REPORT

OF

WORKSHOP ON SMALL SCALE FARMING IN THE CARIBBEAN

Sir Vivian Richards Stadium

18 October 2012
Table of Contents

Introduction

Workshop Objectives---------------------------------------------------------------5

Opening of Workshop------------------------------------------------------------------6

Remarks FAO Assistant Director General, Regional Office, Latin America and Caribbean---------------------------------6

Remarks Program Officer, Agriculture and Industry, CARICOM Secretariat------------8

FAO Medium –Term Strategic Framework for Cooperation in Small scale Farming in Latin America and Caribbean---------------------------------9

Workshop Presentations

Technical Session 1-----------------------------------------------------------------13

Technical Session 11-----------------------------------------------------------------30

Summary of Discussions------------------------------------------------------------43

Conclusions and Recommendations-----------------------------------------------------44
Introduction

The Workshop on Small –Scale Farming in the Caribbean Sub-region was held within the context of the FAO Medium Term Strategic Framework for Cooperation in Family Farming in Latin America and the Caribbean 2012-2015. Specific to the Caribbean sub-region, are the concerns with the situation of high food importation and high import content of agri-inputs, the declines in farm contribution to national food security and foreign exchange earnings and the evidence of declining dependency of small farm families on the outputs of farm activities for livelihoods and food security. Except for Guyana and Belize all the countries of the sub-region are net food importers. Reportedly food importation at the sub-regional level is at an estimated 50% of demand and as high as 70-80% in a few countries.

The objective of FAO to work with the countries of LAC in the formulation and adoption of policies and programs to increase the production of goods and services originally from family farming in a sustainable manner in order to contribute to the well being of rural families in the region is well suited to the sub-region. Analysis of most recent data found in the Census of Agriculture reveal that total contribution of small farming to rural livelihoods and food security have declined in the last decade, with the majority of small farm households generating under 25% of household expenditure from farm activities. In addition the Population Census and Country Poverty Assessments continue to show that not only is rural poverty higher than urban poverty in the sub-region but that small scale farm households are well represented among the poor and those vulnerable to poverty and food insecurity. Furthermore owing to the fact that poverty is measured according to households and not to the numbers of household members it is important to note that where data is available just over 50% of farm households contain five or more persons and of that amount 25% contain between 6 and 10 or more persons per household.

The declines in the dependency on farm activities within farm populations living close to the poverty line is causing a growing tendency towards the replacement of locally produced fresh food with processed and non-processed imported foods. FAO studies conducted in collaboration with CARICOM Community (CARICOM) and Caribbean Food and Nutrition Institute (CFNI) indicate high content of fats and sugars in the diets of the sub-region. Much of this has been attributed to the movement away from the consumption of fresh fruits and vegetables to imported processed and semi-processed foods. The studies also confirm high incidence of obesity and the associated non-communicable diseases such as hypertension, diabetes and cardiovascular diseases, including high incidence of diabetes in children and conclude this situation is strongly influenced by the aforementioned changes in dietary practices in the sub-region.

Against this background CARICOM Governments collaborated with multilateral development partners such as FAO and IICA to formulate sub-regional food and agriculture policies to address issues of food and nutrition security, weakening contribution of farm activities to rural livelihoods and rural/urban employment chains and the overall general declines in role of small farming in development priorities of the countries. These policies have sought to sharpen and strengthen the measures outlined to address the key binding constraints to agriculture growth and competitiveness identified in the Jagdeo Initiative. The major policy positions include the OECS Policy and Plan of Action for Agriculture (2011), the Regional Food and
Nutrition Policy and Plan of Action (2011) the Caribbean Disaster Management Strategy (2007-2012), and the Common Agriculture Policy (2010). These policies are all designed to shape an enhanced environment for agriculture stakeholders to achieve sustainable levels of outputs that impact rural economic employment chains, household food security, foreign exchange earnings and agro-ecological and coastal marine fisheries stability.

Small scale farmers form an important grouping among the sub-region’s stakeholders in agriculture. Typically the sub-region recognizes two groups of farmers on the basis of farm structure: small scale crop and livestock farmers operating on under two hectares (five acres) and large farmers operating above two hectares and include an unclear definition for medium sized farmers, usually those operating on over two hectares and under ten hectares (20 acres).

The FAO Medium-Term Strategic Framework for Family Farming is concerned primarily with small scale farmers in the sub-region. These farmers make up just under 90% of the total farming population under ten hectares, they operate on just over 55% of the total area of land under production, grow a wide range of crops, rear small ruminants and present a extremely heterogeneous group of farmers in terms of their socio economic status and capacities.
Workshop Objectives

The purpose of the Workshop on Small Scale Farming in the Caribbean Sub-region was to create an opportunity for dialogue and debate among actors in the farming sector, including producers’ organizations and civil society representatives, policymakers and experts from international cooperation agencies, about the potential and challenges of small scale farming for the promotion of food and nutrition security.

The objectives of the Workshop were as follows:

- To discuss the concept of small scale farming, giving considerations to the specific situation of the Caribbean sub-region.
- To share relevant experiences in small scale farming in the Caribbean sub-region, their achievements, challenges and opportunities with special attention to the experiences of women, youth and indigenous groups.
- To present and discuss strategies and instruments to promote and support small-scale farming and the economic and political impacts of these efforts at the national and sub-regional levels.

Expected Results of the Workshop were as follows:

- The role of public policy for the promotion of small scale farming sustainable production, market access, inclusion in the value chain and its scope for overcoming poverty identified.
- Instruments to be developed by international organizations and governments for the promotion of small scale production identified.
- Specific aspects related to the implementation of in the Caribbean sub-region of the FAO Medium –Term Strategic Framework for Cooperation in Small –scale (Family) Agriculture in Latin America and the Caribbean 2012-2015 clarified.
- Specific issues that need to be further addressed and supported by the HFLAC Initiative Support Project, through its line of work in small-scale (family) farming, in the context of the HFLAC Initiative highlighted.
Opening Session

Remarks

Dr. Raul Benitez, FAO Assistant Director General, Latin America and Caribbean

Mr. Sergio Garcia, Program Manager, Agriculture and Industry, CARICOM Secretariat
Mrs. Florita Kentish, FAO Sub-regional Coordinator for the Caribbean
Government Delegates
Colleagues from International Organizations
Ladies and Gentlemen,

It is a great honor to host, together with the CARICOM Secretariat, this workshop on Small Scale Farming in the Caribbean. In yesterday’s Opening Ceremony of the Caribbean Week of Agriculture, I made reference to the important progress that the Latin America and Caribbean region has made in reducing the number of undernourished people.

Indeed, over the past two decades, the proportion of undernourished in total population, in the region as a whole, declined from 14.6% to 8.3%. In the Caribbean alone, this proportion went down from 28.5% in the early nineties to 17.8% in 2010-2012.

There is no doubt that progress has been made. However, these figures are still unacceptable. Many of the undernourished are small-scale farmers. Some people regard them as being inefficient, and as being part of the poverty and food security problem. For us, small-scale farmers are part of the solution to poverty and food insecurity in several countries.

Historically, smallholders have been key players in meeting food demand. But, with the structural adjustment programs that most countries in the region followed, smallholders were neglected in public policy, thus, they were unable to display their full productive potential.

Today, things have changed.

That’s the feeling not only in the Latin American and Caribbean region, but worldwide. Proof of this is the fact that the United Nations declared the year 2014 as the International Year of Family Farming.

In 2050, the world population is expected to increase to 9 billion people, which will mean, at least a 60% growth in global demand for food. Small-scale farming, because of its current technology and productivity gap, can significantly contribute to meet this growing food demand.

Climate change already poses huge risks to agriculture. Small-scale farming, given its use of native varieties, conservation and soil improvement practices, its lesser dependence on oil and petroleum products and its practice of multi-culture and forestry systems, plays a fundamental role in mitigating and adapting to climate change.
Small-scale farming encourages the conservation of plant and animal species that are endemic to the region, and thus become a natural guardian of biodiversity. In this regard the fostering of small-scale farming can reduce import food dependency, and reduce domestic food price volatility.
Remarks

Mr. Sergio Garcia, Program Manager, Agriculture and Industry, CARICOM Secretariat

In his remarks, the CARICOM Secretariat representative reminded Workshop participants of some of the ways in which the discussions should impact small scale farming in the sub-region. Priority was given to:

- Climate change, particularly the increasing variability in rainfall intensities and pattern and evidence of extended droughts.
- Land and water issues and the need for attention to sustainable practices for water for small farming including rainwater harvesting.
- Integration of small farming into the green economy and the need for farmers to understand the benefits of amassing carbon credits through simple and familiar practices such as organic or naturally produced products.
- Exploring and expanding the benefits of fair-trade for better market access and inclusion.
- Programs and projects that are of relevance to immediate opportunities for higher levels of sustainable food production and livelihood.

Participants were also reminded to take into consideration the benefits to be realized from the current sub-regional policy and program environment shaped and supported by the Secretariat including the following:

- The IICA/CARICOM/CARDI Program under the 10th EDF
- The Regional Food and Nutrition Security Policy and Action Plan and the National Plans prepared in collaboration with FAO
- The Regional Youth Policy on Agriculture
- CARICOM/IFAD cooperation to provide support in microcredit with provisions for support to the social component of the food and nutrition action plan.
- CRFM initiative under the ACR-EU (CTA) Agreement to position and engage fisher folk organizations in the implementation of the Common Fisheries Policy.
Highlights of the presentation are as follows:

1. Origin of the priority given to family farming: Family farming is one of the four priority areas agreed on at the 31st FAO Regional Conference for LAC. The other three priority areas are Food Security, Transboundary Diseases and Food Safety and Climate Change and Sustainable Management of the Natural Resources. These regional priorities define the strategic framework on which FAO will report to its Governing Body at the Regional Conference in 2014.

   1.1 Concept of family farming: The concept presented to the participants was that of a farm for *agricultural production* (*agriculture includes agricultural, forestry, fisheries, pastoral, and aquaculture activities and combinations of these*) which is managed and operated by a family and reliant on non-wage family labour.

   1.2 Objective of the FAO Strategic Framework on Family Farming: To work with the countries of LAC in the formulation and adoption of policies and programs to increase the production of goods and services, originally from family farming in a sustainable manner, and thereby contribute to the well being of rural families in the region.

2. Challenges and opportunities of family farming: The major challenge to the development of the program was to define the institutional framework that would support rural development planning based on local participation mechanisms around a territorial approach. For example the program had to be responsive to issues of the gender gap in food production, strengthen the role of cooperative in production and access to markets as well as promote small farmer participation in value chains. In addition equal consideration had to be given to improved access to credit and agriculture insurance. The technology gap in small farming and the role of the national extension and research systems in small farming coupled with the new and emerging issues of climate change were other areas where FAO would need to bring its competence to bear on national programs.

3. Comparative Advantage of FAO: Participants were guided through the demonstrated comparative advantage of FAO in several areas of relevance to family farming. In terms of production and extension these include GAPs, integrated pest management and farmer field schools. FAO also has demonstrated competence in areas such as agro chains development, school for young farmers and community based forestry approaches. In the area of policy and programming the Organization is well placed to provide technical support
in policy analysis including areas to improve socio-economic and gender analysis in family farming programs and projects and in rural investment project management.

**4. Areas of cooperation and expected results:** Based on the foregoing the FAO will focus on a cooperation program on family farming in a way that promotes sustainable well-being of families through the following processes:

**4.1. Socio economic, gender, rural and youth policy analysis with the aim of achieving:**

(a) Strengthened national, regional and local capacities for undertaking socioeconomic and gender analysis of family farming productive systems, applying methodologies such as the policy analysis matrix (MAP) and socioeconomic and gender analysis (ASEG), as well as tools and indicators to make diagnostic assessment of the current rural employment situation.

(b) Adequate capacities in analysis of trade flows and marketing margins that have an impact on the competitiveness of family farming and

(c) Diagnostic assessments at the national level to identify, in general, the potential and main constraints on family farming, as one of the inputs for defining priorities and support strategies in public policies.

**4.2. Sustainable development of production systems, conservation and marketing of seeds and intensification of grain production through the use of high quality seeds through processes involving:**

(a) Development of Farmer Field Schools, empowering the leading producers and extension workers

(b) Strengthening extension systems with self-management approaches

(c) Promotion of Integrated Pest Management in smallholder agriculture and

(d) Development of sustainable livestock, agro-aquaculture, silvi-pastoral, agro-forestry family systems

**4.3. Access to markets through the following processes:**

(a) Studying models and proposals for integrating family farming into agri-food markets.

(b) Strengthening of the capacities of family farmers (business capacities, preparation of investment projects, quality and safety standards) and establishment of alliances with buyers.

(c) Strengthening of associated management capacities and negotiation in markets.
(d) Improving the competitiveness of local traditional markets (open markets, specialized markets, mobile markets, flea markets) as an important channel for the commercialization of healthy food products from family farming and

(e) Development of market information systems

4.4 Development of institutional frameworks

(a) Development of national strategies for the sustainable intensification of family farming production, integration of rural employment issues in relevant policy processes, and evaluation of the trade-offs between different policy alternatives.

(b) Strengthening of local, regional and national capacities for the adoption of pro-family farming policies and strategies, and for the design and implementation of new programs and projects, using a results-based management approach.

(c) Organization of national and sub-regional forums for the discussion and exchange of experiences in public policies and strategies for family farming and

(d) Facilitating the exchange of experiences by government officials and civil society organizations involved in family farming policies.

In addition participants were briefed on the management arrangements\(^1\) for the implementation and monitoring of progress in family farming in LAC. These include the technical and administrative bodies, primarily:

(a) Family Farming Functional Technical Group: Comprised of focal points in national governments, officers of the headquarters of FAO in Rome, professionals of the Regional Family Farming Focus Group and other relevant institutions. The latter group will meet every quarter to evaluate work plans using established monitoring methods

(b) Regional Family Farming Priority Group: Comprised of professionals from various offices of FAO in the region working in family farming. This group will provide technical assistance for the implementation of the Strategic Framework and will monitor work plans on a monthly basis and

(c) Communication strategy for dissemination and promotion of the program including the progress towards plans for celebration of the year 2014 International Year of Family Farming.

\(^1\) See Matrix overleaf
Figure 1. Matrix of the Management of the FAO Cooperation Framework in Family Farming in Latin American and Caribbean Countries
Profile of Small scale Farming in the Caribbean sub-region

Dr. L. Barbara Graham- FAO Consultant

Introduction: The purpose of the presentation was to provide brief information from a background document which sought to highlight the situation of small scale farmers in the Caribbean sub region in order to resolve the challenges and the opportunities for participation in the priority area on family farm agreed to by CARICOM Ministers of Agriculture at the 31st FAO Regional Conference for Latin America and the Caribbean. The objective was to profile these producers in terms of who they are, where they are located in farm structure, and what are their main characteristics, resource endowments and main nonfarm activities. Also of interest were the main sub-regional policy, institutions, mechanisms and cooperatives that influence production, marketing and credit in small farming. The highlights of the presentation are as follows:

1. Traditionally Caribbean small farmers are defined as food producers operating on five acres and under of farm land. They farm primarily food crops and to a lesser extent, rear small ruminants, manage small poultry units and conduct activities in artisanal fisheries and small-scale aquaculture. Some small farmers have extended their operations to include activities in agro-tourism and ornamentals and to a lesser extent agro-forestry. Caribbean small farming is recognized for its extreme heterogeneity, a characteristic which is often acknowledged in policy formulation and planning, because of the associated challenges in targeting results based actions.

2. There is a scarcity in data required for policy analysis and programming in family farming. Specifically data on resource endowment (socio-economic status and socio-culture attitudes within the farming populations) is not readily available. Currently the Census of Agriculture data provides the best option for a diagnostic on small scale farming. In this presentation important deficiencies in the Census data in respect of socio-economic and socio-cultural characteristics of small farming have been supplemented through reviews of other sub-regional and country reports on agriculture in general and to a lesser extent on small farming.

2 Small –scale Farming in the Caribbean Sub-region -FAO
3. Agriculture Census data reviewed in 8 countries of the sub region revealed the following about the small farming:

**3.1 The typical small scale farmer in the Caribbean sub-region:** The typical small farmer is predominantly a male between 45 and 54 years of age who operates on five acres (two hectares) and under land and includes landless\(^4\) farmers. On the other hand a farm holder is first defined in the Census of Agriculture where the minimum requirement in the sub-region is that the value of the enterprise is generally the equivalent of about US$300.00 (ECD\(^5\) 1000.00). No other data could be found on a different monetary value used in any of the other countries. This single minimum requirement stands out as an important determinant for the heterogeneity in small farming owing to the range of farm structures from landless to five acres and the associated range of practices and resource capacities in the different populations. Hence while the farm structure remains a sound common framework that identifies populations within small farming the quality of the data challenges the identification of immediate opportunities for objective planning for family farming.

The Census of Agriculture is therefore the best offer as the point of departure to support a diagnosis of small farming and to design a process for data gathering with a view to future policy analysis and programming for family farming. Its suitability is also considered creditable owing to the fact that this type of data is statistically sound.

**3.2 Farm structure in small farming:** An estimated 87.89% of holders (Figure 2) in the 8 countries operating on the total area of land in farm sizes 10 hectares and under are those defined as small farmers. These small farmers operate on 55.20% of the total land (Figure 3) area and occupy farm sizes of two hectares and under. Within the under two hectares population is another four to five farm size of holders depending on whether the country is using the metric or the British system of measurement.

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\(^3\) Jamaica, Antigua and Barbuda, Saint Lucia, Trinidad and Tobago, St Kitts and Nevis, Belize, Dominica

\(^4\) This is a farmer who does not meet the minimum economic criteria to be counted in the census of agriculture but who owns some animals roaming around on land.

\(^5\) Eastern Caribbean Dollars
The minimum requirement of the Census for a food producer to qualify as a farmer is a choice of respective countries, within broad guidelines revised by FAO in 2000. In the case of the Caribbean there is generally no further data to identify populations of farm holders on the basis of socio-economic status, resource endowments and capacities. However respective countries can shape a set of criteria with qualitative and quantitative differentiations within these.

Note later that at least three countries (Antigua and Barbuda, Saint Lucia and St Kitts and Nevis) which conducted Census since 2007 have published some of this type of data and Antigua and Barbuda has relatively good data in its Census conducted in 2007.
same guidelines. Participants were therefore given the opportunity to compare the criteria set by two of the countries in the sub-region with those shaped by Japan for its Census of Agriculture.

Definition of a holder in the Census of Agriculture in two of the countries of the sub-region

<table>
<thead>
<tr>
<th>At least one of the following minimum specifications:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ one head of cattle or one donkey or horse;</td>
</tr>
<tr>
<td>☐ two head of pigs, sheep, goats (or one head of any two);</td>
</tr>
<tr>
<td>☐ a flock of at least 12 fowls or rabbits;</td>
</tr>
<tr>
<td>☐ 10 or more bearings of any tree crops, bananas or plantains;</td>
</tr>
<tr>
<td>☐ 500 square meters or more of vegetables, provision, food or cash crops;</td>
</tr>
<tr>
<td>☐ A raised stand or greenhouse of at least 18 square meters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>At least one of the following characteristics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 0.41 hectares of crop cultivation, including flowers;</td>
</tr>
<tr>
<td>2. If only a greenhouse is operated, it should be of at least 4400 square feet (1 sq. ft = 0.92 m²);</td>
</tr>
<tr>
<td>3. Twelve economic trees like citrus, mangoes, breadfruit etc;</td>
</tr>
<tr>
<td>4. One head of cattle;</td>
</tr>
<tr>
<td>5. Two pigs, two sheep or two goats;</td>
</tr>
<tr>
<td>6. Twelve head of poultry, (including ducks, turkeys etc);</td>
</tr>
<tr>
<td>7. Six beehives;</td>
</tr>
<tr>
<td>8. A fish pond of any size</td>
</tr>
</tbody>
</table>

Definition of a holder in the Census of Agriculture in Japan

**Agricultural enterprise:** An entity having cultivation area of over 0.40469 ha or having a total agricultural product sales of 150 000 yen in one year prior to the census date regardless whether the operation is performed by a family unit or by other entities.

**Farm household:** An agricultural entity consisting of a family unit

**Commercial farm household:** A household engaged in agriculture managing more than 0.3 ha of cultivated land or reporting a sales value of agricultural products, in the previous 12 months, of at least 500 000 yen.

**Non-commercial farm household (subsistence farms households):** A household engaged in agriculture with less than 0.3 ha of cultivated land or a sales value of agricultural products, in the previous 12 months, of less than 500 000 yen.

3.3 **Fragmentation of farm size within small scale farming:** The Figures below are based on Census of Agriculture data from the selected countries and reveal the fragmentation in small farming. The Charts reveal there are four clearly defined farm structures in the two hectares and under (Figure 4-7) and in many countries there is a fifth categorized as landless. It is reasonable to assume that resources and capacities to cope will diminish with farm size and within farm size but there is no data to support this assumption. Table 2 below shows further shifts towards fragmentation in farm size one hectare and under in Jamaica. On the other hand the situation appears to be stabilizing in Saint Lucia (Figures 6&7).

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7 Typically livestock farmers with roaming animals

8 Farm productivity and enterprise approach may also cause differentiation on same farm size
Figure 4  % size group holdings according to farm structure in Trinidad and Tobago- 2004

Figure 5  % Size group according to farm structure Jamaica 1996

Table 2   Census of Agriculture 2007- persistent fragmentation towards smaller size farms - Jamaica

<table>
<thead>
<tr>
<th>Lands under cultivation by size group</th>
<th>Number of farms by size group of farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>under zero ha.</td>
<td></td>
</tr>
<tr>
<td>Under 1 ha</td>
<td></td>
</tr>
<tr>
<td>1 and under 2 ha</td>
<td></td>
</tr>
<tr>
<td>2 and under 5 ha</td>
<td></td>
</tr>
<tr>
<td>5 and under 10 ha</td>
<td></td>
</tr>
<tr>
<td>10 and under 20 ha</td>
<td></td>
</tr>
</tbody>
</table>

9 Under 0 hectare= landless farmers
<table>
<thead>
<tr>
<th>Size group of farms</th>
<th>Area occupied</th>
<th>% 1996</th>
<th>% 2007</th>
<th>% change</th>
<th>Size group of farms</th>
<th>% of all farms</th>
<th>Cumulative % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Under1 ha</td>
<td>66.4%</td>
<td>78.7%</td>
</tr>
<tr>
<td>Under1 ha</td>
<td>47,712</td>
<td>15</td>
<td>43,459</td>
<td>11</td>
<td>9.79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to under 5 ha</td>
<td>86,011</td>
<td>26</td>
<td>101,977</td>
<td>25</td>
<td>-15.66%</td>
<td>19.1%</td>
<td>97.8%</td>
</tr>
<tr>
<td>5 to under 50</td>
<td>50,783</td>
<td>16</td>
<td>67,723</td>
<td>17</td>
<td>-25.01%</td>
<td>2.0%</td>
<td>99.8%</td>
</tr>
<tr>
<td>50 to 200 +</td>
<td>141,303</td>
<td>44</td>
<td>194,275</td>
<td>48</td>
<td>-62.82%</td>
<td>0.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>325,810</td>
<td>100</td>
<td>407,434</td>
<td>100</td>
<td>-20.03%</td>
<td>100%</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

Source: Jamaica Statistical Institute – website

![Number of holdings by size (1996-2007)](image)

Figures 6  Source Census of Agriculture –Saint Lucia 2007

![Area of holdings by size (1996-2007)](image)

Figure 7.  Census of Agriculture Saint Lucia 2007

3.4 **Age distribution on the farm**: Age distribution according to farm size was not available at the sub-regional level. Age distribution is shown for all farmers across
eleven of the countries (Figure 8 below), by changes over the last decade in Saint Lucia (Figure 9) and by gender in Saint Kitts and Nevis (Figures 10).

![Figure 8](image) Age distribution all farmers

![Figure 9](image) Age distribution of holders in Saint Lucia

While the collection of the data did not make a distinction according to farm structure the high percentage of small farmers in the sub-regional farm population would suggest that a large number of small scale farmers are in the age range 41-55 years.

A 1999 survey of small farmers in the OECS reports 1.0% of farmers were under 25 years of age, another 32% between 25 and 40 years of age, 39.3% between 41-55 years of age and 27.7% over 55 years of age. The age distribution in terms of the 40-55 years age small farmers observed at the sub-regional level is reflective of the country specific data as shown in St Kitts and Nevis as well as in data from Antigua and Barbuda. The more even distribution was noted for Saint Lucia as was the complete absence of female youth under 35 years from the farm sector in St Kitts and Nevis.

![Text box](image)

3.5 Gender distribution in small scale farming: The data on gender distribution is not specific to small farming however based on the large proportion of farmers who fall into this category both at the sub-regional level and at country level it is reasonable to assume that Figure 11 below is also representative of small farming. Farming/small scale is a male

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10 11 countries

11 Source Census of Agriculture 2007
dominated activity as not more than about 30% of the holders are female. It is worthy of note that in Guyana female representation is relatively lower. Census of Agriculture data from Saint Lucia reveal that percentage of female increased in the period 1996-2007.

![Graph showing percentage of persons engaged in farming activities by sex for various countries.]

Figure 11 Female and male holder distribution across 7 countries of the sub-region

![Bar chart showing percentage of female holders from 1996 to 2007.]

Figure 12 Change in female holders in Saint Lucia.

Figure 13 Source Census of Antigua and Barbuda 2007

Across the sub-region females are involved in both livestock and food crop activities but mostly in food crops. A 1999 Small Farmer Study in the OECS reports that on the farm women are primarily involved in weeding, planting and harvesting. However across the sub-region females are valued their role in the rural urban fresh produce marketing and making fresh food available at lower prices to poor urban households. By extension females are very active in price setting in the village and urban markets and in establishing mutually beneficiary smart clientele relationships with housewives and urban middlemen. These relationships ensure that

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12 Study on Small Farmer Participation in Export Production OECS/EDADU/FAO
females seldom have to make the long trips back to their rural communities carrying unsold produce. Females are also well recognized in the sub-region for their involvement in initial processing and marketing of artisanal fisheries and in backyard gardening.

**3.6 Tenure arrangements:** The data reveal that at the sub regional level about 56% of farms are owned by the holder another 26% is family owned, 10% rented or leased and the remainder operated under various kinds of local or common law arrangements including squatting on private or government land. Where the data is available there is a notable trend towards family ownership. The shift in land tenure to family ownership has been observed in farms under two hectares in Saint Lucia and under one hectare in Jamaica. It is reasonable to assume that shifting land towards family ownership might not serve the interest of keeping land in food production. In such situations there could be negative implications for household food security in farm families. There is also evidence of an increase in the number of landless farmers. This number almost doubled in Jamaica to reach 12% of farmers as recorded by the 2007 Census, increased by 1% in Saint Lucia and is very high in St Kitts and Nevis.

**3.7 Income from small scale farming:** Data was available from two countries in the sub-region. Inquiries revealed that this kind of data is not readily available. This is another indication of the poor understanding of the socio-economic situation of small farmers.

![Figure 14](image)

**Figure 14** Changes in % income contribution to farm household in Saint Lucia 2007

In Saint Lucia the percentage of the farm population generating less that 25% of household income from their farming activities increased between 1996 and 2007 to well over 50%. In the case of Antigua and Barbuda a similar pattern was observed with 59% of farm household generating under 25% of income from farm activities (Figure 15). Small farming in the farm structure 0.0-0.01 (landless) to 10.0 acres (five hectares) revealed the pattern of contribution to household expenditures in Antigua and Barbuda (Figure 16 below). Based on other data, within the age group 15 years to 35 years, 88% of this group derived less 25% of income from farming. While this age group represents only 8.4% of total farming population in this country earlier information in document highlighted the low participation of youth in agriculture.
Figure 15 Income contributions to household expenditure relative to all small farm holdings -2007

Figure 16 Income contribution to household expenditure based on acreages farm structure

4.0 **Access to credit and to agriculture insurance**: Access to agriculture credit and to deficient risk management are identified among the nine key binding constraints to agriculture in the sub-region. A mechanism to improve access to agriculture risk insurance has been under discussion at the level of the COTED. The conclusion is that such a facility will require substantive public financing. In the meantime small farmers (all farmers) continue to face major losses from weather related risks and from praedial larceny. Small farming experience serious challenges in efforts to access credit and

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13 0.0-0.01 represent landless farmers
there is virtually no access to agriculture insurance except for traditional exports. The main sources of lending to farmers are commercial banks (38.5%), non-government organizations (38.5%), agriculture credit banks and development banks 7.7% and others including credit unions (15.4%). Problems cited include: time lag in disbursement, inappropriate loan structuring, inadequate technical expertise and lack of agriculture insurance other suitable form of collateral. Many farmers including small scale farmers use commercial bank loans which are usually short term and more expensive. Farmers use credit mainly for purchase of greenhouses, irrigation systems and pumps, farm vehicles; small fishing equipments and for small livestock and poultry rearing facilities.

Disaggregated data for credit to small scale farmers is not available however annual loans to the sector by the Agriculture Development Bank (ADB) in Trinidad and Tobago increased by just over 50% in the period 2008-2011\textsuperscript{14}. Over the same period there was a decline by 4% in annual loans from the commercial banks. In the case of Jamaica the annual value of loans issued in 2007 by the Development Bank of Jamaica\textsuperscript{15} increased by 59.9% in 2011 over the year 2007. Domestic crop farmers usually receive the largest share of annual loan allocation by the Jamaica Development Bank. Loans also available for livestock sector (pigs, sheep, and goats), and beekeeping and agro-processing.

5.0 Farming systems: Most of the traditional practices in small farming still exist. These practices include various forms of mixed systems using crops, livestock and freshwater fish. Cropping systems include a wide range of food crops in rotation cropping, intercropping, and agro-forestry. Some farmers practice organic farming or a form of it but which often does not qualify for certification. Nearly all farms use agri-chemicals for improved soil fertility although some use mulch and compost which also conserves soil water. Integrated pest management is practiced but nearly all small farmers use some form of pesticide. Livestock rearing is mostly in pastures but there are sheltered practices for goats and pigs.

6.0 Farming practices and technologies: Small farmers use good agriculture practices including irrigation and improved seed and seedlings available from well managed seedling nurseries but there is much room for improvement in the numbers of farmers with such privileges. Good veterinary services are usually available through the Ministries of Agriculture. Sustainable practices include rainwater harvesting, mulching, the use of micro-irrigation systems, integrated pest management with training through farmer fields school approach, integrated soil nutrition practices and soil conservation measures.

\textsuperscript{14} ADB Business, Vol #1, January March, 2012

Central Bank of Trinidad and Tobago-Annual Economic Survey 2011

\textsuperscript{15} Ministry of agriculture Jamaica data bank- sourced from the Development Bank of Jamaica
With the growing incidence of intense hurricanes farmers have been exposed to selected good disaster risk management practices in vegetable growing, fruit tree crop production, forestry and fisheries. Modern technologies in production and marketing include, greenhouse technology and the development of agri-food chains for market access and to expand employment chains.

7.0 Challenges identified by small farmers:

- Access to irrigation when necessary (more than 60% of farmers are rainfed and many practice various levels of rainwater harvesting).
- Market information, contracts and better prices.
- Access to affordable credit and agriculture risk insurance.
- Access to production information.
- Assistance in the management of pests and diseases,
- Access to better quality land for farming, and more productive labour (estimated 60% of small farmers use labour but it is not clear to what extent and under what conditions).
- Access to or partnerships with organizations that provide training, production information and assistance in managing pests and diseases.

8.0 Main policies and strategies and projects

The main sub-regional policies, strategies projects include:

- Common Agriculture Policy (2010)
- The OECS Agriculture Policy and Revised Plan of Action (2011)
- St Georges Declaration on Environmental Sustainability in the OECS (2003)
- Strategic Action Plans for Sustainable Land Management
- Caribbean Invasive Species Working Group
- PROPEL funded by CIDA under Canada for Hunger Foundation
- The IICA/CARICOM/CARDI Program under the 10th EDF
- The Regional Youth Policy on Agriculture
- CARICOM/IFAD cooperation to provide support in microcredit with provisions for support to the social component of the food and nutrition action plan.
- CRFM initiative under the ACR-EU (CTA) Agreement to position and engage fisher folk organizations in the implementation of the Common Fisheries Policy.

9.0 Main farmer associations, institutions and cooperative

- Caribbean Agri-business Association (CABA) and national Bodies
- National Agriculture Marketing and Development Company of Trinidad and Tobago (NAMDEVCO).
- Windward Island Farmers Association (WINFA)

16 Work Plans under the Caribbean sub-region Partnership for Sustainable Land Management
✓ Caribbean Farmers Association Network (CaFan)
✓ Caribbean Network of Fisherfolk Organization (CFNO)

Figure 17  Small farm practices across the Caribbean sub-region
Solar dried fruits

Dehydrated fruits and vegetables

Agro tourism

Other activities of small farming in the sub-region
Innovative Financing of Small Scale Farming: The Role of Credit Unions

Melvin Edwards-
Former President of the World Association of Credit Unions

The presentation highlighted the role of credit unions, how they function, the challenges experienced with lending to small farmers, innovative approach to credit union lending and areas to be improved for better collaboration with small farming.

Introduction

Role of credit unions: To improve the lives of individual families, communities and countries around the world by providing affordable and secure financial products and services
Many credit unions exist to further community development or sustain international development.
Credit union systems vary significantly in terms of total system assets and average institutional asset size - ranging from volunteer operations with a handful of members to institutions with several billion dollars in assets and hundreds of thousands of members.

Challenges experienced with lending to small farmers

Credit unions are often challenged to find suitable terms of agreement with farmers because of the risks and uncertainties associated with small farming.
Some of the risks identified include praeidial larceny, risks associated with natural disasters such as hurricanes and the other emerging risks associated with climate change, uncontrolled pests and disease, limitations on land tenure and under capitalization of agri-enterprise.
There is also the traditional lack of accountability displayed by borrowers in small farming and the absence of a support base from a cooperative approach.
Unfavorable situations are also created by gluts from time to time, a limited business approach to the farm, the small size of the farm and the weak capacity to cope in the domestic markets.

Suitability/adaptability of credit unions

Credit unions are prepared to lend to small farmers whose savings are adequate. Farmers may borrow small amounts for provident or productive purposes, and the credit union will facilitate flexible arrangements to meet individual needs. The economic benefits are distributed proportionally according to each member’s level of economic interest in the institution (Permanent Shares). Lack of tenure is a major constraint to lending. Accordingly credit unions continue to engage with Ministries of Agriculture to improve collaboration in the areas to develop
mechanisms and methodologies to establish standards to support lending to farmers.

Examples of innovative lending in OECS

- Financing to vendors in Grenada who transport food from the rural areas to the markets both local and overseas, making the crucial link between farmer and small business persons.
- Merger of rural and urban credit unions in Dominica, giving greater access to persons in the agriculture sector and giving loans in specialized areas.
- Public policy supported innovation in St Vincent and the Grenadines to establish a financial consortium to encourage the development of SMMEs resulting in a cooperative owned by nine credit unions, committed to providing access to a variety of services, including insurance, loans and financial education for farmers, agro-processors, vendors and generally members involved in micro and small business enterprises.

Opportunities for future Collaboration

In order to improve and enhance opportunities for future collaboration with small farming the following criteria were presented as desirable.

- Establishment of specific policies which would address a number of issues in credit and small farming.
- Land policy with focus on land tenure for small farmers.
- Creation of avenues for development of scientific, technical and technological systems in agro-processing, marketing and networking.
- Improved collaboration to access the finances of external agencies for specific activities aimed at improving community livelihoods.
- Pooling of resources by cooperatives to conduct research and feasibility studies in order to introduce new products and services most suited to members.
Government of Antigua and Barbuda Policy of Assistance to Small Scale Farmers

Jedidiah Maxime
Director of Agriculture, Antigua and Barbuda

The Government of Antigua and Barbuda has made a number of policy supported provisions to promote small farming and agro processing in the country.

- In respect of farm activities policy support includes subsidized land preparation, concessionary rental for land in agriculture and duty free concessions. The duty free concessions include vehicles, equipment, agro-chemicals, seeds and other inputs used by farmers. Farmers also benefit from special water utility rates and extension services for maintenance of ponds and dams.

- In respect of agro-processing this activity is carried out mainly by women in Antigua and Barbuda. Currently 40-60% of food produced goes to waste. Antigua and Barbuda has regulations governing quality control systems and nutrition labelling.

The agro-processing subsector experiences a number of bottlenecks including the following:

- Inadequacy in raw materials and seasonality in availability of the commodity.
- Lack of technology and modern packaging practices. Most of the practices reflect low technologies associated with traditional practices.
- Absence of linkages with larger scale processors that could assist in improving cheaper access to inputs and provide support in the marketing of the products.
- Good examples such as the sea moss industry in Saint Lucia and Dominica are not evident in Antigua and Barbuda.

The proposal is for consideration be given to a cooperative approach to agro processing with a view to creating the economies of scale required to access inputs at lower cost and to modernize the packaging used. Linked to this would be the development of value chain business linkages to small farming for the production and reliable supply of selected commodities.
The presentation highlighted the challenges of the vegetable industry in Barbados and provided information on the plans by the Barbados Union of Farmers to access developmental support.

**About the Barbados Union of farmers:** The Union was established ten years ago with the aim to bring more professionalism to agriculture and others within the sector. Members are committed to sustainable development of the sector and to improvement in the quality of life of Barbadians through the consumption of fresh healthy foods.

**Constraints in the vegetable subsector:** The sector is constrained by limited domestic market, unstable prices and business relationship and high incidence of farmers entering and exiting the industry. Productivity is low and confidence and trust is less than desirable in the sector.

**Proposed technical solution includes the following:**

- Develop cruise and grocery value chain project with a focus on market access, competitiveness through knowledge transfer, institutional strengthening and dissemination of best practices.
- The project foresees increases in the demand for vegetables by the cruise lines and will support farmers through the development of a crop forecasting analysis system, farmer buyer dispute resolution processes and value chain upgrading. Farmer field training is foreseen, supported by the engagement of a crop specialist.
- The project will also focus on food crops for the domestic market with a view to contributing to food security and stabilizing prices through import replacement in selected food.
The Union will be strengthened through the establishment of a better Governance structure and the training of farmer leaders. Emphasis will be given to improvements in knowledge management and best practices through a dedicated communication strategy including ICT Platform for farmers and farmer training in ICTs.

Financing the Project: The proposal foresees technical assistance support from development partners such as FAO and IICA and support from financing institutions under assistance such as the IDB-MIF Project as well as from local supermarket chains.
Role of Farmers’ Organizations in Marketing of Small Farmers Produce

Jethro Greene,
Caribbean Farmers Network (CaFan)
Coordinator

The Caribbean Farmers Network (CaFAN) is a regional network of Farmers’ Associations and Non-Governmental Organizations (NGOs) in the Caribbean. CaFAN’s membership spans farmers associations in countries across the sub-region, including: Antigua and Barbuda, Barbados, The Bahamas, Belize, Dominica, Grenada, Guyana, Jamaica, St Kitts and Nevis, Saint Lucia, St Vincent and the Grenadines, Trinidad and Tobago and Suriname.

The major focus of the network is to foster linkages, training and information sharing amongst Caribbean farmers so that they are in a better position to respond to the key challenges facing the agricultural sector in the Caribbean. This is achieved through training, advocacy, study tours and regional planning sessions.

CaFan has been actively involved in increasing communication strategies for exchange of ideas experiences, resources, information and technology between and among farmers associations in the Caribbean in a manner that impacts positively on the competitiveness and sustainability of the agriculture sector. There is a strong focus on capacity building, mobilization of financial and technical resources and strengthening linkages among farmers.

In further support of marketing CaFan is continuously and actively involved in the policy formulation discussions at the level of CARICOM to ensure that the interest of the small farmers is protected in all the projects and programs. The main focus is to increase local production and marketing of fresh food to satisfy food security and to generate income for farm families who are highly dependent on farm activities.
In respect of food security CaFan focuses on the marketing of a list of selected commodities (roots and tubers, fruits, vegetables and condiments). These commodities are selected on the basis of the food basket requirements of respective countries.

CaFan affiliated producers have benefitted from training in good agricultural practices, leadership, management, group development, risk management, post-harvest handling and marketing. In this regard CaFan through its agribusiness arm ECTAD has facilitated negotiations to obtain higher and guaranteed market prices for farmers in sub-regional and export markets. In an effort to increase the income from farm activities CaFan is facilitating processes that reduce the need for middlemen in the domestic food chains thereby creating a situation where the entire income flows from the distribution chains remain in the hands of farmers.

CaFan adopts a sub-regional approach to marketing but is also convinced that no one size fits all. A strong focus on cluster approach has facilitated benefits such as the establishment of buffer market credit arrangements with Credit Unions. This arrangement has helped to remove the problems faced by small farmers with delayed payments. While the cluster approach is a priority for CaFan, individual farmers are equal beneficiaries in the programs.

CaFan identifies the urgent need for implementation of policy to improve access of small farmers to economically viable farm sizes. The Network would like to see improvements in the extension systems in areas that can assist farmers to build capacities in business approach to farming through the development of value chains.

Based on their experiences CaFan farmers and farmer organizations have been accepted for participation in several sub-regional projects with marketing components including the All ACP/CARICOM Commodity project, FAO/CARICOM Regional Food and Nutrition Security Programme and more recently the Canadian funded project Promotion of Regional Opportunities for Produce through Enterprise Linkages (PROPEL). Under PROPEL the Canadian Hunger Foundation will work with CaFan through Governments, to increase the quality of fresh fruits and vegetables and help link producers with buyers such as regional grocery stores and cruise lines. Participating countries include Jamaica, Trinidad and Tobago, Saint Lucia, Grenada, St Vincent and the Grenadines, Dominica, Barbados and Guyana.

In the above project CaFan will focus on youth and women and value chains in sweet potato.
Public Policy Support for Small scale Farming along the Value Chain
The case of Trinidad and Tobago

Vassel Stewart
President
Trinidad and Tobago Agribusiness Association

Trinidad and Tobago Agribusiness Association (TTABA) is a “for development not for profit company”, owned by its current 33 member associations drawn from every level of the agri-business sector. The company cannot disburse dividends/profits to individuals but must reinvest its profits to further the objective of actively leading the development and expansion of the agri-business sector in Trinidad and Tobago.

The company’s stated vision is to be the acknowledged leader of an innovative, competitive, sustainable and expanding agri-business sector and one of the main drivers of economic and social development in Trinidad and Tobago.

TTABA’s mission is to lead the sustainable expansion of the agribusiness sector in Trinidad and Tobago through the development of strategic agricultural commodity industries and the provision of innovative agribusiness services and products to stakeholders along the value-chain. Its core business is the provision of technical services for the development of selected agricultural commodity industry value-chains and the provision of high quality agro-processing services. Public policy support is provided in the following areas:

_support for a National Agribusiness Development Program
  ✓ Government of Trinidad and Tobago provided financial support to TTABA for the development and implementation of a National Agribusiness Development Programme (NADP) aimed at moving ten agricultural produce into industries based on the development, production and marketing of a range of new value-added products.
  ✓ R&D activities on cassava, sweet potato, pumpkin, hot pepper, papaya, pommecythere, coconut, rabbit, selected herbs and selected vegetables

_support to develop the Program include:
  ✓ Public private sector partnership agreement
  ✓ Farm infrastructure for large and small farms.
  ✓ Unused lands for farming and small farmers and agri-entrepreneurs encouraged to form associations and cooperatives
  ✓ Building agro processing capacities among farmers associations and other agri entrepreneurs.
Policy measures include incentives and subsidies, expansion of access to labour, support to control praedial larceny\textsuperscript{17} and marketing infrastructure and marketing information system strengthened. Access to affordable loans, support to R&D, flood compensation and trade policy are the other policy measures.

A comprehensive program was developed for nine of the commodities. The program included support to commodity farmers and identification of market opportunities for value-added products for the nine commodities. Pilot agro processing facilities were established to produce, commercially evaluate value-added products and divest the products to the private sector. Commercial production of semi-processed raw material for local food manufacturing and food service sectors is also being undertaken.

Project expectations over 5 year period are as follows:
- Domestic food production increase by 25\% with participation of 7000 small farmers and small farmers association.
- Increase farm family income and profitability of enterprise.
- Increase employment in rural areas.

Highlights of Achievements
- Formal arrangements in place to allow the range of stakeholders from Directors through farmers to consumers to participate in the planning and development of the industries. The stakeholders include the Board of Directors, 15 farmers associations, nine commodity association and two thematic associations.
- Introduction of new varieties and production technologies including production of clean planting material, mechanization of planting and harvesting operations for root crops.
- Major increase in farm productivity of commodities ranging from 35\% to over 120\%.
- Over 40 new value-added products developed including frozen staples, vegetables, meat sauces, juices and bakery products are now in retail institutional and food manufacturing markets.
- Cassava, sweet potato, coconut, pawpaw, pumpkin, hot pepper and sweet corn production at the level of supply capability to invite private sector interest for industry development.

\textsuperscript{17} An estimated 18\% of farmers produce (fish, livestock and crops) are stolen annually in the sub-region.
Role of Cooperatives in Production – The Jamaica Experience

Alvin Murray
CEO
Christiana Cooperative Potato Growers Association

The objective of the Christiana Cooperative Potato Growers Association (CCPGA) is to improve the life of its members, by utilizing their united funds and efforts for the better production, processing, and marketing of potatoes and/or any approved product, along co-operative lines and to perform services in their interest in the most sustainable and economical way.

The goal of the Association is community renaissance through diversification and technology. Currently the cooperative services over 4000 active members in seven different clusters across five parishes in Jamaica.

Members are provided with sustainable oriented services as described below which are expected to enable them to make a profit.

Primarily services support production and marketing of potatoes. Currently a selection of other crops is being addressed within the program of the cooperative. Collectively cooperative services include a supply outlet for agri-inputs, promotion of greenhouse technology for potatoes and other selected vegetable crops, seedling production, management of pests and diseases, product certification and value addition.

Promotion of greenhouse technology has resulted in the following benefits to members:

- Co-operative farmers use five to ten times less land.
- Technology has sustainable spinoff as there is no need to use trees for stakes and also less pesticide use is necessary.
- Increase yields have been recorded, the quality of yields is better and production is year round.
- Potatoes have longer shelf life.
- Risks are lower.
- Use of water and fertilizers improved.
- Increase labour efficiency achieved.
- The practices are considered female friendly as all the labour required is under cover of the greenhouse.
Assisting farmers with seedling production. The cooperative assists farmers with good quality seedlings through tissue culture production.
The cooperative promotes efficient use of water both in the application of greenhouse technology, in the selection of potatoes as the crop of choice (highest calories return per litre water) and in rainwater harvesting.

![Chart showing calories produced per litre of water used for different crops](chart.png)

![Rainwater harvesting in ponds](ponds.png)

![Water use efficiency by introducing tires in greenhouse technology](tires.png)
Promotion of innovative environmentally friendly practices

Using chopped waste for added porosity reduces pollution from solid waste

Growing ginger in old tires while reducing pollution from solid waste

Soilless production in greenhouse another environmentally friendly practice demonstrated to farmers
Diversification Services provided include:

- Facilitating tissue culture using slips of selected varieties of sweet potato, moving sweet potato production from 4000-8000 kgs per hectare or 0.56 kg for every tissue culture slip planted.
- Strawberry production for import substitution
- Production of foods with therapeutic values
More services provided by the cooperative

- Management of pests and diseases

- Quality control and certification programs for membership in collaboration with the Jamaica Bureau of Standards
Next steps for the cooperative

- Searching for new varieties with a preference for high yielding, early maturing, high dry matter content, tolerance to drought, heat, salt tolerant and resistance to pests and diseases.
- Value addition of the main root crops growing in the area: yams, sweet potato and cassava

Facilitating collaboration and cooperation

Partners include

- IICA which provided the initial funding for the tissue culture project that blossomed into a CARDI/CFC Planting Material Project and CDE/ALL ACP Temporal Immersion Pilot Project
- National and sub-regional organizations
- International organizations such as ACP, EU, FAO, ITC, CFC, CDE, CTA, USAID, CIDA.

Constraints experienced by farmers yet to be resolved were listed as:

- High energy cost, lack of irrigation, lack of capital, weaknesses in extension service, inadequacy or complete absence of agriculture insurance, inadequate access to mechanization, no outlets for value addition and high level of indebtedness of the farms.
Summary Discussions

The main issues which were raised in the discussions were as follows:

1. **Concept of Family Farming and relevance to small farming in the Caribbean sub-region.** The main point of the discussion was that the definition of small scale farming in the Caribbean sub-region and family farming were not interchangeable. Use of labour on the farm is common across the sub-region and varies across the different farm structures under two hectares. The opinion of the workshop participants was that small farmers who use only family farms would be those in the land size category of 0.275 hectares and closer to 0.15 of a hectare. Except for the smaller economies of the OECS the application of the definition of family farm agreed to at the Conference would eliminate an estimated 60% of small scale farmers in the sub-region. A further complication is that brought about by two of the practices common to the sub-region among small scale farmers (a) the use of (*day fi mi day fi yu*)18 and (b) the move towards clusters of farmers. In this age old practice neighboring farmers and groups of farmers provide labour at no wage to each other in areas such as land preparation, planting, harvesting or other activities such as preparing soil conservation banks on hillside farms. Clusters have provided a more organized and efficient form of this practice as small scale farmers in the same cluster will mostly be managing the same crops with the similar quality control practices.

2. **Policy support to provide better socio-economic and gender analysis in small farming from the Census of Agriculture data.** Current heterogeneity in small farming is a key constraint to policy and programming for small farming. Currently the published data is primarily focused on farm structure, on population of holders and on quantitative fragmentation in small farming. As shown from data available from Antigua and Barbuda Census of Agriculture, since 2007 raw Census data may contain important socio economic data by household and by farm structure, role of women and youth participation among others which if available elsewhere is not being analyzed and published. This data need to be captured and analyzed in order to assist in the identification and separation of homogenous groupings of farmers within the farm structures. Where it is not available it needs to be collected perhaps using the process followed in Antigua and Barbuda.

Participants recognized this urgent need for assessment of the data to determine what additional socio-economic data and socio-cultural data is required in the context of family farming. This approach will create a platform from which to agree on a strategic program for family farming as well as a balanced view on the cost / benefits to small scale farming in general as public and private sector resources to small farming is already limited. In fact there were concerns that whatever programs are designed should be carefully crafted so that opportunities are not missed for all small farming to benefit from this important FAO regional priority.

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18 Different local expressions across the sub-region.
Against the foregoing participants wholeheartedly agreed that the declines in the contribution of small scale farming suggest that a common purpose to remove further risk to the livelihoods of farmers at the lower end of the farm structure must be pursued. However the results foreseen for family farming should not create a situation where the FAO focus and technical support is diminished on small farming at the upper end of the small scale farm structure including those marginal groups who potentially are ready for early transition into higher incomes and food security with minimum technical assistance.

3. Integration of nutrition indicators and social safety net objectives in farm family planning. Workshop participants discussed the need to integrate small scale farming and the concept of farm family into social safety net programs and to establish results that target not only quantitative outputs such as food production but that include nutrition sensitive indicators. Models of collaboration with agriculture exist in Jamaica in the Social Investment Program.

4. Issues of land and water: Workshop participants gave high priority to the need to address issues of land for small farming. Countries with comprehensive land use policies must be supported to take decisions on the establishment of land banks prompted by technical support to prepare a strategic investment plan to encourage youth under 25 years to participate in agriculture. The fact that parents are deliberately steering their children away from the farm was acknowledged. Moreover land titles or any other collateral are being used to access loans to send children for an education away from the farm and land ownership is moving towards family tenure. These would suggest that there is no generational focus on farming as a career. Along with land must provided capacity building and public investment in irrigation for small farms with a strong focus on public infrastructure for rainwater harvesting and water markets. These might require policy considerations and development financing. Because they have strong implications for sustainable rural development and poverty alleviation these issues need to be addressed with urgency. Participants also cautioned that land bank packages in small farming should not be exclusive to youth.

5. Farmer organization (clusters, cooperatives and associations). The important role of farmers’ organizations was acknowledged. Attention was drawn to the formation of clusters for value chains development, and for capacity building. Questions were raised as to how the family farm concept could be made to embrace the cluster approach and that perhaps a policy position need to be taken at sub-regional level to resolve the issue. Clusters and other forms of organizational approach were also considered necessary for sustained markets access. It was felt that perhaps more work need to be done in terms of identifying clusters beyond market access. There could be other considerations such as the role of clusters in the improvement of savings in small farming, access to social safety nets and pensions for farmers. During this discussion there was further support for up scaling or refocusing of the outputs of the Census of Agriculture to assist in small should be given consideration for better data collection. Some participants raised questions such as what exactly is a small farmer and whether or not the current policies reinforce the situation of small farmers or create opportunities for transition from one level to another. Some participants felt that there was no data to determine whether or not the implementation of small farming policies have resulted in sustainable outcomes at family, or community level. Others felt that there was no evidence that justification for resource allocation to small farm development program was based on any consideration other than farm size?
6. Better understanding of the role of women gender issues. Participants felt the contribution of females in the sub-region is still not fully captured in reviews of small farming. Culturally there is a strong recognition of female dominance in rural urban domestic marketing and by extension the setting of fresh food prices, even though males may be observed transporting the produce to the market place. There were concerns with the fact that females were listed mainly as farm workers involved in weeding and harvesting and especially most of the data show female holders below 30% compared to males. The role of females in supplementing household food through backyard gardening, a growing source of household food in farm and non-farm families, as well as the innovative utilization of food in the home is also underplayed. One conclusion was that females in small farming have a multifunctional role in food production, marketing and utilization described as important, but not fully understood because of the way data is collected and hence this role is not effectively supported.

7. Youth and agriculture. The low participation of youth in agriculture is cause for concern. With the declines in returns from small farming it might require substantive public and private sector investment beyond the usual two year period of project life to establish youth confidence in the sector sufficient to attract young people. Participants foresee players outside the sector both in public, private and educational/vocational institutions, buyers and volunteers (retired and experts in agriculture) becoming involved. It’s more than buying a greenhouse for a youth.

8. Appropriateness of the TTABA model for the Caribbean sub-region: The TTABA model was considered a success. However there were concerns that the cheaper energy cost in Trinidad and Tobago may have provided an advantage in the success of the agro-processing component of the agri-business chain. Still the comprehensiveness of the value chain development is a model for examination and replication with the necessary adjustments based on the resources of the country.

9. Role of credit unions in lending for investment and for risk management in agriculture: The criteria for lending by credit unions were not significantly different from the other lending institutions used by small farmers. The credit union identified the normal challenges presented by these other institutions. On the other hand the models from St Vincent and the Grenadines and from Grenada should be beneficial to those small farmers who satisfy the requirements for lending by Credit Unions as these models serve to build the loan portfolios for small farmers’ membership. Participants also felt that credit unions encourage savings which is a major weakness in small farming.
Conclusions and Recommendations

CONCLUSIONS

Conclusion 1.

- There has been progress in food and nutrition security in terms of absolute numbers of food insecure households in the sub-region in spite of unacceptably high food importation and an increase in the last decade in the number of landless farmers and farmers operating below the 0.5 hectare farm size.

Conclusion 2.

- Considerations need to be given to modification of the definition of family farm agreed to at the FAO Regional Conference of LAC in order to permit with appropriate limitations, the use of labour other than that of the farm family on the farm. In the context of the Caribbean the exiting definition of a family farm would be satisfied only at the lowest end of the farm structure of under 0.5 hectares and closer to 0.15 hectare. Where disaggregated data is available at the country level this size farm is not well defined in the Census of Agriculture data and where it is defined represents 1% to 10% of the small farmers in the smaller states of the OECS. On the other hand according to the data reviewed 90% of Caribbean small farmers on farms 10 hectares and under, operate on farm two hectares and under. To eliminate this large grouping of farmers on the basis of the use of hired labour would be to deny the majority of Caribbean small farmers the opportunity to participate in the programs of an important strategic objective designed to impact household food security and rural livelihoods. Moreover the loss of ability to affect household food insecurity and livelihoods from farm activities would impact many households who are already vulnerable owing to low income generated from farm activities.

Conclusion 3.

- Small farming in the Caribbean is fragmented. This tendency continues with a steady increase in the number of holdings at the lower end of the farm structure and with increasingly more farm households operating as landless farmers. Data for farm family planning could be improved to serve policy analysis and planning by introducing measures for the Census of Agriculture to include data on the socio-economic conditions and capacities of the families on these fragmented holdings. In the absence of this type of data the extreme heterogeneity in the small farm population of the sub region is recognized but not sufficiently understood to influence policy, programs, projects, capacity building and incentives to permit transitioning to another level of food security or welfare.
Conclusion 4.

- Caribbean small scale farmers experience serious constraints emerging from land and water issues some of which have been made more challenging by fragmentation of small farms. The delay in the establishment of land banks has not helped and this matter needs to be addressed with urgency in order to pave the way for investment in strategically placed public/private infrastructure and intuitional capacity building in areas such as irrigation including rainwater harvesting and production and marketing services for agri-chain development in rural communities.

Conclusion 5.

- Small farming must find new partnerships through policy and programs in social safety net projects with nutrition sensitive indicators and in public policy supported incentives based market arrangements, in order to increase access to production resources at farm level and to promote consumer interest in locally produced foods. The current low contribution to farmer household income would suggest that small farm food production is losing its significance to rural livelihoods and household food security.

Conclusion 6.

- There are no clearly identifiable segments in the domestic market for small farmers. In most of the countries the data show that a farmer sells in all the markets in an effort to secure an income. While this might reduce risk at current production levels it is not a strategy to mange organized market led production with growth. All indicators are that some small farmers have adopted technologies and practices to support reliable supplies of fresh produce to the domestic markets especially vegetables, fruits and rootcrops. However the high importation of some vegetables and fruits coupled with the strength of domestic supermarket chains and wholesalers present strong competition to small scale farming. It was the view that small scale farmers can only respond with the support of innovative public institutional inputs and organizational farmer strategies such as cluster formation and cooperative approaches.

Conclusion 7.

- Access to credit for on-farm investment is another constraint in small farming due to the limitations on savings or other type of acceptable collateral. The use of land titles is under threat as tenure shifts to family owned land. There is discontent by lenders with lack of accountability among agriculture borrowers, lack of agriculture risk insurance and the limited success at attempts on the part of farmers and farmer organization to establish buffer market credit arrangements with lending institutions and buyers. Small farmers also show more interest in access to agriculture risk insurance than in accessing credit for on-farm investment which may be suggesting a disinterest among small farmers to expand their production base or to invest in technologies to increase productivity and a stronger interest in simply to protect current assets.
Conclusion 8.

- There are some models for consideration for replication after further evaluation. They include commodity value chain models being promoted by Trinidad and Tobago Agribusiness Association, buffer market credit arrangements with financial institutions promoted by CaFAN, the farmers' market arrangements of NAMDEVCO and the cooperative model demonstrated by the CCPGA. These need to be considered for program/project packaging for promotion and dissemination in cooperation with development agencies with interest in small farming production and marketing chains and in partnerships with national farmers associations, commodity associations and rural NGO’s. There are also some production practices with varying measures of success deserving similar consideration. Some of these practices have already benefitted from substantial investment, though not enough, by small farmers, Ministries of Agriculture and FAO. These practices include greenhouse and protected agriculture, organic farming, fair-trade certification, integrated pest management, soil and water conservation and management, rainwater harvesting, integrated soil nutrition programs, farmer field school approach and value chain development and markets.

Conclusion 9.

- The entry into small farming appears to be closer to middle age. Small farm population comprises primarily males who are typically about 45 years old. The median for female holders is around 55 years of age. Young males under 25 are barely represented in small farming and young females are equally invisible in the system before 30-35 years of age. This would suggest that Caribbean small farmers do not grow or age into farming but instead they enter farming at a later age. Farming is therefore not seen as a career. This could be a reasonable explanation for the low contribution of farm activities to household income as by then the farm family would have been involved in other livelihood activities. Further support for this is that a 1999 small farmer survey revealed only 50% small farmers interviewed were recorded as full time.

Conclusion 10

- Females are less represented as holders but there is reason to believe the representation is biased by the definition of the holder or a cultural tendency for the female householder to recognize the male as the head of the house and by extension sole holder of the farm. In at least one country the number of female holders increased in the last decade. While no explanation was given it might be of interest to examine whether or not this is a trend in countries where there are significant declines in male farmers, subsequent outmigration in search of other livelihoods and how this changing role for females in farm activities might affect community and household food security.

Conclusion 11

- The heterogeneity in small farming is well recognized in the main sub-regional food and agriculture related policies. However technical support to improve small farm household
food security and livelihoods will require more in-depth work at the country level to determine, separate and package the heterogeneity into homogenous populations of small farmers. As this is also a poverty alleviation issue the criteria for creating homogenous groups must facilitate a methodology for coordination at sub-regional level to deal with the broad issues of poverty alleviation, declines in rural livelihoods and rural youth unemployment and the impact on youth crime and the socio-economic status of rural youth at the sub-regional. Social partnerships and a greater awareness of successful experiences in such partnerships at community levels and at the non-governmental institutional levels need to evaluated and means provided for dissemination, monitoring and evaluation especially in the populations operating under one hectare.

Conclusion 12

- Policy shaping and strategic approaches to raise production and incomes in small farming will require considerations in several areas including: public policy and private sector policy and incentives, role of production marketing and financing cooperatives, risk management in farming, capacity building and partnerships through the range of institutions. The methodologies and results agreed on will be challenged if the heterogeneity in small farming is not managed. This is especially so for those farmers operating at the lower end of the farm size, earning less than 25% of income from farm activities and whose socio-economic status is uncertain. At the same time it is important that a careful and innovative strategic approach is designed for the management of sustained linkages with growth, which must be established with those farmer households operating on farms two hectares to under five hectares range. These farmers are not defined as small farmers in the Caribbean and will not be eligible for consideration in these benefits foreseen in this priority area. However this group of farmers has emerged as most stable and most productive within the farming populations in the sub-region with the capacity to sustain and create pathways for transition of the small farmers. Public policy formulation must therefore give consideration to appropriate policy measures and incentives to encourage their economic linkages to small farming.

RECOMMENDATIONS

The conclusions of the Workshop on Small scale Farming in the sub-region are clear indicators that the set of recommendations proposed must include measures to improved data for planning for Caribbean small farmers to benefit from the strategic objectives to be pursued under family farming. In this respect data on the social and economic dimensions of the farm household is of major importance.

The recommendations below focus on short and medium term measures for formulation of policies, programs and actions to increase farm production and services from small farming/family farming in the Caribbean sub-region. The numbering of the recommendations does not necessarily respond to the numbering of conclusions as shown above. Except for recommendations 1 and 2 the numbers are not meant to reflect the order in which the actions should be carried out. However it is proposed that the actions are undertaken over the next four years.
Recommendation 1

- It is recommended that an early agreement is reached between the FAO Sub-regional Office in the Caribbean and the COTED to guide the way forward on the modification of the current interpretation of the definition of family farming in order to permit the participation of most of, or all of the small scale farmers in the sub-region, in the strategic programs of the LAC priority on Family Farming.

Recommendation 2

- It is recommended that as a second step measures be undertaken to manage the heterogeneity in small farming for objective results based planning. This will require cooperation from FAO to provide technical support and country level capacity building to undertake data collection similar to the process used in the 2007 Census of Agriculture of Antigua and Barbuda. The exercise will be specific for small farmers operating on two hectares or 5 acres of farmland and under. The intention is to gather information for a sub-regional policy position on small farming based on information on total capacity (socio-economic and socio-cultural status of small scale holders’ households and farm structure) and to identify homogenous populations based on the sum total of their qualitative and quantitative characteristics. In carrying out this exercise all data on farm structures below two hectares from the national Census of Agriculture conducted in the sub-region since 2007 should be examined in order to determine what additional data is required.

Recommendation 3

- It is recommended that consideration is given to public and private sector policy support and incentives to upgrade, strengthen, establish and promote the viable operations of effective institutions and mechanisms to provide value added packages to small farming. Good examples of successful models in the sub-region which should be replicated include modern production, research and development oriented cooperatives such as the Christiana Cooperative Potato Growers Association, the approach to farmers market by NAMDEVCO, market buffer credit arrangements pursued by CaFan and the commodity led value chain approach of TTABA/CABA.

Recommendation 4

- It is recommended that urgent consideration is given to the enactment of legislation to support the national land use policies that already address land banks, in order to support the measures necessary to make lands available for youth in agriculture programs and to clusters of small farmers positioned to benefit from centralized post-harvest facilities in selected agro-ecological zones. It is further recommended that the first phase of a sub-regional program to promote small scale irrigation and rainwater harvesting through public sector investment and farmer capacity building is integrated into the land bank package.
Recommendation 5

- It is recommended that in light of the declines in the contribution of farm activities to rural/farm households and according to socio-economic status and capacities the small farm householders participating in this program are innovatively linked to sub-regional and national projects providing social safety nets, ecosystem protection and poverty alleviation. The intention is to access funding sources for the development of sustainable rural livelihoods and food security projects, available outside of the small farming sector. Development aid for poverty alleviation, climate change and rural livelihoods and ecosystem protection normally managed by sub-regional agencies such as the Caribbean Community Climate Change Centre and the Caribbean Development Bank fall into these categories. The expectation is that funding from these sources will also bring to small farming additional exposure to the modern methodologies for coping with issues of poverty and climate change which are major concerns in small farming.

Recommendation 6

- It is recommended that at the national level a communication strategy is developed or strengthened to improve skills within the agriculture extension system to work in collaboration with the various types of farming organizations and lead farmers to adopt the farmer field school approach for capacity building and to disseminate information on production and marketing practices in areas such as organic farming, farm certification, integrated pest management, soil and water conservation including rainwater harvesting and development of market lead value-chain products and services. It is further recommended that Ministries with responsibility for Nutrition and the Ministries of Agriculture seek FAO technical cooperation to train extension officers and agriculture planners to identify and manage small farming projects with nutrition sensitive indicators and public relations component firstly to access non-traditional funding support and secondly and to promote locally produced food.

Recommendations 7

- It is recommended that measures are undertaken for gender analysis in small farming. The focus will be on indicators such as the unusual absence of females under 30-35 years as farm holders, the increasingly low declines in contribution of farm activities to household expenditures, growth in percentage of female holders in one country and the higher median age of 55 years of female holders. The analysis would also take into consideration indicators of bias in data collection on gender in small farm activities including in the Census of Agriculture, the preference of females for production technologies such as greenhouse, the changing role of female in household food and nutrition security and household incomes and the possible impact on the RFNSAP. It is recommended that the final output of the analysis would be in the form of national projects designed to strengthen the role of females in the four pillars identified in the RFNSAP and to enhance their capacities and socio-economic status by integrating them in the viable points of value chains.
Recommendation 8

- It is recommended that at the mid-term stage of this four year program a review of the major regional agriculture policies of the sub region is undertaken in order to update them with the policy interventions and program recommendations for family farming/small farming. This would be followed by the design of a sub-regional project to provide a set of recommended small farm models and proposals to establish the institutional arrangements and methodologies for dissemination of the models at national level to ensure outputs that correspond to the strategic objectives of the updated sub-regional policies. The project will also outline the monitoring and evaluation process for the continuous up-scaling of these models.

Recommendation 9

- It is recommended that the Multidisciplinary Team in SLC under the leadership of the Senior Policy Officer assumes responsibility for the monitoring and evaluation of the priority area. In this regard SLC will establish a Virtual Technical Team comprising one representative from each of the countries. Country representatives may in turn agree to establish their own national monitoring and evaluation technical teams comprising farmers and farmer organizations and other players. The Senior Policy Officer will be responsible for preparing TOR for the Virtual Technical Team.