

# Food Insecurity- A Threat to Sustainable Development in the Caribbean

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The Caribbean region is the most food insecure region of the Americas. One of the principal reasons for this situation is low levels of investment in the food and agricultural sectors. There are some people in the Caribbean societies who believe that we in the Caribbean should abandon the agricultural sector and invest in a true service economy based on tourism and financial services, that we should create a tourist resort for the rich and famous, sell our land to the highest bidders for real estate, housing and golf courses and we should import all our food. However, it is now becoming clear to all that a service economy that produces nothing to sell except sea and sand is not sustainable. In order to develop and reduce our vulnerability to external shocks, we must change our allocation of public finances and allocate more resources

to the promotion of agriculture, entrepreneurship, innovation and food security. There is need for our agricultural sectors and our manufacturing sectors working together to promote agro-industries to grow our economies and create employment opportunities for our people.

## Introduction

According to the recent Barbados Bridgetown Initiative, led by Prime Minister Mia Mottley the world is facing an unprecedented set of events, comprised of three interconnected crises:

- A cost-of-living crisis stemming partly from the war in Ukraine and the COVID-19 pandemic.
- A developing country debt crisis following the COVID-19 pandemic and climate-related disasters.
- The climate crisis as the

glaciers melts and storms and droughts intensify.

The situation is compounded by tightening monetary policies in developed countries and a strengthening U.S. dollar. One in five countries is experiencing fiscal and financial stress. Unaddressed, there will be deepening hardship, debt defaults, widening inequality, political upheaval and a delayed shift to a low-carbon world. According to Prime Minister Mottley "If we allow the threats of climate and the pandemic, and of violence and of the digital divide and of food insecurity to crowd out the traditional ambition of development as captured by the sustainable development goals, then our people will come to suffer, and regrettably, the world is going to become a very inhospitable place for us to live".

In addition, a recent report, prepared by the CARICOM Secretariat and the World Food Programme, indicates an increasing level of food insecurity in the Caribbean region. According to the report "An estimated 2.8 million people or nearly 40% of the population in the English-speaking Caribbean is food insecure, 1 million more than in April 2020."

Severe food insecurity continues to increase in the region with the current figure suggesting that it is 72% higher when compared to April 2020.

Highlighting the lasting impact of the pandemic, survey results demonstrate deteriorating food consumption and diets with 25% of respondents eating less preferred foods, 30% skipping meals or eating less than usual and 5% percent going an entire day without eating in the week leading up to the survey.

High food prices continue to affect people's ability to afford a nutritious diet with 93% of respondents reporting higher prices for food compared to 59% in April 2020. The ongoing crisis in Ukraine is expected to create an even deeper impact on the cost of basic goods and services in the Caribbean."

### The importance of a food and agriculture sector to development

Access to food is the most basic of human needs and according to Dr. Norman Borlaug, the Nobel Laureate who championed the Green Revolution of the last century- Access to food is the most basic requirement for the achievement of social justice. Amartya Sen, an Indian economist, philosopher and Nobel Laureate advanced the idea of food as a human right as one of the freedoms to which human beings are entitled.

It is generally agreed that the agricultural sector of the

economy of any country should have as its fundamental goal the production of healthy nutritious food for the people of the nation. The measure of the success of the sector must be determined by a positive answer to the question: is the sector feeding the nation?

If the sector is not substantially feeding the nation, then I conclude that the agricultural sector has failed.

If you agree with this analysis, then I must conclude that the agricultural sector of the Caribbean has failed; it has failed to feed the people of the Caribbean and if you doubt my conclusion just look at the statistics of food importation. Recent data indicate that we import into this region US\$6 billion of food every year to feed our people and the tourists and that should this food not arrive, for whatever reason, we will starve. In the case of Barbados that figure has been given as US\$350 million per year. Data suggest that we produce only 25% of our food needs. This is called food insecurity.

Since the global food crisis in 2008, governments around the world have been expressing concern about food insecurity and vulnerability to lack of food. The food crisis in 2008 resulted in food riots in some 20 countries.

At that time, the United Nations Food and Agriculture Organization (FAO) reported a 45% increase in the World Food Price Index. Wheat prices increased by 130%, soya bean prices by 37%, rice prices by 84% and maize prices by 31%. This increase in prices of these basic commodities resulted in a dramatic increase in the cost of living around the world and has resulted in many people returning to poverty.

From China to Chile, from Brazil to Australia, the food and agricultural sector became the focus of attention as evidence suggested that the observed increase in food prices was not a temporary phenomenon: rather it was a trend that was likely to persist in the medium term and most countries agreed to invest up to 10% of their national budgets in the agricultural sector. The World Bank report of 2008 concluded that agricultural development was fundamental for sustainable economic development and poverty reduction.

There seems to be some doubt in the mind of regional policy makers about the role of the food and agricultural sector in national development. This doubt was vividly expressed by the rather small allocation that was given to Ministries of Agriculture when the national budgets are prepared. For example, in 2010, the analysis showed that in the Caribbean

only 0.9% of government expenditure is allocated to agriculture. When compared to other sectors and to other countries of the developing world this is miniscule (Table 1).

This miniscule contribution to agriculture in my view is based on a general misunderstanding of the real contribution of agriculture to economic development, on one hand and an apparent desire to abandon a sector that has been associated with slavery, low wages, economic exploitation by the colonial masters and a sector that is perceived to be backward and inefficient.

Those who hold this view are unaware that the food and agriculture sector of an economy comprises two interrelated systems. The primary agriculture production

system and the agrifood system. The primary agriculture production system consists of the production of crops, livestock and forest products. The agri-food system consists of the processing, marketing, distribution and the consumption of food products and the production of inputs for food production and processing. This continuum results in the consideration of commodity chains.

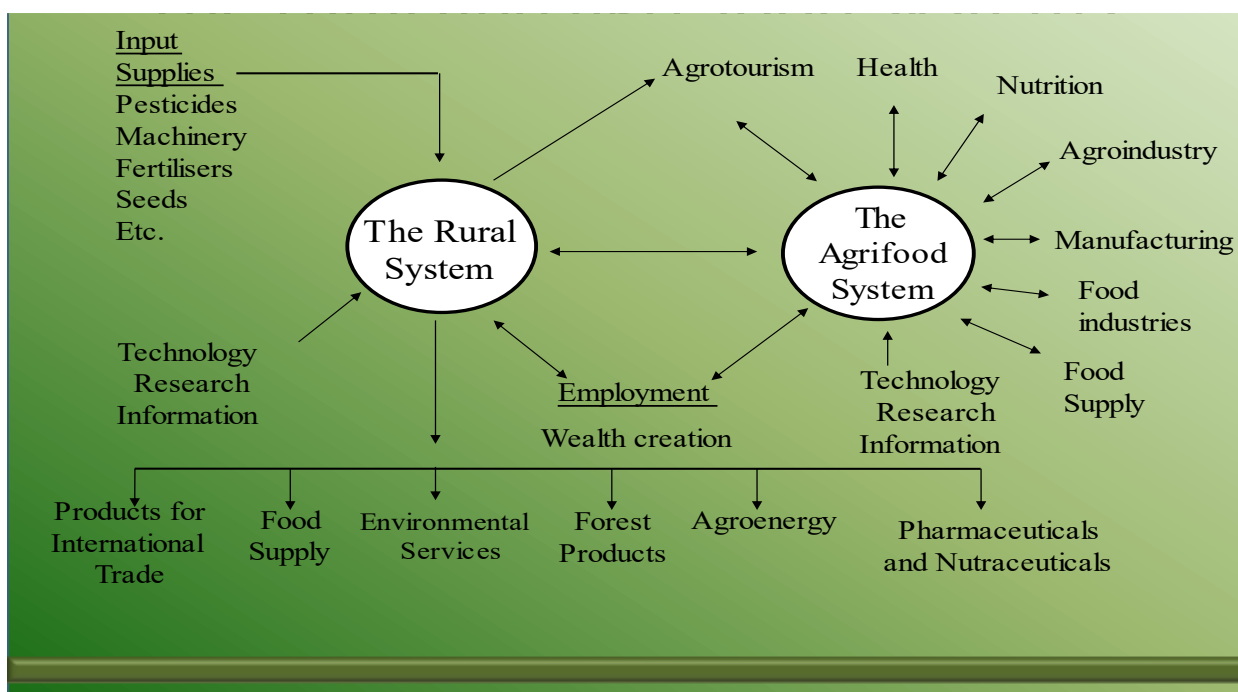
Official statistics often measure the contribution of primary agricultural production to gross domestic product and the results derived from these measurements are often single digit percentages.

The contribution of the food and agriculture sector (or the expanded agricultural sector) is much greater than what is reflected in national statistics because it includes all backward and forward linkages to other sectors of the economy. For example, food processing, food distribution, input supplies, transport, storage, agribusiness, contribution to exports, agro-industry, the food industry, financial services for agriculture, employment in the primary and

**Table 1: Proportion of Government Expenditure Allocated to Agriculture**

Region	Percentage
Sub-Saharan Africa	6.3
Africa	5.0
Asia	6.5
Latin America	2.5
Caribbean	0.9

Source: International Food Policy Research Institute



**Figure 1: The expanded agricultural sector**

associated activities are all part of the expanded agricultural sector (Figure 1).

When I was Director General of IICA we attempted to measure this expanded contribution of Agriculture to national development using the concept of the social accounting matrix and we found that when all the backward and forward linkages in the commodity chain are considered and measured, the food and agriculture sector's contribution to national development is three to seven times higher than the percentages reported for agriculture in national statistics. The analysis showed that agricultural production is only 25% of the contribution of agriculture, inputs suppliers contribute 15% and agroprocessing and other related activity 60% (Figure 2).

For example, our study showed that in Argentina, the official statistics indicate that the agriculture sector contribution to GDP is 4.6%, but when we consider all the backward and forward linkages this figure increases to 32.2%. In Brazil, the figure grows from 4.3% to 26.2%, in Chile from 5% to 32.1%, in Mexico from 4.6% to 24.5%, and in Costa Rica from 11.3% to 32.5% (Table 2). In the Dominican Republic, Belize, Jamaica and Trinidad and

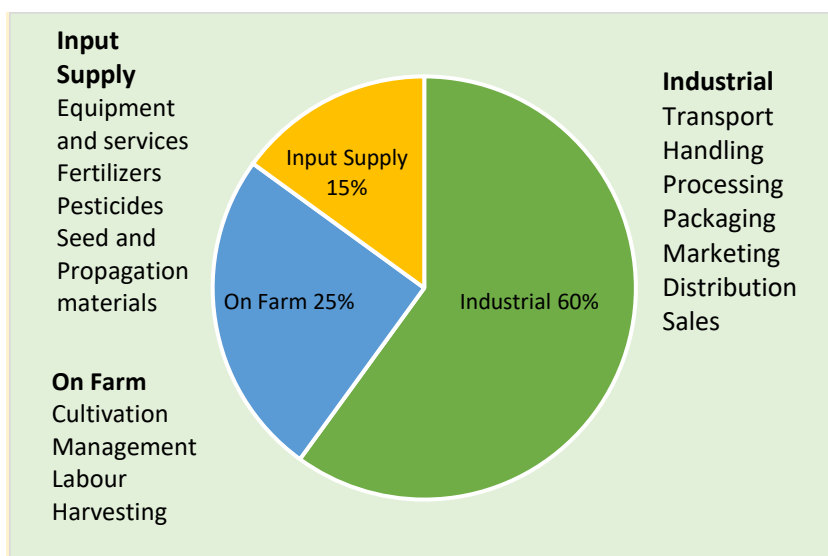


Figure 2: Agro-industrial pie chart

Tobago a similar trend has been recorded. In a recent study in Jamaica, the figure moved from 6% to 12% of GDP. These studies show that some 75% of primary production is used to generate wealth and employment in other activities such as agribusiness, processing and

agro-industry.

There is also a prevailing misconception in the development literature that agriculture's importance in an economy declines as a country moves from developing to developed status. This misconception is only true if

Table 2: Gross domestic product and value added

Country	Primary agriculture (AgGDP/GDP)	Food and agriculture sector (GDP expanded agriculture/GDP)
<b>Argentina</b>	4.6%	32.2%
<b>Brazil</b>	4.3%	26.2%
<b>Canada</b>	1.8%	15.3%
<b>Chile</b>	5.6%	32.1%
<b>Colombia</b>	8.0%	32.1%
<b>Mexico</b>	4.6%	24.5%
<b>Peru</b>	6.6%	31.8%
<b>Uruguay</b>	6.2%	34.8%
<b>United States</b>	0.7%	8.1%
<b>Venezuela</b>	4.0%	20.5%
<b>Costa Rica</b>	11.3%	32.5%

we see agriculture as primary production, however, if we see agriculture as agribusiness with all its linkages to other sectors of the economy, then the sector contribution to development increases.

### A new concept of agriculture

These understandings of the role of agriculture in development have led to the development of two modern concepts of agriculture the first is the "Agribusiness sector" the second is the "Bioeconomy."

Agribusiness sector includes all activities and all enterprises that derive their existence based on agriculture and involve food processing, input supplies, output activities or manufacturing based on agricultural inputs.

For example, all the Kentucky Fried Chicken outlets, The Mc Donalds, Burger Kings, Subways and Starbucks; the suppliers of agricultural machinery, suppliers of pesticides and fertilisers are all agribusiness enterprises, their business success depend on the production or availability of agricultural products. If the agricultural inputs for the fast-food chains are imported, then there is little contribution to food security and to economic development.

Bioeconomy is the new concept of a revolutionary paradigm for agriculture which is defined as the "sustainable production of renewable biological resources and their conversion into food, feed, energy and industrial products derived from biological materials". This new concept strengthens the relationship between agriculture and industry, making them an integral part of the same process thus giving agriculture an expanded space among the sophisticated industries of the world. The countries of the developed world continue to be leaders in the use of biotechnology, bioinformatics, nanotechnology, information technology, synthetic biology, genetic modification of living organisms and DNA cloning and sequencing. The new

bioeconomy involves not only the production of food, energy, pesticides and fertilisers but also the production of pharmaceuticals, vaccines, antibiotics, functional foods, nutraceuticals, cosmetics and fragrances.

In addition, the new understanding of the role of agriculture in development also examined the current vicious cycle of public investment. In this cycle increased public investment in the cities leaves less for investment in the rural sector. This leads to greater urban-rural imbalances, greater rural poverty. The rural poor then migrate to the cities creating more urban overcrowding, unemployment and crime and then more national resources are spent to solve urban problems (Figure 3).

The increasing migration of

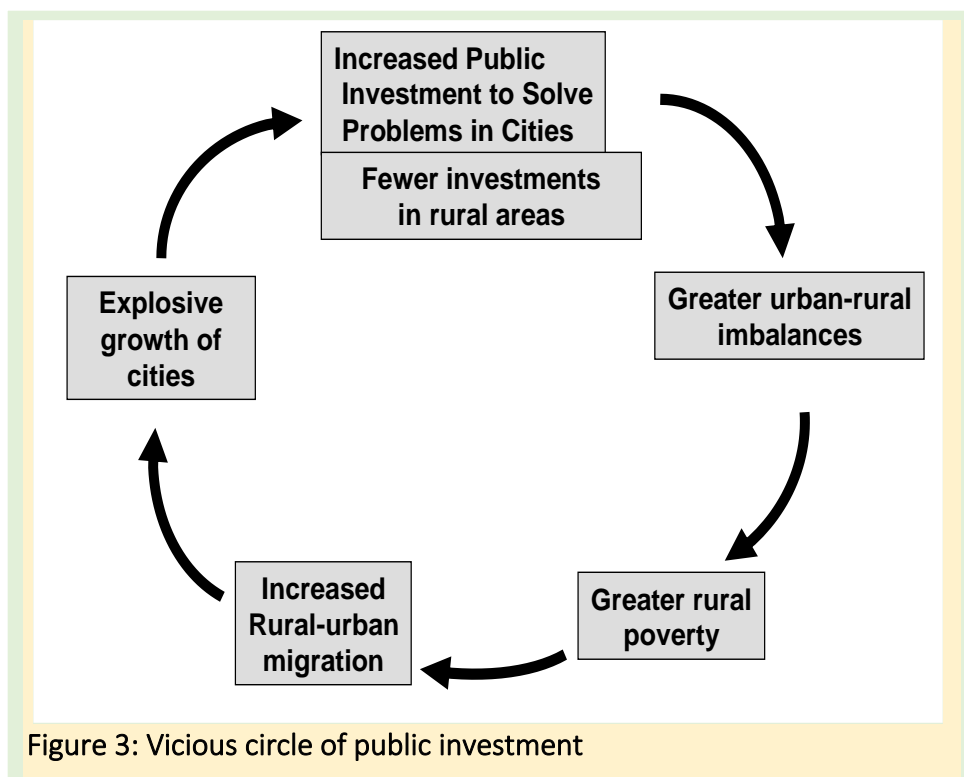


Figure 3: Vicious circle of public investment

the rural people from the rural areas results in less agricultural production and consequently, the governments of the Caribbean then import more food (normally cheap food) to satisfy urban demands which further undermines the capacity of the rural sector to produce. This results in another vicious circle; food insecurity (Figure 4).

### Summary and conclusion

Around the world today, there is renewed emphasis on agriculture. The sector is now viewed as a strategic sector for addressing the issues of economic growth, rural poverty and employment, hunger and sustainable development. It is not surprising therefore to see that several countries have increased their investment in their food and agricultural sectors and most bilateral and multilateral agencies have placed agriculture and food security on their development agenda and are allocating resources to increased investment in the sector.

Governments around the world and policy makers have realised that the competitiveness of the agricultural sector cannot be based solely on the contribution of primary production but also on the linkages to the rest of the economy and the sector must be valued for its contribution to economic growth, social stability, environmental sustainability and

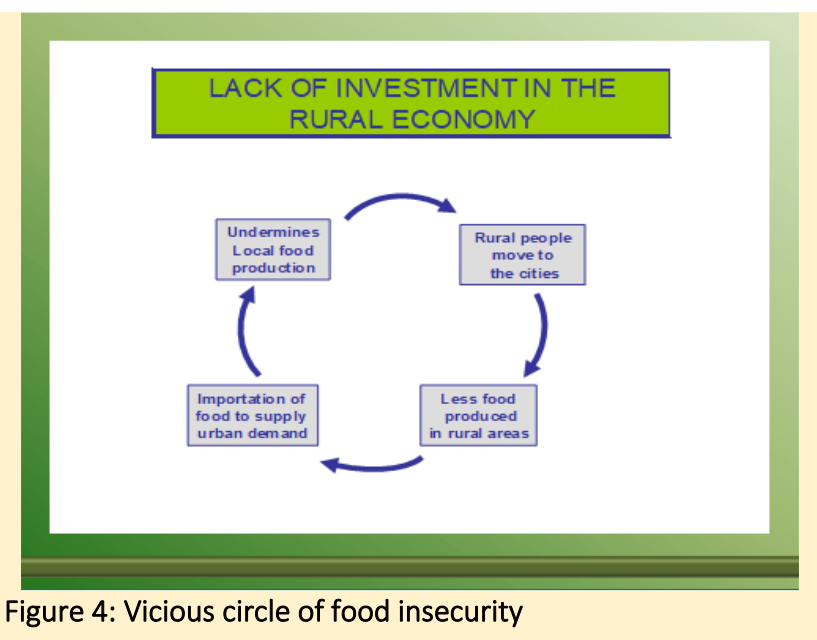


Figure 4: Vicious circle of food insecurity

food security.

The lack of an appreciation of these concepts has led many Caribbean countries to adopt a development model that is anti-agricultural and anti-rural. The recommended approach to economic development is based on industrialisation and favoured growth of urban-based sectors e.g. tourism, financial services, information technology etc.

There are those in the Caribbean societies who believe that we should abandon the agricultural sector and invest in a true service economy based on tourism and financial services. That we should create a tourist resort for the rich and famous. Sell our land to the highest bidders for real estate, housing and golf courses and we should import all our food.

However, it is now becoming clear to all that a service economy that produces nothing to sell except sea and sand is not

sustainable. There is need for our agricultural sectors and our manufacturing sectors working together in agro-industries to help drive our economy and create employment opportunities.

It is clear that agriculture brings back memories of the past when sugar was king and West Indians had to work hard on the plantations for miserly wages that barely kept them alive. The time has come, however, for us to realise that a food and agriculture sector that is modern and driven by technology and mechanisation can play a critical role in economic development because of its multiple linkages to the rest of the economy and because food is a basic requirement for human existence.

Our development model based on imported food has resulted in:

- A large, disproportionate allocation of public



- investment funds for glamorous urban sectors.
- A population ravaged by chronic non-communicable diseases; diabetes, hypertension and obesity.
- High health care costs.
- Lack of employment opportunities in the economic activities that are derived from the linkages of agriculture to other sectors of the economy.
- The need to generate scarce foreign exchange not only to buy grains such as wheat and soya but also to buy basic food items such as lettuce, carrots, pumpkin and cabbage from abroad for the population and for tourists.

Sir Arthur Lewis, celebrated economist and the first person from the Caribbean to win the Nobel Prize (the first black Nobel Laureate in Economics) recognised the importance of agricultural development in his celebrated work “The theory of economic growth” published in 1955.

In 2008, the late Professor Norman Girvan in a lecture delivered to mark the launch of the year of Sir Arthur Lewis in commemoration of the first Caribbean Nobel Laureate wrote:

“A second lesson that has continued relevance is the importance of effecting an agricultural revolution. By raising the productivity of domestic food production,

*the supply price of labour to the commodity sector would increase. This would counter the tendency for declining terms of trade; raise rural incomes, creating a market for the goods produced by the industrial sector and facilitating all-round improvements in living standards.”*

Hence, Lewis regarded the agricultural revolution in developing countries as equally important to the industrial revolution. In his 1950 article on West Indian industrialisation, he was at pains to point out that industrial and agricultural development in the region were not alternatives but had to proceed in tandem with one another. Unfortunately, governments in the Caribbean and in many parts of the developing world have often failed to appreciate this simple truth.

According to Girvan

“Everywhere today we are seeing the results of decades of neglect of the domestic agricultural sector, in the form of rural poverty, rural-urban migration and the growth of urban mega-cities with the attendant social pathologies. Lewis’s legacy calls on us to redress the imbalance by raising the

*return to agricultural activity, by making the conditions of rural life more attractive, by investing in human and physical capital for the agricultural sector and by providing the other kinds of government support needed”*

In order to become developed countries and reduce our vulnerability to external shocks, we must change our allocation of public finances and allocate more resources to the promotion of agriculture, entrepreneurship, innovation and food security.

By focussing on food security of the nation, we should produce more of what we consume, create more employment opportunities in the food services sector and contribute to reduction in un-employment and poverty.

- We must change all our ministries of agriculture to ministries of food and nutrition security.
- We must educate our people about the health and nutritional value of our own foods.
- We should not import any product that can be produced locally.
- We need to develop an agricultural sector that incorporates an agroindustrial complex based on food processing and agroindustries.