatives concerned with preserving the environment.

Another possible effect of the world scenario on the region's agriculture is the possible loss of its preferential markets. This may not occur in 1992 when the Europe Unitary Market comes on stream, but certainly preferential markets will not go on forever. Because of this, Caribbean agriculture will have to become more competitive, both in terms of cost and quality of product. In addition, we need to be more selective. We also need to identify those commodities which give the Caribbean a comparative advantage in the market place. Given the difficult circumstances in which we operate in the Caribbean (high-cost producers with limited land area hence the absolute necessity for environmentally friendly agricultural practices), the need to make maximum use of technology is imperative. But we need to be selective, lest we dissipate our energies on too many things and accomplish too little in the end. A

number of areas have been mentioned in the discussions, e.g. buffalypso in Trinidad, ova implantation techniques, genetic engineering, etc. We know, for example, that we can substitute cassava flour or another carbohydrate source to the extent of about 20 per cent in bread without detectable differences in the end product. Can we genetically engineer cassava to make it more amenable to bread making?

The Caribbean has always been regarded as "sample" producers because, with the exception of few of the traditional export crops (sugar, bananas, cocoa) we have not been able to produce commodities in quantity. Continuity of supply also has been a problem. Now with the trend towards mega markets, we must identify opportunities for niche markets and ensure high product quality.

It was said that agriculture is a "high risk" venture, and now we are about to impose a number of additional "requirements" on the farmer. We were told that we need a new farmer—a farmer with a higher level of technical and managerial capability. But mechanisms must be put in place to ensure that the lot of the experienced farmer is improved.

But agriculture is not only about farming and farmers and it cannot develop in isolation. We were told that there must be intersectoral linkages with agro-processing, for example, to get what the economists call the "value added", together with the advantage of increased commodity shelf-life; more effective linkage between agriculture and tourism, and, as the minister of agriculture indicated, we must look at the "entire food chain and all those factors which impact on making adequate and nutritious food available to all peoples".

We were told of the need for macro-economic policies which stimulate agriculture, trade policies which are not counter to agriculture, and appropriate training and education for farmers. In terms of government—and we find that most governments in the region are devoid of cash—we were told of the need for change in the role of government with increasing involvement of the private sector. "Privatization" is the word that is frequently used.

Mention was made of three elements to guide the development of the agricultural sector in the region: improved technology, better farm management, and the strengthening of farmer's organizations. One reason for the latter lies in the need for a strong lobby to influence the policies which affect agriculture. But here, one should be careful because



when one begins to talk about farmers organizations, not only is there some measure of resistance from the farmers themselves, but there could also be significant opposition from the political directorate, for obvious reasons.

I think that the presentations by the media were extremely enlightening. The participatory process, people involvement and the need to package things for specific target groups were stressed.

Finally mention was made of the image of agriculture. This is a very important area and if the media can assist in changing its present negative image in the region, and if we can clearly demonstrate that an individual can earn a good living from agriculture, we will be well on the road to having greater involvement, thereby increasing the likelihood of making agriculture the engine of growth which we all hope it will become.

Ladies and gentlemen, Madam Chairperson requested I indicate where we should go from here. A number of ideas have emanated from the presentations and subsequent discussions. These should be looked into very carefully. Perhaps I should suggest that you, Madam Chairperson, as the IICA Representative in Trinidad and Tobago, may wish to bring together a small group of people to examine the ideas and recommendations in some detail with a view to designing specific projects for consideration by the appropriate bodies. Hopefully, these will be funded and implemented.

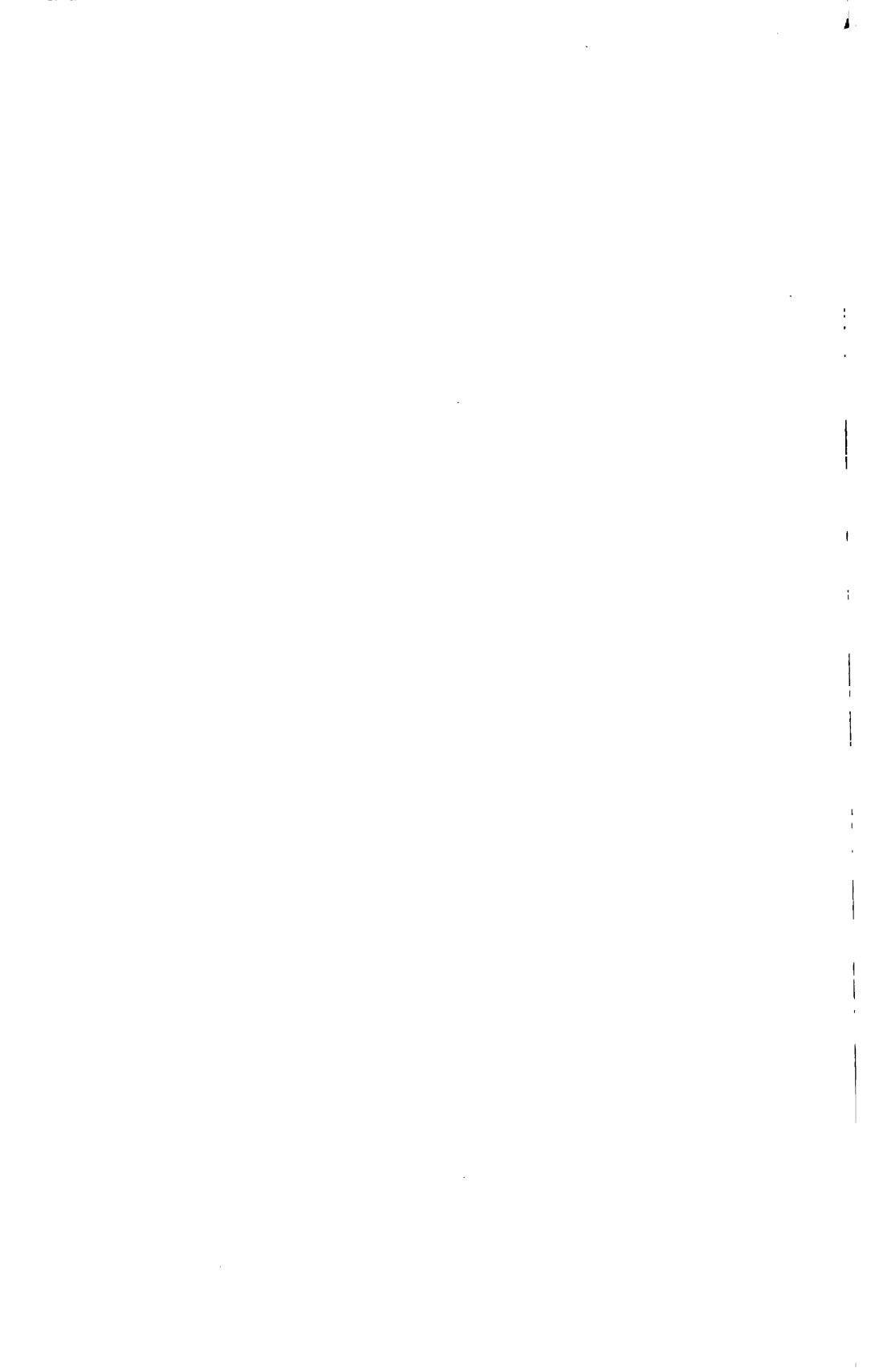
May I say that at this time IICA is supporting CARICOM to host a Donors' Conference immediately after the next meeting of the CARICOM Ministers of Agriculture in St. Lucia in June, and we are hopeful that many of the projects of the CCPAD, the OECS Diversification Programme and PLANLAC will attract financial support, in spite of the current world situation.



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**PARTICIPANTS  
AND ACRONYMS**

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**Errata**

**Editors:** Dr. Joan S. Wallace  
IICA Representative  
&  
Fedrison Jagessar  
Consultant

**Chairmen:**

**Topic 1 -** Global Framework of Agricultural Policy

Mr. Nello Raphael  
Economic Adviser to the Prime Minister

**Topic 2 -** Agricultural Overview and Identification of Alternative Scenarios for the Future

Mr. Winston Rudder  
Permanent Secretary  
Ministry of Food Production and Marine Exploitation

**Topic 3 -** Creating a New Business Environment Conducive to Investment in Agriculture

Mr. Anthony Beaubrun  
President  
Trinidad & Tobago Chamber of Industry and Commerce

**Topic 4 -** Importance of the Media in Promoting Agricultural Transformation in the Caribbean

Mr. Alwin Chow  
Managing Director  
Trinidad Publishing Company

**Topic 5 -** Strategies for Dissemination of Agricultural Information by the Media

Mrs. Janet Badjan Young  
Director  
United Nations Information Centre

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## LIST OF PARTICIPANTS

---

**Donatus ST. AIMEG**  
ECLAC/CCST  
Box 1113  
Port of Spain  
Trinidad and Tobago

**Desmond ALI**  
Director  
Caribbean Industrial Research  
Institute  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**Amotz AMIAD**  
Consultant  
Ministry of Food Production and  
Marine Exploitation  
St. Clair Circle  
St. Clair  
Trinidad and Tobago

**Peter S. BAKER**  
Director  
CAB International  
Gordon Street  
St. Augustine

**Anthony BEAUBRUN**  
President  
Trinidad and Tobago Chamber  
of Industry and Commerce  
31 Frederick Street  
Port of Spain  
Trinidad and Tobago

**Robert BELLEFEUILLE**  
Resident Representative  
Inter-American Development  
Bank (IDB)  
4th Floor, TATIL Building  
Maraval Road  
Port of Spain  
Trinidad and Tobago

**Alexander BENN**  
Head of Extension  
Sugar Cane Feeds Centre  
Pokhor Road  
Longdenville  
Trinidad and Tobago

**Steve BENNET**  
"Glamorgan"  
Gordon Street  
St. Augustine  
Trinidad and Tobago

**S.C. BIRLA**  
 Department of Agricultural  
 Economics  
 The University of the West  
 Indies  
 St. Augustine  
 Trinidad and Tobago

**Jay BRUNS**  
 First Secretary for Economic  
 Affairs  
 Embassy of the United States of  
 America  
 15 Queen's Park West  
 Port of Spain  
 Trinidad and Tobago

**George BUCKMIRE**  
 IICA Representative in Guyana  
 65 Anira and Peter Rose Streets  
 Georgetown  
 Guyana

**Dowlat BUDHRAM**  
 Specialist  
 IICA Office in Barbados  
 P.O. Box 705-C  
 Bridgetown  
 Barbados

**Lancelot A. BUSBY**  
 Economic Affairs Officer  
 United Nations Economic  
 Commission for Latin America  
 and the Caribbean  
 22 St. Vincent Street  
 Port of Spain  
 Trinidad and Tobago

**Joseph CAMPBELL**  
 Director  
 Organization of American States  
 3A Queen's Park West  
 Port of Spain  
 Trinidad and Tobago

**Thomas W.A. CARR**  
 Director of Research  
 Caroni (1975) Limited  
 Waterloo Road  
 Carapichima  
 Trinidad and Tobago

**Nubia CASTRO**  
 Officer in Charge  
 Embassy of Colombia  
 5 Rookery Nook  
 Maraval  
 Trinidad and Tobago

**Edward CAZABON**  
 Deputy Director, Animal Health  
 Ministry of Food Production and  
 Marine Exploitation  
 St. Clair Circle  
 St. Clair  
 Trinidad and Tobago

**Arlington H.D. CHESNEY**  
 Managing Director  
 Caribbean Food Corporation  
 30 Queen's Park West  
 Port of Spain  
 Trinidad and Tobago

**Cecil CHIN**  
 CARIRI  
 Macoya Industrial Estate  
 Tunapuna  
 Trinidad and Tobago



**Meeling Kong CHING**  
President  
Caribbean Institute of Food  
Technology  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**Alwin CHOW**  
General Manager  
Trinidad Publishing Company  
22-24 St. Vincent Street  
Port of Spain  
Trinidad and Tobago

**Derek COMMISIONG**  
Permanent Secretary a.i.  
Ministry of the Environment  
and National Service  
Whitehall  
Maraval Road  
Port of Spain  
Trinidad and Tobago

**Luis J. COVA**  
VENPRES  
Trinidad and Tobago

**Donna COX**  
Office of the Prime Minister  
Division of Information  
13-15 St. Clair Avenue  
St. Clair  
Trinidad and Tobago

**James CUMMINGS**  
CARIRI  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**Carlton G. DAVIS**  
Department of Agricultural  
Economics and Farm  
Management  
Faculty of Agriculture  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**David DEANE**  
Planning Officer III  
Ministry of Food Production and  
Marine Exploitation  
Prada Street  
Port of Spain  
Trinidad and Tobago

**Gonzalo ESTEFANELL**  
Head, Technical Cooperation  
Strategies and Projects Division  
IICA Headquarters  
Apartado 55  
2200 Coronado  
San Jose  
Costa Rica

**Gerald MAC FARLANE**  
Secretary for Agriculture  
Division of Agriculture  
Tobago House of Assembly  
Tobago  
Trinidad and Tobago

**Paulo Roberto DA FONTURA**  
First Secretary  
Brazilian Embassy  
18 Sweet Briar Road  
St. Clair  
Trinidad and Tobago

**St. Clair FORDE**  
**CARDI**  
 The University of the West  
 Indies  
 St. Augustine  
 Trinidad and Tobago

**Maria Teresa FORERO**  
 La Seiva Villas  
 La Seiva  
 Maraval  
 Trinidad and Tobago

**Theresa FREDERICK**  
 Agricultural Development Bank  
 87 Henry Street  
 Port of Spain  
 Trinidad and Tobago

**Jacquiline GANTEAUME-  
 FARREL**  
 Ministry of Food Production and  
 Marine Exploitation  
 St. Clair Circle  
 St. Clair  
 Trinidad and Tobago

**Binod GHOSH**  
 First Secretary  
 High Commission for India  
 6 Victoria Avenue  
 Port of Spain  
 Trinidad and Tobago

**Dr. Patrick I. GOMES**  
 Project Co-ordinator (Training)  
 United Nations Economic  
 Commission for Latin America  
 and the Caribbean (ECLAC)  
 22-24 St. Vincent Street  
 Port of Spain  
 Trinidad and Tobago

**Anthony GOODWIN**  
 Agricultural Adviser  
 Deletion of the Commissions  
 of the European Communities  
 2 Champs Elysées  
 Long Circular Road  
 Maraval  
 Trinidad and Tobago

**Ronald M. GORDON**  
 Officer in Charge  
 Agriculture Development  
 Section  
 Caribbean Community  
 Secretariat  
 Bank of Guyana Building  
 P.O. Box 10827  
 Georgetown  
 Guyana

**K. GUYAY**  
 c/o Goodwill Life and General  
 Insurance  
 K.K. Plaza  
 Couva  
 Trinidad and Tobago

**Carver R. HARRIS**  
 Yellow Meadow Farms  
 Las Lomas No.1  
 Las Lomas  
 Trinidad and Tobago

**Ralph HENRY**  
 Department of Economics  
 The University of the West  
 Indies  
 St. Augustine  
 Trinidad and Tobago

**Joseph HOWARD**  
Ministry of Planning and  
Mobilization  
Eric Williams Financial  
Complex  
Independence Square  
Port of Spain  
Trinidad and Tobago

**Indira JAGESSAR**  
Industrial Development  
Corporation  
10-12 Independence Square  
Port of Spain  
Trinidad and Tobago

**Denyse MARIELLA  
JOHNSTON  
CARDI**  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**Dr L. HARLAN DAVIS**  
Deputy Director General  
IICA Headquarters  
Apartado 55 2200 Coronado  
San Jose, Costa Rica

**Beverly KHAN**  
Ministry of Planning and  
Mobilization  
Eric Williams Financial Complex  
Independence Square  
Port of Spain  
Trinidad and Tobago

**Yves KLOMPENHOUWER**  
International Labour  
Organization  
St. Clair Avenue  
Port of Spain  
Trinidad and Tobago

**Lance LOUIS**  
Planning Officer III  
Ministry of Food Production and  
Marine Exploitation  
St. Augustine Nurseries  
St. Augustine  
Trinidad and Tobago

**Jones P. MADEIRA**  
Head of News and Current  
Affairs  
Trinidad Broadcasting Company  
Ltd.  
11B Maraval Road  
Port of Spain  
Trinidad and Tobago

**Bertram MANIN**  
La Vega Estate  
c/o Manhin Victor Limited  
49 High Street  
San Fernando  
Trinidad and Tobago

**Sonia MANJOO**  
Documentalist  
CARDI  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**Marilyn MELVILLE**  
Manager  
Agricultural Development Bank  
7 Cipero Street  
San Fernando  
Trinidad and Tobago

**Carlos MENAFRA**  
 Inter-American Development  
 Bank  
 4th Floor, TATIL Building  
 Maraval Road  
 Port of Spain  
 Trinidad and Tobago

**Vincent MOE**  
 Director, Animal Production and  
 Health  
 Ministry of Food Production and  
 Marine Exploitation  
 St. Clair Circle  
 St. Clair  
 Trinidad and Tobago

**Bruce MOTTA**  
 Counsellor (Commercial)  
 Canadian High Commission  
 Huggins Building  
 72-74 South Quay  
 Port of Spain  
 Trinidad and Tobago

**Gordon J. MULLER**  
 Programme Leader  
 Crop Production  
 CARDI  
 The University of the West  
 Indies  
 St. Augustine  
 Trinidad and Tobago

**Gemma Tang NAIN**  
 Caribbean Network for  
 Integrated Rural Development  
 (CNIRD)  
 40 Eastern Main Road  
 St. Augustine  
 Trinidad and Tobago

**Floyd NECKLES**  
 Director, Sugar Cane Feeds  
 Centre  
 Pokhor Road  
 Longdenville  
 Trinidad and Tobago

**Gita Cynthra PERSAD**  
 Deputy Director of Crop  
 Research  
 Central Experiment Station  
 Centeno  
 Trinidad and Tobago

**Reginald PHILLIPS**  
 Technical Officer  
 Division of Agriculture, Forestry  
 and Marine Affairs  
 Tobago House of Assembly  
 Tobago  
 Trinidad and Tobago

**Joseph PIRES Jr.**  
 Caribbean Chemicals and  
 Agencies Ltd.  
 Charlotte Street  
 Port of Spain  
 Trinidad and Tobago  
 Trinidad and Tobago

**Dr Carlos POMAREDA**  
 Director, Program on  
 Agricultural Policy Analysis  
 and Planning  
 IICA Headquarters  
 Apartado 55  
 2200 Coronado  
 San Jose  
 Costa Rica

**Kaloutie POORAN**  
c/o Goodwill Life and General  
Insurance  
K.K. Plaza  
Couva  
Trinidad and Tobago

**Theresa Ann RAJACK**  
Head, Department of  
Agricultural Extension  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**Peretz RAM**  
Consultant  
Ministry of Food Production and  
Marine Exploitation  
St. Clair Circle  
St. Clair  
Trinidad and Tobago

**Dr. Suruj RAMBACHAN**  
Minister of Industry, Enterprise  
and Tourism  
Level 15, Riverside Plaza  
Besson Street  
Trinidad and Tobago

**Ronald RAMKISSOON**  
Economist II  
Research Department  
Central Bank of Trinidad and  
Tobago  
Eric Williams Plaza  
Independence Square  
Port of Spain  
Trinidad and Tobago

**Gopichan RAMSARAN**  
Turkish Honorary Consul  
General  
c/o Goodwill Life Insurance Co.  
88-90 Abercromby Street  
Port of Spain  
Trinidad and Tobago

**Nello RAPHAEL**  
Adviser to the Prime Minister  
Prime Minister's Office  
Eric Williams Financial Complex  
St. Vincent Street  
Port of Spain  
Trinidad and Tobago

**Natalie REECE**  
Agricultural Development Bank  
87 Henry Street  
Port of Spain  
Trinidad and Tobago

**Winston RUDDER**  
Permanent Secretary  
Ministry of Food Production and  
Marine Exploitation  
St. Clair Circle  
St. Clair  
Trinidad and Tobago

**Dr. Brinsley SAMAROO**  
Minister of Food Production and  
Marine Exploitation  
St. Clair Circle  
St. Clair  
Trinidad and Tobago

**Roderick SANATAN**  
 Communications Coordinator  
 Communications Unit  
 Caribbean Community  
 Secretariat  
 Bank of Guyana Building  
 P.O. Box 10827  
 Georgetown  
 Guyana

**Kaloutie SEECHARAN**  
 c/o National Farmers and  
 Workers Trade Union  
 Coffee Street  
 San Fernando  
 Trinidad and Tobago

**Prof. John SPENCE**  
 Head, Cocoa Research Unit  
 The University of the West  
 Indies  
 St. Augustine  
 Trinidad and Tobago

**Madhuri SUPERSAD**  
 Ministry of Labour, Employment  
 and Manpower Resources  
 Level 11, Riverside Plaza  
 Besson Street  
 Port of Spain  
 Trinidad and Tobago

**Constance MC TAIR**  
 Office of the Prime Minister  
 Division of Information  
 13-15 St. Clair Avenue  
 St. Clair  
 Trinidad and Tobago

**Davendranath TANCOO**  
 Chepstow House  
 Frederick Street  
 Port of Spain  
 Trinidad and Tobago

**Warren THOMPSON**  
 Central Marketing Agency  
 (CMA/NAMDEVCO)  
 Macoya Road  
 Trinity  
 Trinidad and Tobago

**Dr. Joan S. WALLACE**  
 IICA Representative  
 Apple Centre  
 155-157 Tragarete Road  
 Woodbrook  
 Port of Spain  
 Trinidad and Tobago

**Bernard A. WESTON**  
 Ministry of External Affairs and  
 International Trade  
 "Knowsley"  
 Queen's Park West  
 Port of Spain  
 Trinidad and Tobago

**Allan N. WILLIAMS**  
 Economic Analyst  
 Association for Caribbean  
 Transformation  
 3 Pelham Street  
 Port of Spain  
 Trinidad and Tobago

**Prof. L.A. WILSON**  
Dean, Faculty of Agriculture  
The University of the West  
Indies  
St. Augustine  
Trinidad and Tobago

**Naoto YOSHIKAWA**  
Programme Officer  
Food and Agriculture  
Organization  
17 Keate Street  
Port of Spain  
Trinidad and Tobago

**Janet Badjan YOUNG**  
Director  
United Nations Information  
Centre (UNIC)  
Bretton Hall  
Victoria Avenue  
Port of Spain  
Trinidad and Tobago





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## **LIST OF ACRONYMS**

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## LIST OF ACRONYMS

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ACP	African, Caribbean and Pacific countries
BBC	British Broadcasting Corporation
CAP	Common Agricultural Policy (of the EEC)
CARDI	Caribbean Agricultural Research and Development Institute
CARICOM	Caribbean Common Market, Caribbean Community
CATCO	Caribbean Trading Company
CBU	Caribbean Broadcasting Union
CCPAD	Caribbean Community Programme for Agricultural Development
CDB	Caribbean Development Bank
CFC	Caribbean Food Corporation
CNIRD	Caribbean Network for Integrated Rural Development
CNN	Cable News Network
ECTN	Eastern Caribbean Television Network
EDC	Export Development Corporation
EEC	European Economic Community
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNP	gross national product
HYV	high yielding variety
ICAC	International Cotton Advisory Committee
ICO	International Coffee Organization
IDB	Inter-American Development Bank
IDC	Industrial Development Corporation
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IICA	International Institute for Cooperation on Agriculture
IPS	Inter-Press Service
ISO	International Sugar Organization
OECD	Organization for Economic Cooperation and Development
OECS	Organization of Eastern Caribbean States
PLANLAC	Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean
UWI	University of the West Indies
WFP	World Food Programme



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Autor

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Nombre del solicitante

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IICA Office in TRINIDAD AND TOBAGO Apple Centre, 155-157 Tragarete Road, Woodbrook,  
Port of Spain, Trinidad and Tobago/Tel: 001 (809) 622-2373/2374/2381/2383/Address: IICA  
Office In Trinidad and Tobago, Tacarigua Post Office, Tacarigua, Trinidad and  
Tobago/Cable: IICAPOS/Fax: 001 8809) 6287058