

Sectoral Presentation 2009

Ministry of Agriculture and Fisheries

Dr. the Honourable Christopher Tufton, M. P.

July 7, 2009

Mr. Speaker, let me begin by thanking those who have directly or indirectly contributed to the efforts of the Ministry of Agriculture and Fisheries over the past year. To the Honourable Prime Minister and the Cabinet for their guidance, my colleague Minister of State, JC Hutchinson, the Permanent Secretary and the thousands of staff members in the Ministry, for their support.

To the many local and international agencies and stakeholder groups, including the thousands of farmers who have risen to the challenge of leading the recovery of the agricultural sector after hurricanes, Ivan, Dennis, Emily, Dean and Tropical Storm Gustav.

Mr. Speaker, I would like to thank the citizens of SW Elizabeth for their understanding and support. I want to thank my family for their love.

Agriculture Recovery

Mr. Speaker, the last two quarters, ending December 2008 and March 2009 showed a 14.4% and 16 % increase in domestic crop production volume, when compared to the corresponding quarters last year. During this period our farmers produced 96,657.4 tonnes and 114,021 tonnes of food respectively, representing an 18% increase quarter over quarter. This is a testament to the resilience and hard work of our farmers.

Mr. Speaker, let me also commend our Jamaican householders living in our urban centres, who have responded to the call for seeking local options through backyard gardening. A UWI survey conducted two months ago, on backyard gardening in Kingston, St. Catherine and St. Andrew showed that 74% of the respondents were involved in some kind of backyard gardening, with a third of this number indicating that they started this process as a response to the recent 'Eat what you grow, grow what you eat' campaign.

Mr. Speaker, more generally, our Jamaican consumers are eating more locally grown foods as evidenced by a fall off in food imports in 2008, when compared to 2007. Even though our food import bill increased by 18.6% - from US\$730 million to US\$866 million due to price inflation, the actual volume of foods imported has declined by 28%.

Volume of Imports of select agricultural commodities 2007 compared to 2008

Item	2007 (kg)	2008 (kg)	% change
Irish Potatoes	18,819,319	17,062,390	-9%
Carrots	319,840	66,352	-79%
Tomatoes	480,357	312,104	-35%
Cabbage	96,409	72,618	-25%
Sweet Pepper	339,327	261,793	-23%

Source: Statistical Institute of Jamaica

Mr. Speaker, our farmers are responding to the call and our Jamaican people are giving them support. This is good for agriculture and good for Jamaica.

Fisheries Focus

Mr. Speaker, I want to recognise our fisher folk, and to thank on their behalf, the Honourable Prime Minister for re-naming the Ministry of Agriculture, the Ministry of Agriculture and Fisheries. Mr. Speaker, the symbolic significance of recognising the importance and the contribution of our fishers to hundreds of communities and householders across this country, should not be trivialised. Our fisher folk are an important part of our economic, social and cultural landscape and in the past, we have treated that sub-sector as an afterthought. This has been a mistake and this government is working to correct it.

Mr Speaker, symbolism alone is insufficient to transform the sector. There must be a plan and resources to implement that plan. We have started that process by allocating over the last two years, an average budget that is 145% more than the average budgetary allocation over the previous three years prior to this administration. Mr. Speaker, this is not just symbolism - it is action.

Opposition's Comments

Mr. Speaker, the Member from Central Westmoreland gave his account of the sector a few months ago. The member raised a number of issues and offered to work with the Government towards building the sector. I want to thank the Member for his offer, which I accept. I am happy to see that he has accepted the need to change course towards building a more sustainable agricultural sector.

Mr. Speaker, the Member did, however, make a number of claims that were exaggerated or inaccurate. For the record, I would like to correct those inaccuracies.

On the issue of the imported fertilizer, his claims that Jamaica does not have the capacity to test for heavy metals, and that the imported fertilizer was not tested for heavy metals, are incorrect.

The International Centre for Environmental and Nuclear Sciences at UWI, the Scientific Research Council, the Bureau of Standards and the Mines and Geology Department, all have the capacity to test for heavy metals. Furthermore, tests were done for heavy metals on the imported fertilizer and the results showed no significant traces to affect human health.

Select Crops Showing Positive Growth in 2008

CROPS	Production (Tonne)		
	2008	2007	% Change
Sugar Beans	589.9	114.9	413.3
Beetroot	1,391.7	1,024.9	35.8
Squash	1,192.4	886.4	34.5
Ginger	297.5	241.1	23.4
Onion	455.0	215.4	111.2
Pineapple	20,351.0	18,102.0	12.4
Watermelon	12,230.3	9,572.7	27.8
Hybrid Corn	784.0	586.6	33.7
Ordinary Corn	1,106.5	1,080.0	2.5
Dasheen	11,416.3	10,830.5	5.4
Sorrel	946.5	749.0	26.4

Source: Data Bank & Evaluation Division, MOA & F

The member spoke about the major declines in crops such as yams, Irish potato, plantains, sugar cane and cassava, but carefully omitted to say that the comparison between 2007 and

2008 was largely influenced by the impact of hurricane Dean in 2007 and tropical storm Gustav in 2008.

Mr. Speaker, one of the most significant challenges that I have had as Minister, is to get consensus on the importance of building a sustainable agricultural sector. Not everybody is on board, and when stakeholder interests contend, unfortunately, agriculture is normally the weakest contender. As leaders within the sector, we have to make our case with a seriousness of purpose and soundness of analysis. Otherwise, we run the risk of not being taken seriously or worse, being a distraction, rather than assisting the process.

The Global Context

Mr. Speaker, our policies and programmes must be generated out of an appreciation of the global context.

The consensus among the World Bank, the IMF and the FAO, is that commodity price increases, which rose sharply in 2006 and continued into 2008 are not cyclical, but structural.

In fact, when poverty indicators are applied, the World Bank is projecting that over 100 million people have been pushed back into poverty over the last year and a half, wiping out gains that have been made over the past decade.

The United Nation's World Population Prospects, 2006, advances that the world population will likely increase by 2.5 billion persons or 37.5% to 9.2 billion persons by 2050; while the FAO, is projecting that food demand will double by 2050, requiring another 100 - 200 million hectares of land under cultivation, noting that cereal yields must increase by 40% and irrigation water by 40 -50%.

Mr. Speaker, with projected population expansion, there is no doubt that the world will be increasingly challenged to come up with new and improved ways of increasing food production, but is likely to be restricted by critical resources like fresh water. In addition, variables such as climate change will have a negative impact on production levels, due to more frequent events such as heat stress, droughts and flooding.

Already we see countries changing their food security strategies and adopting new paradigms, such as purchasing or leasing land in other countries to grow food for their markets. Mr. Speaker, we cannot ignore this reality.

Food Security Vision

We need a food production strategy, that is holistic – one that considers the value chain, from primary production to end-user consumption. It must be demand driven, with adequate focus on end-users; and value-added focus, through the creation of brands and processing, using our own inputs as much as possible, through linkages with primary producers. Mr. Speaker, that is the vision of this Government.

Sustainability

Mr. Speaker, a key part of the challenge towards sustainability, is attracting investments in Agriculture. It is investments in agriculture that will transform the sector and make it sustainable. We need the creativity, innovation and capital from the private sector to move the process forward.

But investments will be influenced by risks and returns. This administration is working to improve the management of the sector, to increase the earnings of the Jamaican farmer and agro-investor, and to deliver more efficiently, healthy and nutritious foods to our consumers.

Mr. Speaker, our strategy should not just be about cheap foods, but about healthy foods, and local foods, that provide jobs for our farmers and food security for our nation.

The US Farm Bill and EU CAP

Mr. Speaker, if we examine the American Farm Bill and the EU Common Agricultural policy, it is quite clear that those countries view their local agriculture first and foremost, as a strategic imperative for their national, economic and security self-interest. They find ways, despite the WTO, to motivate their farmers to produce with incentives, and at times - guaranteed incomes. They find ways to support certain sub-sectors through trade limitations and capacity building.

The Restructured Ministry

Mr. Speaker, in an effort to stimulate investments in agriculture, we have undergone major restructuring of the Ministry over the past year and a half to get our farmers back into production. The key areas of focus have been Extension support, Marketing, Research, Training, and Investments.

In the area of Extension support, in order to help farmers to produce more efficiently, the Rural Agricultural Development Authority (RADA) has been restructured to include:

- The hiring an additional 74 extension officers, an increase of over 100 %. Mr. Speaker, we are addressing the shortage of extension officers to give farmers better advice in the field. These extension officers include plant, livestock and marketing personnel, in every parish. These new officers have also been equipped with extension kits to better respond to farmers' needs.
- Mr. Speaker, extension officers will be required to re-certify each year, by engaging in at least 60 hours of mandatory training.
- Starting this year, extension officers will be required to wear uniforms.
- RADA has also launched a toll-free number, 1-888-4295-RADA, to improve responsiveness to farmers and consumers.

Marketing

Mr. Speaker, for a long time farmers produced without having any information on markets. Similarly, consumers have been unable to influence what is produced. We intend to change

Marketing Achievements

- Conducted 125 training days (in areas such as cost of production, post-harvest management, group formation and marketing) impacting 5,178 farmers.
- Conducted 8 marketing workshops impacting 590 farmers, buyers, creditors, and input suppliers.
- Marketed approximately 2.4 million kg of produce valued at some \$228.5 million and impacted 2,500 farmers island wide.
- Weekly collection and publication of farm-gate, retail, and municipal market prices. This is a collaborative effort between RADA's marketing and the Ministry's Marketing Divisions, which resulted in regular meetings, sharing of information and improved marketing intelligence to stakeholders.
- Introduction of a revolving Market Mobilization Fund operated out of RADA that assisted farmers with transportation logistics until collection is done from the sale of their produce.
- Initiated dialogue with USDA through Plant Quarantine Unit for Tourejon, an agro-processing company based in Clarendon, to ship processed sweet potatoes to the United States.
- Developed a mailing list of end-users to whom price data is distributed on a weekly basis.

Source: Marketing Division, MOA&F

that, to help farmers to grow for consumers, which will help them to sell more, and consumers to get more of the foods they require, produced locally.

The Ministry has strengthened the Marketing and Data Bank Unit by engaging the services of 19 Marketing Officers, including one each, at the parish level and four within the Ministry's Head Office. The Marketing and Data Bank Unit is responsible among other things, for tracking end-users to determine market needs, and communicating these needs to our farmers to determine what to produce and in what form. In addition, this unit will coordinate the collection, tabulation and dissemination of information on production levels.

Mr. Speaker, we are providing the management to help our farmers to sell what they produce and to grow what the consumers require.

Research and Training

Mr. Speaker, we are strengthening the research capacity of the Ministry to train farmers in best practices. The Ministry launched the Centre of Excellence for Advance Technology in Agriculture (CEATA) in March 2009. The operations of the Centre are being partially funded by the Spanish Government. CEATA is managed by a board of Governors drawn from stakeholder groups in academia, other research agencies and the Ministry.

CEATA has been charged with coordinating the research agenda based on an assessment of the farming sector, and initiating and implementing the necessary research, which will be applied to the training of extension officers and farmers. In addition, CEATA has been charged with coordinating the development of agricultural education. We are currently working with a number of stakeholders, including the Ministry of Education on this matter and an announcement will be made shortly.

Mr. Speaker, we are going to ensure that our farmers and agro-investors have the best information, so they will produce more efficiently and reliably for their consumers.

Investment

The Ministry is in the process of merging two entities: the Agricultural Development Corporation and the Agricultural Support Services & Productive Projects Fund Limited, to form the **Agro-Invest Corporation**. This entity within the Ministry will be charged with packaging and promoting agricultural investment opportunities. The work has already started with two

investment seminars taking place - one in Kingston and the other in New York. Mr. Speaker, both were very successful, with well over 3000 participants and more than 800 inquires.

Mr. Speaker, we are taking a business approach to agriculture. We want to cultivate a new breed of agro-investors. We want our farmers and agro- investors to make money from their efforts.

Veterinary Division

Mr. Speaker, in addition to these critical areas, the Veterinary Services Division has been restructured with the addition of three (3) new Veterinarians, seven (7) Animal Health Technicians and four (4) Artificial Insemination Officers.

And two months ago, a Molecular Biology lab was opened at a cost of \$15 million, to enhance the Vet Services capacity to quickly diagnose animal diseases, including the diagnosis of pathogens/bacteria that are of public health and food safety significance.

Mr. Speaker, we are ensuring that we better manage our food chain. We want our farmers to be better producers and consumers to eat healthy foods.

Plant Protection

In the area of plant protection, Mr. Speaker, **this year we established a Pest Risk Analysis Unit, and a Plant Health Surveillance and Pest Response System.**

Combined, these units will allow the Ministry to monitor our plant life and tests for any possible risk that may affect local or imported produce. Mr. Speaker, this will assist the Ministry to assess the safety of produce going out and coming into the country for trade or other purposes.

Mr. Speaker, we want to make our foods safe for our consumers.

The Forestry Department

Mr. Speaker, the Forestry Department is now an Executive Agency. During the past year, we have been developing a number of investment opportunities in Forestry to encourage short and long term tree cover.

It is estimated that Jamaicans remove .1% or 300 hectares of tree cover per annum, but the Forestry Department is only able to replace 100 hectares on an average each year. This means that we must intensify our reforestation programme, by engaging the private sector in the process, and marketing forestry as an investment opportunity. The Forestry Department has developed a number of investment packages and we intend to promote these aggressively.

Mr. Speaker for agriculture to be sustainable we must protect our environment and planting trees does just that.

Investment Possibilities in Forestry

- The following investment opportunities are available:
 - Commercial plantations of pine and high value hardwoods such as Mahogany, Cedar, Teak, Spanish Elm and Blue Mahoe;
 - Commercial production of Cupressus for sale as Christmas Trees;
 - Wood conversion and utilization – logging, milling and treating;
 - Value-added products – furniture, pallets, wood flooring, construction, etc.; and
 - Forest recreation, eco/nature tourism (cabins, trails, picnic areas).

Cupressus (Christmas Tree) Plantation

- A hectare of Cupressus established with 1,450 seedlings over 3 years, inclusive of maintenance will cost approximately J\$787,987 (This figure includes equipment cost. However this figure can be minimised to approximately \$603,397 since minimal instrumentation is needed).
- The gross return on investment that can be realised after 6 years (equipment cost included) is approximately J\$2.34 million, assuming a cost of J\$2,000- \$2,500 per tree. Average annual income amounts to approximately J\$390,752.17. This is in addition to the numerous environmental benefits to be gained from such activities.

Hardwood Plantations

- The establishment of a hardwood plantation represents a long term investment, that is, 25-30 years.
- The Establishment cost per hectare is J\$158,125, or J\$63,250 per acre including maintenance costs over 3 years. At an average stumpage rate of J\$80/ cubic foot or J\$4,544/ m³, net income amounts to \$666,339 per hectare, having produced 481 square metres of standing timber volume.

Source: Forestry Department, MOA&F

Fisheries

Mr. Speaker, the Fisheries sector is challenged on several fronts, primarily due to unsustainable fishing practices, the lack of enforcement and limited infrastructure. We need stronger leadership to secure our fish stocks – both for our fishers and for future generations.

Currently, there are approximately 200,000 persons who are directly or indirectly dependent on the fishing industry to survive. These are primarily artisanal or small scale fishers (over 95% artisanal), who live on the margins of society, due to increasing overexploitation of our fishery resources and limited infrastructure to support their sustainability.

Overexploitation in the Fishing Industry

The overexploitation of reef resources has several negative effects:

Destructive fishing practices (e.g. dynamite, cyanide, bleach fishing and trawling in deeper waters), cause direct physical damage to corals, while the indirect effects of overfishing appear to be more widespread.

At a minimum, overfishing results in diminishing fish sizes and changes in the composition of species within reef communities, which may precipitate large-scale ecosystem changes (Bryant et al, 1998).

Case Study

In parts of the Caribbean, this process appears to have led to major changes in reef composition, particularly near Jamaica. Widespread overfishing in the region for many decades has led to very low levels of herbivorous fish, which normally play an important part in keeping algae from overgrowing reefs. In the absence of herbivorous fish, the role of keeping algae levels in check fell to a species of grazing sea urchin. When an epidemic nearly wiped out the beneficial urchins on Jamaican reefs in the early 1980s, algae quickly overgrew and killed the corals. Subsequently, hurricanes in the region reduced the now largely dead reef framework to rubble, with the result that living corals that formerly covered half of the seafloor in the shallow nearshore waters off Jamaica, now only cover 5 percent of the bottom (Hughes, 1994).

It has been estimated that about one quarter of the potential fish harvests in developing countries come from coral reefs. Because reefs provide so many benefits, degrading them is costly. A recent study found that the cost of destroying just 1 kilometer of reef ranges from about US\$137,000 to almost US\$1.2 million over a 25-year period, just counting the economic value of fisheries, tourism, and shoreline protection (Barber, Pratt, 1997).

Source: Fisheries Division, MOA&F

Mr. Speaker, in 2008 we landed a total of 9,975 tonnes of fish, including conch and lobster. This, however, represents as much as 30% less catch per fishing trip for the average fisher. In addition, fish sizes and quality are on the decline. For example, snappers and groupers now represent approximately 10% of the catch, down from 40% two decades ago. We must correct this. We want our fish stock to expand and to be there for future generations.

Listing of Fishing Beaches Refurbished/ to be refurbished, amounts and status

Implementing Agency/Beach	Estimated Cost \$J m	Status
MOA&F - priority		
Alligator Pond	10.9	Work in progress
Great Bay	1.0	Completed
Rae Town	7.0	Completed
Greenwich	7.0	Completed
Hope Bay	7.3	Work in progress
Rio Nuevo	10.7	Work in progress
Salem	4.3	Tenders out
Fort Rhodes	4.8	Final Design Stage
Old Folly	4.3	Final Design Stage
River Bay	8.9	Tenders out
Calabash Bay	0.3	Completed
Sub Total	62.5	
MOA&F - other		
Port Royal	98	Final Design stage
Manchioneal		
Morant Bay		
Port Morant		
Lances Bay		
Belmont		
Sub Total	98	
CIDA		
Old Harbour Bay	175 m	Final Design stage
Rocky Point		Preliminary design stage
Sav-la-mar		Preliminary design stage completed, stakeholder consultations on-going
Negril		
Black River		
Calabash Bay*		
Sub Total	175	
EUBSP		
Rocky Point (St. Thomas)	54 m	Contract signed, work to be completed by December 31
Buff Bay		
Brian's Bay		
Annatto Bay		
Pagee		
Bournemouth		
Sub Total	54	
Total	389.5	

Source: Fisheries Division, NIC

Mr. Speaker, in an effort to support sustainability in our fishing industry, a number of measures has been introduced.

- We now have in place a closed season for lobster which includes, no storage or consumption during the period specified.
- We have established eight fish sanctuaries, in addition to the two that were already in place, and we are supporting them with resources to monitor and enforce compliance, in partnership with the fishers and local NGOs. This year \$36.92 million is budgeted for enforcement of these sanctuaries.
- We have introduced a cess on conch exports which will earn the government \$59.5 million, to be used exclusively for sustainable measures for the sector.
- We have already spent \$54 million on refurbishing a number of fishing beaches, as part of a three-year programme of expenditure of over \$350 million to restore and upgrade the infrastructure of 30 beaches.

Mr. Speaker, we are working with fishers to give them more comfortable surroundings on their beaches. This Government is providing better management of our fishing sector.

In addition Mr. Speaker, we made available J\$50-million for a low interest (7.8%) revolving loan scheme for fishers and fish farmers.

The modernization of the Fisheries Division has commenced and we now have in place a new Chief Executive Officer and a Fisheries Advisory Board. In addition, several sub-committees have been established to focus on specific aspects of our fisheries sustainability programme.

Mr. Speaker, there is more to be done, and so this year we will:

- Launch a major Fishers' Registration Programme, as we did with our Farmers' Registration Programme, at no cost to fishers who register themselves and their boats within a specified time-frame. This will cost the Government J\$30 million. This is important as we need to know who our fishers are so we can work with them to improve their earnings.
- Mr. Speaker, the Government is working to establish a communication system for fishers at sea, which includes the setting up of 13 Repeater Stations, including coverage for the Morant and Pedro Cays at a cost of \$14 million. This we hope to complete over the next two years.

- Additionally, in conjunction with The Nature Conservancy (TNC) - an NGO, we will be establishing a research station at Pedro Cays (J\$15.5 M), as well as sanitary conveniences for fisheries on the north east and middle Cays (J\$2.5 M) at a total cost of \$18 million.

Fisheries Restrictions

Mr. Speaker, we believe the fishers have a right to an industry that can provide them with a living. But those rights come with critical responsibilities, if the fisheries sector is to survive. Fishers must take responsibility to ensure sustainability. *We have to abandon some of the unsustainable practices.*

This year we will be asking our fishers to comply with certain rules in order to sustain this important industry for themselves and future generations. These include:

- the banning of mesh sizes for fish pots below 1.5 inch, effective 12 months from today, July 7th, 2010;
- the banning of mechanical spear guns for fishing, that is - both manufactured and home-made spear guns - effective March 31st 2010; Mr. Speaker, let me add that we are not banning spear fishing, just the mechanical spear guns, which have had a lethal impact on our breeding fish stocks and on our reefs. The Government intends to exchange each mechanical spear gun for a Hawaiian Sling, a slightly less accurate, but still effective tool for spear fishing. This programme will be announced shortly.

Mr. Speaker, this is not unique to Jamaica, it is in force in The Bahamas, Cayman and Bonaire, where mechanical spear guns are totally banned; and in other countries such as Trinidad & Tobago, and St. Vincent & the Grenadines, where their use is restricted.

- the banning of night diving for spear fishing, will also be effective as of March 31st, 2010. Spear fishing at night has proven to be extremely destructive, as it targets the fish while they are at rest, when they are most vulnerable.
- the requirement for a special permit for compressors or other mechanical devices used for underwater breathing for the purposes of fishing only, will also be effective March 31st, 2010.
- Mr. Speaker, we will be strengthening our enforcement efforts to ensure that all vessels and fishers are registered and licensed by March 31st 2010. And all fishing vessels must

have their registration numbers prominently displayed on the right and left sides of the bow of the vessel, for easy identification.

- *Mr. Speaker, we intend to exercise zero tolerance in respect of fishers caught using dynamite, bleach or any other toxic substances, as well as those who fail to display their registration numbers on their boats in the prescribed manner, or fail to comply with the licensing regulations when they come into force.*

Aquaculture

Mr. Speaker, this year, the Government intends to work very closely with the aquaculture sector to give it the support it needs to improve its competitiveness. At peak production, private fish farms employed over 1,200 persons in an industry valued at US\$20 million. Today, the sector is extremely challenged, having declined by 23% over the last two years, due to increasing costs and subsidized imports.

Commodity Boards

Mr. Speaker, our main traditional crops are governed by Commodity Boards, established from as early as the 1930s. Our cocoa, citrus, coffee, banana, and sugar sectors have been good to us over the years - creating thousands of jobs and earning significant amounts of foreign exchange. While we have seen improvements over the past year in production levels, we have seen much better days in the distant past.

Number of Farmers and Change in Production for Major Commodities

Commodity	Number of Farmers	Production		Percentage Change
		2008	2007	
Cocoa (tonnes)	11,000	550	400	37.5%
Non-Blue Mountain (boxes)	8,592	87,883	46,660	88.3%
Blue Mountain (boxes)		320,389	345,087	-7.2%
All Coffee	8,592	408,272	391,746	4.2%
Citrus (tonnes)	29,700	140,635	122,291	15%
Banana (tonnes)	1,400	34,800	17,437	99.6%

Source: Respective Commodity Boards and European Union Banana Support Programme

To expand and improve the production and efficiency of our traditional commodities, the Government will be reviewing the role of the Commodity Boards, to determine whether changes can be made to improve production and increase value-added activity through private/public sector partnerships.

The Profile of the Jamaican Farmer

Mr. Speaker, it is important to understand the profile of the Jamaican farmer, if the Government is to develop an appropriate strategy to improve production and productivity. I inherited a Ministry that too often seemed to have been groping in the dark - engaging a process of trial and error, with questionable information on farmers and farmers' production processes. We cannot plan for efficiency and effectiveness with inaccurate information.

Number of Farmers by Size Group of Farms

Size Group of farms	2007	Percentage		Change 1996-2007	
		of all Farms	Cumulative	Absolute	% Change
Landless 28	28,070	12.3%	12.3%	13,090	87.4%
Under 1 ha	151,929	66.4%	78.7%	36,662	31.8%
1 to under 5 ha	43,731	19.1%	97.8%	-7,149	-14.1%
5 to under 50 ha	4,543	2.0%	99.8%	-1,489	-24.7%
50 to under 200 ha	270	0.1%	99.9%	-157	-36.8%
200+ ha	140	0.1%	100.0%	-229	-62.1%
All Farms	228,683	100.0%	-	40,728	21.7%

Source: STATIN. Census of Agriculture, 2007

Mr. Speaker, we are a country of small farmers, with 76 % of our over 220,000 farmers cultivating on 1 hectare of land or less. Only 140 farmers cultivate on 200 hectares or more.

Mr. Speaker, the trend is towards smaller farms, suggesting a splintering of our farm lands. This will have a major impact on our productivity levels and our farmers' ability to compete. We must find ways to support our small farmers, but we must also encourage medium and large scale farms if agriculture is to be sustainable.

PROFILE OF THE JAMAICAN FARMER

Number of Farms

There has been an increase in the number of farms, from 187,791 in 1996 to 228,683 in 2007. This increase has been attributed by STATIN, largely to a rise in the number of landless farms and farms of less than 1 hectare in size (Table 1). The number of landless farms has almost doubled since the last census. There were approximately 28,100 landless farms in 2007 compared to 14,980 in 1996. Landless farms as defined previously, are typically those farms in which the minimum criteria for the land are not satisfied, but the holder is in possession of the number of animals required to satisfy the criteria to be considered a farmer. The number of farms of under 1 hectare in size, increased by 36,662, a rise of about 32 per cent between 1996 and 2007. This indicates a worrying trend of fragmentation which must be addressed as a matter of urgency, or alternately, a way must be found to effectively organise small farmers.

Table 1 – Lands under Cultivation by Size Group of Farms

Size Group of Farms	2007 Census Year		1996 Census Year		% Change
	Area Occupied	%	1996	%	
Under 1 ha	47,712.00	15	43,459.00	11	9.79%
1 to under 5 ha	86,011.00	26	101,977.00	25	-15.66%
5 to under 50 ha	50,783.00	16	67,723.00	17	-25.01%
50 to under 200 ha	25,449.00	8	41,484.00	10	-38.65%
200+ ha	115,854.00	36	152,791.00	38	-24.17%
Total	325,810.00	100	407,434.00	100	-20.03%

Source: STATIN. Census of
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Decline in Farm Sizes

In 1996 less than half a percent of the total number of farms in Jamaica accounted for 50 percent of all the land under cultivation (See Table 2). In 2007 this figure declined further to .2% accounting for 44% of lands under cultivation. Much attention should be placed on this information, because if this group continues to decline further, it could have serious implications for food security and significantly reduce agriculture's importance in the Jamaican economy. Measures must be put in place not only to sustain these large farms but also to encourage other medium farms to increase their acreage under cultivation or production. To demonstrate the level of fragmentation taking place in terms of farm size - while landless farmers grew by 87%, and farms of less than 1 hectare grew by 31.8% - all other categories registered declines, with the largest being in the category of farms of over 200 hectares registering a decline of 62%, and the category 50 to 200 hectares registering a 37% decline. While much of this may relate to the decline in banana and sugar production, it is a cause for concern. Fragmentation can undermine food security and reduce the capacity of the country to feed itself if the rate and pace of fragmentation leads to economically unviable subsistence farmers. Eventually, such farmers may leave the soil in search of more lucrative options, thereby exacerbating the rural/urban drift and further contribute to urban decay.

Table 2. Number of Farmers by Size Group of Farms

Size Group of farms	2007	Percentage		Change 1996-2007	
		of all Farms	Cumulative	Absolute Change	Percentage Change
Landless 28	28,070	12.3%	12.3%	13,090	87.4%
Under 1 ha	151,929	66.4%	78.7%	36,662	31.8%
1 to under 5 ha	43731	19.1%	97.8%	-7,149	-14.1%
5 to under 50 ha	4543	2.0%	99.8%	-1,489	-24.7%
50 to under 200 ha	270	0.1%	99.9%	-157	-36.8%
200+ ha	140	0.1%	100.0%	-229	-62.1%
All Farms	228,683	100.0%	-	40,728	21.7%

Source: STATIN. Census of Agriculture

Small Farmer Focus

For small farmers, the strategy must be to encourage clustering of activities to take advantage of shared knowledge, technology on production methods, and marketing of crops or livestock. This requires farmers and farms to be registered and community-based farmers' organisations to be established and serviced by extension support.

Mr. Speaker, last year was a record year for farmer registration, with over 25,000 new farmers added to the RADA data base. In addition, we embarked on a programme to register community-based farmers groups - an original mandate of RADA that was not executed, until now. These community-based farmers' groups are called Production and Marketing Organisations (PMOs). Last year we registered over 800 of these groups with a membership of more than 30,000 farmers.

Mr. Speaker, this registration of community-based farmers' organisations will allow RADA to more effectively support farmers through group effort. Two weeks ago the Ministry hosted its inaugural farmers' only PMO conference at the Trelawney multi-purpose stadium. Over 10 thousand farmers attended, and they participated in a series of workshops on best practices in agriculture, new technologies, access to financing and marketing.

Investments in medium and Large Farms

Mr. Speaker, this Government wants to encourage investments in medium and larger farms, as these farms are critical to productivity improvements in certain crops. Fruit trees and root crops are examples of commodities that require larger acreages.

Investments in larger agricultural projects will require more rigid business plans to source funding, land and other investment variables. The soon-to-be formed Agro-Investment Corporation is intended to package and promote medium to large scale agro investments. We hope to make this facility a one-stop-shop within the Ministry, to coordinate with other critical agencies and Ministries, in supporting these larger agricultural investment projects. To this end, we intend to work closely with Jamaica Trade and Invest and the Ministry of Industry, Investment and Commerce.

Land Reform

Mr. Speaker, land reform is critical to the agro-investment process. Over the last year, the Ministry has been working with a number of relevant agencies, including the National Land Agency, the National Irrigation Commission, and Rural Physical Planning to audit and develop a data base of agricultural lands, to determine the status of these lands and where possible, to make these lands available for agro-investors.

Mr. Speaker, Jamaica's total land mass is 1.1 million hectares of which 388,000 hectares are classified as arable. Of the arable lands, 155,000 hectares or 40 % are actually being utilized. Agricultural lands vary in quality, depending on a number of factors, including access to water, soil profile and terrain.

As part of our thrust for efficient land utilisation, the Ministry's efforts will focus on identifying and engaging the best agricultural lands in the first instance. Primarily among these, are lands with irrigation infrastructure. Currently, we have eight NIC schemes representing 28,781 hectares of land, with a land utilisation of 45 percent.

Mr. Speaker, this year, we intend to actively promote the use of these lands by linking agro-investors with sound business plans, with these lands that are most arable and not being utilised. For private owners, we will offer our assistance through our Agro-Investment Corporation, to engage these lands in agricultural ventures.

Mr. Speaker, this will ensure that persons interested in investing in agriculture will have the opportunity to access the best arable lands available.

Youth in Agriculture

Mr. Speaker, the average age of the Jamaican farmer is 50 years old. While we have the greatest respect for our experienced farmers, the future of farming must rest with a new and younger generation taking over, and embracing new and more modern approaches. In this regard, we must start in our schools, to sensitise the very young about the importance of agriculture.

I want to commend the 4H Clubs for the work they have been doing to introduce agriculture to young persons in our schools. Last year the 4H movement established school gardens in 402 schools and increased their membership by 18.6 percent to 70,709 strong. This year, the 4H movement will establish school gardens in at least another 300 schools.

Mr. Speaker, at a higher level of learning, we want to encourage more young people to pursue diplomas and degrees in agriculture-related fields. Last year 806 students graduated from CASE, UWI, and Ebony Park with degrees, diplomas and certificates in agricultural disciplines. Tracer studies conducted by CASE show that only 50 percent of their graduates end up in the field, due to a range of challenges including lack of land and financing to get started. *Mr. Speaker, we want to get more trained young people into farming.*

Number of students graduating from the agriculture programmes at CASE 2005/2008

Year	Programmes					
	Diploma in Agriculture	ASc. General Agriculture	ASc. in Agricultural Education	Bachelor in Agricultural Production & Food Systems Management	Total	Employed in Agriculture
2005	27	50	10	24	111	73
2006	30	51	28	30	139	70
2007	33	52	28	6	120	53
2008	32	47	20	38	137	na
Totals	122	200	86	98		

Source: CASE

Last year we launched a Youth in Agriculture initiative, which aimed at encouraging young persons of up to 30 years old to become agro- entrepreneurs.

Number of students graduating from EBONY Park 2006/2007 – 2008/2009

Area of Training	2006/2007			2007/2008			2008/2009		
	Level			Level			Level		
	1	2	3	1	2	3	1	2	3
Agro-Food Processing	26	29	14	33	17		59	66	5
Crop Production	79			115			200		
Livestock Production	94			80			199		
Ornamental Horticulture		38			31			65	
Farm Maintenance					40			63	
Poultry Rearing					12			4	
Tractor Operation & Maintenance					7			2	
Pig Rearing					11			8	
Total	280			346			666		

Source: Ebony Park Heart Academy

These persons who are trained in agriculture, and are interested in careers in agriculture, will be given assistance with business plan development, access to land, and capital to establish their agro-businesses.

So far we have engaged 48 agro-entrepreneurs with 43 already starting to produce. This programme has benefitted from J\$21.4-million support from the Ministry. This year we intend to expand that programme with an additional J\$50 million, with another 50 agro-entrepreneurs being targeted.

Mr. Speaker, we intend to work with this new generation of farmers to become the catalyst for an agricultural revolution, characterised by improved technologies, best practices, and value-added products.

Access to Credit

Mr Speaker access to credit is a major challenge facing our farmers. The Government has done a lot to increase the pool of funds available to fishers, farmers and agro-investors. Last year, the uptake of loan funds amounted to approximately J\$890 million, a 181 % increase when compared with the loan uptake in 2007 of J\$316.8 million. Currently, loans are available at rates of between 7.875 % and 13 % for farmers and agro-entrepreneurs, through approved financial institutions such as the PC Banks and Credit Unions.

The challenge is to ensure that once funds are available, as they are now, farmers and fishers can access these funds. Mr. Speaker, small farmers and fishers have difficulty meeting the collateral requirements and are often without the expertise to develop proper business plans. More often than not, the PC banks lack the institutional capacity to assist these farmers and fishers to complete their application forms, or to monitor loan funds for potentially more risky borrowers. As a consequence, small farmers only benefit from a mere 2 % of the PC banks' available loan funds.

Loan Allocations to the Agricultural Sector in 2008

Sub-sector	Total (J\$,000)
Domestic Crop	14,348
Livestock	395,607
Export	234,433
Farm Infrastructure	14,225
Agro-processing	231,346
Total	889,959

Source: Economic and Social Survey 2008

This year the Government will move to address these problems by doing the following:

1. working with the DBJ and our international partners to review and restructure the PC banks;
2. expand the distribution outlets for loan funds to include the Credit Unions and other Micro Financing entities like JN Small Business and Nation Growth;
3. introduce a loan scheme, through these distribution outlets for small farmers and fishers who require collateral for only 50% of the value of the loans up to \$2 million. These loans will attract an interest rate of 9.5 percent and a moratorium on payment that will vary for up to 10 years, depending on the crop cycle. These loans will be subject to certain guidelines, including strict supervision by a loans officer and the RADA extension officers.
4. For the Youth in Agriculture Programme, we will this year open a special window, within the Ministry's investment company, to provide them with access to credit up to a limit of \$1 million in technical support and raw materials, including tools and seeds, together with marketing assistance to get them started.

Mr. Speaker, I would like to ask interested farmers and agro-investors to contact their RADA parish offices for further information on these programmes.

Technology Improvements

Mr. Speaker, a major thrust of the Government has been the embracing of new technology to drive agricultural productivity and production levels. Last year we pursued a number of initiatives and have started to see the results of improved productivity, increased income for our farmers and cheaper prices for our consumers.

As a first step, the Ministry established a Productivity Unit which:

- identified a range of crops and farmers;
- tracked their performance in terms of productivity and husbandry practices; and
- established targets for improved productivity through best practices.

We have so far trained 467 farmers in best practices to produce carrots; onions; sweet potatoes; Irish potatoes; hot peppers; and ginger - to name a few. Mr. Speaker, we have seen productivity improvements ranging between 9% and 41%, and farmers earning up to 50% more income from these productivity gains, while consumers are paying less. This year we intend to continue this programme.

Ministry of Agriculture & Fisheries Production/Productivity Programme (selected crops) – 2009

Crops	Area (ha)	Productivity 2009 (tonne/ha)	Productivity 1996 base year (tonne/ha)	Improvement in productivity (tonne/ha)	% Improvement in productivity	Ja\$/tonne	Incremental Increase in Gross Income Ja\$/ha
Carrot	16.8	17.2	13.9	3.3	24%	\$57,300.00	\$189,090
Onion	-	13.4	12.3	1.1	9%	\$66,100.00	\$72,710
I. Pot.	6.6	16.5	14.6	1.9	13%	\$66,100.00	\$125,590
S. Pot.	8.1	23.1	16.4	6.7	41%	\$88,200.00	\$590,940

Source: Ministry of Agriculture & Fisheries

Mr. Speaker, we are helping farmers and agro- investors to grow better crops and to make money out of their investment in farming.

Tractor Programme

Mr. Speaker, the use of technology was expanded this year when the Ministry launched a Tractor Programme under RADA, which saw 14 new tractors being purchased at a cost of \$50 million, for hireage to farmers or agro-investors for land preparation. We have recruited and trained tractor drivers and we intend to administer this programme under strict guidelines. This year we will add a few more tractors to this programme.

We are moving our farmers and agro- investors away from the back-breaking work involving the hoe and the fork.

Protected Agriculture

Mr. Speaker, our technology thrust in protected agriculture continued during last year, with a 30% expansion in greenhouse capacity. During this period, greenhouse production accounted for 303 tonnes of tomato, sweet pepper, lettuce and cucumber.

To continue the expansion, within the Ministry, we have set up a Protected Agriculture Unit to coordinate the Government’s role in boosting protected agricultural production. Last year the

Unit organised training for 37 extension officers, launched a greenhouse training manual, in conjunction with USAID and participated in three (3) training sessions for farmers and agro-investors in protected agriculture. A total of 50 farmers have been trained in this area. The Unit is also now experimenting with new crops, using this technology.

Mr. Speaker, this year we intend to expand greenhouse capacity by an additional 25 %, through private sector investment and a GOJ/CIDA project which will see 40 greenhouses, with production capacity amounting to three (3) acres being constructed and leased to small farmers. In addition, we intend to establish two (2) facilities to conduct experiments and training in protected agriculture. Work on new crops, disease control and post-harvest handling will be pursued to build capacity in the area.

Irrigation

The National Irrigation Commission (NIC) has been an important part of the productivity programme, with the launch of the Hounslow irrigation scheme. In addition, five (5) new irrigation

Summary of National Irrigation Commission's Irrigation Districts

Region	Parish	District	Size of Districts		Active Agriculture Lands	Unused & Unutilized Lands
			Hectares	Acres	Hectares	Hectares
Eastern	St. Thomas	Yallahs	874	2,159	243	560
	St. Catherine	Rio Cobre	9,372	23,158	6211	2361
	St. Catherine	St. Dorothy	3,503	8,656	1457	2046
Central	Clarendon	Mid-Clarendon	12,029	32,194	5,506	4,735
Western	Trelawny	Braco	109	269	57	47
	St. Elizabeth	Hounslow	1038	2,565	142	668
	St. Elizabeth	Beacon/Little Park	806	1,991	124	303
	St. James	Seven Rivers	50	125	20	30
Total			28,781	71,117	13,760	10,750

Source: National Irrigation Commission

schemes have been approved over a three (3)-year period. These five schemes will provide irrigation infrastructure for 781 hectares (1930 acres) of land, serving 583 farm families. A contract has been awarded for the Duff House/ New Forest scheme. In addition, 250 farmers will benefit from small irrigation schemes consisting of black tanks and drip irrigation equipment. We hope to expand this programme this year by working with Members of Parliament.

Soil Testing

Mr Speaker, the quality of our soils is important to improve production and productivity levels.

Let me say that soil care depends on a number of variables and involves a number of processes.

Over the past year, the Ministry has embarked on a programme to review a comprehensive soil profile conducted by our Rural Physical Planning Division, in order to determine nutrient levels and soil types for all our agricultural lands. This is intended to update our data base, which was last updated in 1984 - some 25 years ago. The intension is for extension officers to use this information as a guide to crop selection and care, in their respective extension areas.

In addition, we have established a committee which pursued work and developed a manual to guide extension officers and farmers to do soil profiles of specific farms and test for soil diseases.

I am happy to announce that the committee has completed its work and as a result, a new soil manual is now available and will be introduced to all extension officers who will now be required to do soil profiling as a routine part of their job. We have made this possible, by providing extension kits, which include tools to collect soil samples for lab testing.

Furthermore, this year, we intend to equip our two soil labs, one at Bodles, geared for soil disease testing and the other at Rural Physical Planning, which is geared towards soil nutrients profiling. The equipping of these labs we expect will cost over J\$30million.

Mr. Speaker, we envision that once soils are profiled, the extension officers will prescribe appropriate nutrients and treatments, and recommend appropriate agronomic practices for the crops being planted.

The recently launched Centre of Excellence will work with RADA to coordinate this process, along with ongoing training for our farmers and extension officers in this approach.

Post-Harvest Capacity

Mr Speaker, a critical part of the productivity process hinges on the extent to which we have the capacity to provide adequate and efficient post-harvest care. This includes, reaping, warehousing or storage, grading and sorting, value-added processing, marketing and distribution.

We intend to do the following this year to improve post-harvest infrastructure:

1. establish a unit within the Ministry to address the development of post-harvest infrastructure; and
2. establish five (5) wholesale market facilities for handling and selling produce and livestock. These facilities will have cold storage, water, shelter, toilets, scales and simple display areas for commercial activities. The infrastructure will cost the Government approximately \$20 million.
3. We also intend to install cold storage facilities at Montpelier, Moneague, Denbigh, New market, White River, Wait-A-Bit, Christiana, Southfield and Hounslow, where primary producers will be able to store excess capacity. So far, we have in storage 160,000 lbs pounds of Irish potatoes.
4. Additionally, we will establish two (2) banana ripening houses in Maroon Town in St. James and Trinity in St. Mary, at a cost of J\$1.4 million. These facilities will be leased to farmers' organisation to administer on behalf of its members.
5. We will upgrade the AMC complex on Spanish Town Road, including the repair of the cold storage facilities at a cost of \$10 million.
6. We will construct two CIDA/GOJ-sponsored post-harvest processing and packaging facilities in St. Elizabeth and Manchester. These facilities will be leased to private entities and will be engaged in grading, sorting, packaging, storage and logistics management, as well as the marketing of agricultural produce. This is expected to cost \$50 million.
7. We will construct three (3) pepper mash facilities in the parishes of Clarendon, St. Elizabeth and St. Mary at an estimated cost of \$80 million. These facilities will support the Government's major pepper expansion programme through the processing of hot peppers for the condiments market.

8. We will complete the construction of a yam packaging house in Trelawny at a cost of \$15 million. This is scheduled to be completed by September 2009, and leased as a buying and packaging house for yam farmers in Trelawny, Manchester and Clarendon.

Mr. Speaker, these projects are public/private sector partnerships that will help our farmers to grow better produce and our consumers to get better value for money.

Value-Added Products

Mr. Speaker, the Honourable Prime Minister has been talking about the need for value-added activity in agriculture. This is an important part of our mandate and we are making progress.

- Over the past year we have worked with a number of our partners including agro-processors, farmers, and the research entities to move our primary products into value-added brands. Today we can say we have cassava chips (in two flavours for the local and export market!), sweet potato chips, dasheen chips, and packed peanuts.
- Mr. Speaker, we have also been working with juice processors to provide them with concentrates and flavours from our locally grown fruits and vegetables. This year we have converted 120,000 kg of mangoes; 35,000 kg of melon; 33,833 kg of cucumber; 278,000 kg of sorrel; 399,000 kg of carrots; 10,000 kg of Otaheite apple; and 534,000 kg of June plum into flavours and juices for the beverage market.

The Government is currently exploring other markets for Jamaican grown value-added products. For example, we are working with the Ministry of Education to provide more of our local produce for their school feeding programme. We are discussing juices, sweet potato and cassava.

New Product Development

Mr. Speaker, last year we embarked on a number of initiatives to introduce new products.

- We have started our rice trials and this has shown the capacity to produce up to seven tonnes per hectare, which is comparable to major rice-growing regions. This year we intend to expand this effort by involving small farmers in Westmoreland and St. Elizabeth in rice production. We have recruited 70 farmers for this project and are in the process of purchasing machinery for planting and reaping.

- We are now experimenting with a new variety of pineapple from Costa Rica called MD2 Del Monte Gold.

We are currently doing trials with sorghum as a source of animal feed, alternative energy and brewing.

- This year we will continue and include tests on orchard development with nutmeg, pimento, and a range of herbs such as cerasee, fever grass, peppermint, Khus-khus and sorrel. These are all intended to be used in value-added production such as teas and juices.

Agriculture Risk

Mr. Speaker, all our efforts will come to naught if we do not plan to address the various forms of agricultural risk - and there are many faced by the farmer and agro-investor:

- the risk of unfair trade: we have to guard against in order to motivate our farmers to produce; and
- the risk of hurricanes and droughts: we have to overcome with infrastructure for irrigation, crop insurance and farmer training.

Last year we announced a study on crop insurance by the IDB and World Bank. The study was completed and we are now moving to develop a work programme. We are also developing through RADA, new planting practices with farmers, focusing on root crops, more use of storage facilities, and less production of vulnerable crops during the hurricane season.

Praedial Larceny

Praedial larceny is another major area of risk to our farmers. It is a cancer on our farmers' efforts. It can no longer be described as petty theft but organised criminality. We must address this scourge on our farmers' efforts through public education, clear laws and efficient enforcement.

Last year the Ministry commissioned a study on how to deal with this problem. This year we will introduce new measures to improve enforcement. I have already met with the Minister of National Security, Attorney General's Office and the police and military high command to discuss the way forward. A team was established to detail these new approaches and this will be announced shortly.

In the meantime, let me say that critical to controlling praedial larceny is the establishment of traceability of farm crops and livestock. This means farmers must register their farms and farm activities. Otherwise, the system will not work. In addition we will be embarking on a programme, in conjunction with the Ministry of Health to more effectively monitor our food chain, through the consolidation of slaughter houses or abattoirs and increased inspection of foods in the trade. This will not only improve the quality of our foods, but also assist with the praedial larceny challenge.

Mr. Speaker, This year we intend to spend J\$29 million on an Animal Identification System that will have the following impact:

- identification and registration of all livestock in Jamaica
- a computerised database system inclusive of passports and tags which will be able to trace animals from birth to slaughter
- a database system with the ability to store and generate vital information on domestic animals
- traceability system which will facilitate tracing meat from farm to fork

This system will not only ensure the safety of our meats but will also be an effective tool in the fight against praedial larceny.

Conclusion

Mr. Speaker, I close today, by thanking all those who have contributed to the efforts of the past year and those who will be part of the process going forward. I want to give thanks to the Almighty for his guidance and the blessings that this country enjoys, including an environment where agriculture can flourish and farmers can prosper.

Mr. Speaker, we have the intellectual capacity to manage these variables to create opportunities for our people. It requires us to think strategically, abandon the stereotypes that have either kept us in a commodity mode or discouraged agro investments all together.

We must, with pride, eat more of what we grow. We must invest in our future by investing in growing more of what we eat. And we must take our products and brands to the world, as I am convinced that the world is already convinced. It is for us to make our products available.

Mr. Speaker, agriculture can make this country grow again. Let's make it happen.