



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*



**CARIBBEAN FOOD  
CROPS SOCIETY**

**45**

**Forty Fifth  
Annual Meeting 2009**

**Frigate Bay  
Federation of St. Kitts and Nevis**

**Vol. XLV  
Number 1  
T-STAR Invasive Species Symposium**

PROCEEDINGS  
OF THE  
45<sup>th</sup> ANNUAL MEETING

Caribbean Food Crops Society  
45<sup>th</sup> Annual Meeting  
July 12-17, 2009

St. Kitts Marriott & Royal Beach Casino  
Frigate Bay, St. Kitts and Nevis

**“Reality and Potential of Food Security and Agricultural Diversification in Small Island  
Developing States”**

**“Realidad y Potencial de la Seguridad Alimentaria y la Diversificación Agrícola en  
Pequeños Estados Insulares en Desarrollo”**

**"Sécurité alimentaire et diversification agricole dans les petits états insulaires en  
développement: réalisations et perspectives".**

**United States Department of Agriculture,  
T-STAR Sponsored Invasive Species Symposium**

**INVASIVE SPECIES SAFEGUARDING: IMPERATIVE FOR CARIBBEAN  
REGIONAL AGRICULTURAL DIVERSIFICATION AND FOOD SECURITY**

**Special Symposium Edition  
Edited by  
Waldemar Klassen, Carlton G. Davis, Edward A. Evans, Sikavas Na-Lampang  
and Wanda Lugo**

**Published by the Caribbean Food Crops Society**

© Caribbean Food Crops Society, 2009

Published by the Caribbean Food Crops Society

© Caribbean Food Crops Society, 2009

**ISSN 95-07-0410**

Copies of this publication may be obtained from:

Secretariat, CFCS  
P.O. Box 40108  
San Juan, Puerto Rico 00940

Mention of company and trade names does not imply endorsement by the Caribbean Food Crops Society.

The Caribbean Food Crops Society is not responsible for statements and opinions advanced in this meeting or printed in its proceedings; they represent the views of the individuals to whom they are credited and are not binding on the Society as a whole.

**TOWARDS ACHIEVING ENHANCED FOOD SECURITY THROUGH COMBATING INVASIVE SPECIES: Regional Integration Coordinating Institution Perspective**

*Ms. Margaret Kalloo, Deputy Programme Manager, Agricultural Development Unit, Directorate of Regional Trade and Economic Integration, CARICOM Secretariat, Greater Georgetown, Guyana. Phone: 592 222 0055 Ext 2635. Email: [mkalloo@caricom.org](mailto:mkalloo@caricom.org)*

Thank you, Chair, for your kind introduction. I thank the organizers of the Invasive Species Symposium for giving me the opportunity to discuss how to achieve enhanced food security through combating invasive species from the perspective of a regional integration coordinating institution.

The Revised Treaty of Chaguaramas established the Caribbean Community (CARICOM) including the CARICOM Single Market and Economy (CSME). The Community is made up of 15 Member States and five Associate Members. The Conference of Heads of Governments made up of the Prime Ministers and Presidents of the Member States is the highest Policy Making Organ of the Community. There are several Councils which allow for a system of consultations to enhance the decision making process of the Community. The Council for Trade and Economic Development (COTED) is comprised by the Ministers of Trade/Economic Development and Ministers of Agriculture. The CARICOM Secretariat is the principal administrative organ of the Community and is headed by a Secretary General who is the Chief Executive Officer of the Community.

The presentations you just heard by representatives from Trinidad and Tobago, Barbados and St. Kitts and Nevis clearly elaborated the major constraints and challenges involved in enhancing food security and in combating invasive species. If we consider these constraints and multiply the commonalities by 20 states, then we arrive at the perspective of a regional integration coordinating institution, i.e., the CARICOM Secretariat.

Some of the obligations in the Revised Treaty of Chaguaramas are as follows:

- Increase and expand food security for the Region
- Expand agricultural production and food self-sufficiency of the Region.

To achieve these major goals, the Revised Treaty of Chaguaramas mandates:

- Establishment of an effective and efficient Sanitary and Phytosanitary (SPS) regime,
- Changing administrative and legal and technical processes to best support SPS measures (Article 74). Changes are to be arrived at by consensus, not just with respect to the SPS but to various other issues as well.

Thus we have to deal with issues of science and technology within the context of wide disparities in scientific infrastructure among the Member States. Further we have to examine the legislation pertaining to food security and SPS issues in order to establish a basis for harmonizing regulations and approaches.

Clearly we find that much work remains to be done to achieve a high level of coordination between and among 20 states. Indeed we find that the integration challenge is really quite great even for those major problems that all Member States have in common for the following reasons:

1. We must have agreement /consensus before we can use and implement a certain method or concept.
2. Timing of agreement and implementation is important and often hard to optimally synchronize across 20 Member States.
3. Resources, although generally scarce, vary greatly for any specific initiative among the 20 Member States, and CARICOM simply does not have sufficient resources to undertake every vitally important programme. The adequacy of the technical infrastructure to deal with SPS issues varies greatly among Member States, and we have a long way to go to develop such capacity throughout the whole community. It can be said that the CARICOM chain is as strong as the strongest link and weak as the weakest link. SPS related programmes must be based on sound science. Policy must be grounded in sound science. The way forward must be based on sound science. Moreover, we must proceed on the basis of consensus, and this is not always achieved quickly.
4. The CSME gives us opportunities for increased trade, but it also increases the movement of people, who often unknowingly move plant material infested with invasive alien species. Thus we need to support a massive public education process within the CSME. We need to strongly encourage trade between and among the Member States as a means of creating wealth within CARICOM. However, the benefits of trade must not be undermined by the shipment of infested products. We welcome collaboration with APHIS and CIRAD in helping us to strengthen SPS measures. Public education within CARICOM is extremely important in support of SPS measures, food security and food self-sufficiency.

## PREDISPOSING FACTORS FOR INCREASED INFLOW OF INVASIVES

Modern transportation is a significant predisposing factor in the influx of invasive species into the Caribbean. As air and sea linkages of Caribbean countries to south Asia, Australia and New Zealand and to South and Central America have increased, so has the rate of inflow of invasive species. We have found that many invasive species come from India and other parts of south Asia; people bring live plant materials into the Caribbean from those distant lands. We need to educate people concerning the immense risks to the Caribbean of such well-intentioned but unwise actions.

Geography also plays a significant role in the spread of invasives. Guyana and Suriname, being located on the northern coast of South America, and Belize, being located on the northeastern coast of Central America, are very vulnerable to the influx of invasives from adjacent countries. Trinidad is just a short distance off the coast of Venezuela. Boats ply the waters between the many island states in the Caribbean Sea. Clearly, the CARICOM Member States are predisposed by transportation, geography and the formation of the CSME to a high rate of influx of invasives as well as to the rapid dispersal of invasives between and among the Member States.

People take advantage of proximity to engage in commerce. Many break the law either knowingly or unknowingly. The CSME will increase both trade and the movement of people.

In order to meet the challenge of movement of commodities and the movement of invasive species, we need (1) early intelligence, (2) monitoring systems, (3) surveillance programmes and (4) the knowhow and wherewithal to control or eradicate incipient infestations. In short we need to practice disaster preparedness, as well as to meet the requirements of the World Trade Organization.

The formation of the World Trade Organization in 1995 has changed the way countries can control international trade. The WTO provides a framework for negotiating trade agreements, and a dispute resolution process aimed at enforcing adherence to WTO agreements such as the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). Under the SPS Agreement the WTO may override a country's use of the precautionary principle – a principle which allows a country to act on the side of caution if there is no scientific certainty about potential threats. Now under the SPS rules, the burden of proof is on countries to demonstrate scientifically that something -such as a plant pest or pathogen- is dangerous before it can be regulated. Thus in order to engage in trade, each country needs to have available an inventory of plant pests and pathogens in order to be able to judge whether imported products pose a risk.

Fortunately for us we have fora such as this Symposium and development partners such as USDA-APHIS, CIRAD, FAO and IICA. So we have a wealth of collaborators who can assist us in establishing a SPS system for CARICOM Member States. In the first of this series of invasive species symposia at the 2003 CFCS meeting in Grenada we began the development of Caribbean Regional Invasive Species Intervention Strategy (CRISIS). CRISIS has been adopted by COTED and it has broad acceptance as the Regional Policy of the CARICOM Member States. Our challenge now is how to implement it as a priority during this time of very scarce resources. So how can the Ministries of Planning and the Ministries of Finance in the Member States ensure the appropriation of resources sufficient to implement this strategy to erect an effective and efficient safeguarding system?

## COORDINATING CHALLENGE

So having said that, we have the needed plans, the determination and the patience to meet the challenge. We have information on what we should do, namely:

- (1) Develop the infrastructure,
- (2) strengthen and build capacity,
- (3) reform the legislation, and
- (4) strengthen/establish the institutions.

Fortunately in many Member States we have scientists and technicians competent in what needs to be done, and we have politicians who know what is at stake and who guide agriculture and trade. They are the key to providing some of the needed resources. And if we are to take anything from the address of Senator The Honourable Arnold Piggott, it is that (1) the impacts of invasive organisms on trade can be quite costly and very devastating, and (2) once reliable

estimates of the monetary impacts of invasives on agricultural production and trade become available, these data will serve as a powerful justification for the appropriation of some of the needed resources to implement effective and efficient safeguarding measures.

So to a certain extent we need to refocus our effort to obtain data on the monetary value of the losses in production intended for export in order to justify public expenditures for safeguarding. Once the impacts of inadequate safeguarding on trade are known, we can make the case for increased appropriations. I am not saying that biodiversity is unimportant or that the environment is unimportant, but appropriations must be justified in terms of economic impacts. It is the monetary impact of inadequate safeguarding on agricultural production and trade that is most likely to capture national and international attention and provide the public support needed by politicians to make needed appropriations. So it is the private sector that needs to understand what is at stake and to urge the politicians to take action.

Chair that concludes my remarks. Thank you very much!

CARICOM Agriculture Donor Conference  
CROWNE PLAZA, PORT OF SPAIN, TRINIDAD AND TOBAGO, 2 June 2007

### • Nutrition and food health related challenges

Table 7: Prevalence of undernourishment in total population (%)

Countries	1969-1971	1979-1981	1990-1992	1995-1997	2001-2003 provisional	2002-2004 preliminary
	7	12	9	14	7	8
	3	<2.5	<2.5	3	<2.5	<2.5
	17	4	7	6	5	4
	42	27	4	7	8	8
	40	25	27	26	27	29
	28	28	9	7	7	7
	19	13	21	12	9	8
	54	48	65	59	47	46
	12	10	14	11	10	9
	47	26	13	19	11	10
	34	19	8	7	5	5
	19	14	22	27	12	10
	23	18	13	10	10	8
	16	6	13	15	11	10

Source: FAOSTAT, 2006