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DOMINICA ORGANIC AGRICULTURE MOVEMENT AND DEVELOPMENT OF ORGANIC PRODUCTION IN DOMINICA

CARIBBEAN OPEN TRADE SUPPORT PROGRAM

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ACRONYMS

CISA	Community Involved in Sustainable Agriculture
COTS	Caribbean Open Trade Support program
DEXIA	Dominica Export Import Agency
DOAM	Dominican Organic Agriculture Movement
EU	European Union
GMO	genetically modified organism
IFOAM	International Federation of Organic Agriculture Movements
NOP	U.S. National Organic Program
OECS	Organisation of Eastern Caribbean States

EXECUTIVE SUMMARY

A 2004 article about organic production in Dominica concluded with an assessment of the problems facing organic farmers, including general skepticism about the possibilities of success, difficulties in obtaining inputs, and issues of certification, policy, and regulation. Access to markets was noted as the greatest deterrent for farmers to engage in organic production. Since that time, a number of steps have been taken to address these problems. A February 2005 United Nations Environment Programme/Dominican government report, “Transforming Dominica into an Organic Island,” provides a thorough analysis of why organic production is appropriate and essential for Dominica’s environmental and economic goals. A June 2007 National Organic Agriculture Enhancement Project report provides a complete outline and budget projections for the Dominica Ministry of Agriculture, Fisheries and the Environment to implement a sustainable organic agriculture sector. The creation of an “organic desk” in the Ministry of Agriculture and the official launch of the Dominica Organic Agriculture Movement (DOAM) are signs of progress toward these goals. Progress, though, means continuing to implement the National Organic Agriculture Enhancement Project and building market opportunities for organic products.

Success in Dominica hinges on public and private participation in developing and expanding organic production. Relying on market forces and the private sector alone will not work because of Dominica’s size, scale of production, and access to transportation, and because organic production is not just a market opportunity, it is a method to protect, restore, and enhance the environment, which requires government participation and commitment. The United States and the European Union (EU) lead the world in organic production and organic market share as a result of more than 30 years of public and private initiatives and investments. Active involvement by farmers, businesses, citizens, and government toward a common goal for organics will make a difference in Dominica.

Dominica is poised to move forward as DOAM organic production standards near completion and move through the process for public review and approval by the Bureau of Standards. National legislation that includes organic as a good agricultural practice is being considered and may be the precursor to mandatory national organic standards and certification. The Ministry of Agriculture is receptive to increasing its involvement by providing information and advice to farmers on organic production methods as good agricultural practices, regardless of whether farms fully convert to organic. Other services — such as regional compost operations, cooperative composting near farm areas with multiple individual plots, and restoration of traditional animal breeds — support expansion of organic production, and the Ministry of Agriculture should be encouraged to expand its work in these areas.

DOAM is the hub of the public/private partnership and needs continued support to build its capacity to promote organic production and standards. Bringing together Dominica’s organic activities, initiatives, and opportunities is DOAM’s core role. Presently, DOAM operates as a volunteer organization and therefore there see only incremental gains toward its goals. A volunteer coordinator, empowered by members, must be identified or

step forward to manage a business, communication, and advocacy plan. As funds are available, the position should transition from volunteer to paid, which will accelerate the development of organic agricultural production. Regardless of the pace, there are viable activities that will sustain forward movement. This report proposes components of a communication and advocacy plan for DOAM, including a “Buy Organic, Locally Grown” campaign that will promote awareness and educate the public and media about organic agriculture and its benefits. Recommendations are made to develop a diverse base of funding for DOAM, including government funds, foundation or NGO grants, business initiatives such as organic farm supply sales, fees for membership, and organic certification or registration.

Based on an analysis of the current capacity and resources required to establish an organic certification program, an initial, simple registration program that includes DOAM and the Ministry of Agriculture is recommended. A registration program would serve organic farmers and processors by reducing the costs to organic entry, encouraging the adoption of organic practices, building capacity in DOAM and within the government, preparing producers and processors for organic certification requirements, and eliminating the need for two (or more) certifications for export products. Ideally, the Bureau of Standards would take up organic certification and inspection when mandatory national organic legislation is in place. Group certification and a regional organic certification and inspection program are alternatives to a Dominican certification program.

Revisions to DOAM standards are proposed based on the idea that organic standards should reflect the unique situation of Dominican producers and consumers and be oriented toward stimulating both organic production and marketing. Dominica’s standards should be established for internal markets but compatible with U.S. and EU standards so that producers and handlers interested in export markets could obtain the applicable certifications. Standards should primarily serve an educational function, and therefore are proposed as relatively simple and readily understood. The proposed standards do not attempt to encompass all possible sectors of organic production and processing, especially those that are minimally developed for non-organic agriculture on the island. Livestock standards are intended to be attainable by small producers who sell only to local markets.

Local market opportunities exist for Dominica as much of the fresh fruits and vegetables purchased by the local population and by retail stores, hotels, restaurants, and resorts is locally grown. With no strident opposition to purchasing organic at a reasonable price, there is a ready market, especially for eco-tourists who come to Dominica, the “Nature Island.” For fresh organic produce, the neighboring Caribbean islands — especially those with Green Globe-certified hotels or eco-tourist resorts — are a prime opportunity for Dominica. Competition and lack of infrastructure limit other export markets for fresh organic fruits and vegetables, but processed organic products may be able to find access to the United States and the EU, as well as to neighboring islands’ markets.

The consumers that drive trends are shifting from an interest in anything organic to crafted, artisanal, or unique products that are organically produced. This is the niche for processed or preserved organic products from Dominica. Organic medicinal or herbal teas, dried fruit specialty products (fruit leathers and roll-ups), rum, ornamental flowers, and cocoa are recommended for further exploration and development. Partnerships with entrepreneurs, U.S. or EU companies, and other development initiatives — such as COTS’ Business Support Component and the New Orleans: Dominica/Organisation of Eastern Caribbean States (OECS) Trade Initiative — must be pursued to break down technical, financial, and market barriers.

Dominican organic production can find success, but it will require enthusiasm, persistence, and a willingness to move beyond the comfort zone.

SECTION 1. SITUATION ANALYSIS

Brief History

In an article published in 2004 by the International Federation of Organic Agriculture Movements (IFOAM)' Ecology and Farming magazine, the history of organic farming in Dominica traces back more than 40 years to Andrew Royer on Anronat Farm. ESPWA, a Dominican NGO active from 1998 until 2005, helped launch initiatives to advance knowledge of organic production, including a compost project, production of pesticide-producing plants, organic seeds of acclimatized crop varieties, and a video about Royer. Other initiatives included the Youth Employment Services Corps training program in organic agriculture and the Bellevue Chopin Organic Farmers Movement. At the time the article was written, there was an expectation that an organic center would be established with support from the Minister of Agriculture. The center would cater to farmers' needs for seed and plants and provide a library, internet access, computer skills training, a farmer-to-farmer school, resource center, and demonstrations and trials.

The article concluded with an assessment of the problems facing organic farmers in Dominica, including general skepticism about the possibilities of success, difficulties obtaining inputs, and issues with certification, policy, and regulation. Access to markets was noted as the greatest deterrent for farmers to engage in organic production. Since then, a number of studies have outlined the way forward, the government of Dominica announced a vision to become an organic island by 2015, and an NGO, the Dominica Organic Agriculture Movement was officially launched.

Government Involvement

In the Dominica Ministry of Agriculture, under the Ministry of Agriculture, Al-Mario Casimir is the staff person for the "organic desk" and has solely or jointly written documents 1, 4, and 5 in Appendix C. The draft National Organic Agriculture Enhancement Project is an excellent document and plan, and every effort should be made to garner political and financial support to implement it.

The director of the Ministry of Agriculture, Oliver Grell, supports expanding organic production in Dominica and has assigned four division staff to informally support the desk. Mr. Grell noted that there is draft legislation on organic production and labeling but he may be referring to the national standard for good agricultural practices that was brought forward by the Bureau of Standards. DOAM should stay informed about this legislation and become involved in its drafting and passage. It would also be helpful if COTS followed this legislation. Mr. Grell suggested that field staff/agents guide farmers on organic production; he sees their role as providing information and training, rather than inspection.

Bureau of Standards Director Dr. Steve John is also very supportive of the development of organic standards for Dominica and the adoption of organic practices. He has promised

to supply the protocol for submitting voluntary standards. DOAM must follow up and obtain a copy of the protocol and when the standards are complete, DOAM must begin to implement the public process for approval. Dr. John is willing to take the standards up the chain to obtain recognition of a private-sector organic standard. Although the bureau is responsible for certification and inspection of mandatory national standards, his position is that DOAM should perform certification until then. The bureau is involved with the compulsory standard for good agricultural practices based on organic principles, which is now being drafted. The outgoing minister of Agriculture, Fisheries and the Environment, John Colin McIntyre, made note of these practices and support for organic production. This standard will help transition agricultural practices to organic and pave the way for a mandatory national organic standard.

Both Mr. Grell and Dr. John believe DOAM should advocate for the government to stand behind organic and allocate resources to make organic a priority. Although Dr. McIntyre is no longer a minister, he can remain a good ally for DOAM as he both understands and supports organic agriculture as the future for Dominica. In his new position as minister of Trade, Industry, Consumer Affairs, Private Sector Relations, CARICOM, OECS and Diaspora Affairs, he oversees many policy areas that could assist in advancing trade in organic products, protecting consumers through truthful labeling of organic products, and collaborating regionally on organic production, trade, and certification.

Al-Mario Casimir, Keian Stephenson (Ministry of Agriculture, team leader – Central Region), and two others have taken Independent Organic Inspectors Association inspector training. They are also in contact with the Jamaica Organic Agriculture Movement and are knowledgeable about organic activity and policies in other Caribbean Islands. They are planning to train other Ministry of Agriculture extension agents on organic production. The Ministry of Agriculture can provide great service to farmers by providing information and advice on organic production methods as good agricultural practices, regardless of whether farms fully convert.

DOAM was officially launched last year in a public ceremony with press coverage. Its 50 members include farmers, agricultural businesses, and individuals. The official launch is considered by the government as a step forward in implementing the Organic Island Initiative. The organization is volunteer-based, though Mr. Casimir and Mr. Stephenson are both on the executive committee and their time on DOAM activities is part of their Ministry of Agriculture responsibilities. DOAM grew from EPSWA activities to fill the gap when EPSWA left Dominica.

Agriculture Sector

The farmers in DOAM are not the only farmers using organic practices on the island, but there are currently no certified organic farms. There had been a five-acre banana farm certified organic by the Soil Association in the recent past, but the absence of a certified handling facility was the barrier to shipping the bananas to Sainsbury's in the United Kingdom; therefore, there was no incentive to continue certification. Farmers are fairly knowledgeable about organic production and are honest about what they are or are not doing that complies with organic practices. Any misconceptions about organic production

are based on stricter perceptions of organic requirements. For instance, there is an assumption that no pesticides, even garlic and hot pepper preparations, would be allowed. And there is a great concern about drift and contamination from other farm plots, though there are few areas where organic and non-organic plots are in close proximity. Another concern is lack of organic seed availability, in particular non-genetically modified seed, although there is no production of canola, soy, or field corn. There is some awareness of the use of compost, crop rotation, cover crops, and green manure for soil building, and there is use of chemical fertilizers and pesticides in larger commercial banana operations and on other farms. Hurricane Dean recovery plans included distribution of chemical fertilizers to restore banana production. On the island is a Fair Trade banana project that is not organic and does not plan to phase out chemical use. The price of these bananas is comparable to that of organic bananas, so there is little incentive to go organic.

Mr. Casimir has been involved with two compost projects on the island, one at an agriculture field research site and the other at the Fair Trade banana project. Both operations are small in scale, although the Fair Trade site was designed for large-scale operation but is underutilized. That site was built with a grant (equivalent of about USD\$30,000) but the bins were not built, so it is not complete. Both sites have concrete floors, open sides all around, very high ceilings, timber-frame construction, and no bins. Compost piles are on the floor and turned by hand, and liquid is collected at the research site but not the Fair Trade site. Some farms also have compost piles near their fields, although some farms do not want to spend time composting. The Fair Trade compost project is selling its compost but there is little demand because of the cost-to-nutrient-value ratio perceived by many farmers. The compost sells for half the price of a chemical fertilizer mix and is not labeled with NPK analysis, so it is seen as less effective. Also, farmers make little distinction between compost and bagged manure, which is also sold. The island has an endless source of biomass but somewhat limited sources of manure because there are few commercial animal operations. The island has resources that might be harvested from fishing waste or seaweed. Regional compost operations or cooperative composting near farms with multiple plots would help support expansion of organic production.

Dominica does not have a prominent beef or dairy sector because it is not part of its food culture. Goats, chickens, pigs, and rabbits are raised for meat because they are more suited to the island's topography. There are some small herds of beef or dairy cows, but most cows are owned by individuals or farms with one cow tethered by the side of the road. Converting animal production to U.S. or EU organic standards will be difficult. Animals are generally confined for traditional practice, crop protection, minimizing loss from wandering or theft, and lack of space. There are few predators, except humans, and feed is imported from Granada, Trinidad, and Barbados. Dominica has limited capacity to grow feedstock except legumes. Animals are fed fruits and vegetable waste/byproducts from farms. Farmers want fast growth and don't see pasture-fed production as viable. The traditional breeds that respond better to pasture and fruit and vegetable byproducts/waste are disappearing, but efforts should be made to maintain and restore traditional breeds.

Soil varies from clay to volcanic and from rocky to deep deposits. Potassium levels were identified as a problem but there is a unique solution: wood vinegar (liquid byproduct from the condensation of water and smoke from wood burning) is collected and used as a soil amendment. There is plenty of clean, largely unpolluted water because of the tropical rainforest and 365 rivers. Parrots and tropical birds are pests for fruit production, but no one mentioned wild animal problems. There are pests and disease, particularly on bananas, which are the most extensive commercial production on the island. Pest damage on vegetables was by aphids and leaf borers. Weed control is a big problem because of how quickly everything grows; only hand-weeding and hand tools work on these small farm plots. Land is used for production is used intensively — land holdings are small, usually less than five acres and generally surrounded by native vegetation or rainforest. Some farmers use black plastic for weed control and to maximize plantings. Farm laborers, if used, come from Haiti. The number of farmers in Dominica is decreasing and few young people are farming or working on farms.

Retail and Processing Sectors

There are three main grocery stores on the island: Brizee's Mart, Astaphan, and Whitchurch. People sell fresh product on the streets of Roseau, the capital city, and every Tuesday and Saturday there is a farmer's market. The market has many vendors with the same products but most sell everything they bring because this is where people go for fresh produce and because everyone eats and likes the produce that is available: cabbage, lettuce, peppers, cucumbers, herbs, plantains, bananas, mangos, papayas, pineapple, coconut, watermelon, oranges, tangerines, breadfruit, guava, avocado, pumpkin, squash, carrots, celery, beans, and tomatoes. Also, lemongrass, bay, cinnamon, and vanilla are cultivated or wild-harvested. Consumers, like everywhere, are price sensitive but in Dominica have ready access to low-priced local produce and foods. There is a culture of concern about how food is grown and this could be cultivated to support organic products, especially among the commercial customers (businesses) who serve tourists as well as those who live in Dominica.

There is a small agroprocessing industry on the island. The major locally produced and processed products are dried fruit, hot pepper sauces, jelly, cocoa, juices, coffee, herbal teas, noni and sea moss (agar) energy drinks, soaps, bay lime (used for cologne, perfumes, and as an antiseptic), beer, and rum. Dominica is the world's largest exporter of bay leaves used in the perfume industry. Coffee, cocoa, and pineapple production is limited. There is only one organic producer in the Dominica Pineapple Association. Cocoa production has been semi-abandoned for the past 15 years but there is an initiative to bring it back using conventional farming practices. Dominica supplies the other islands with coconuts. There is a long tradition of medicinal herbal preparations made for home use for humans and animals. There are only a few shipping companies and customs brokers. The Dominica Export Import Agency (DEXIA) is a public/private agency that handles most fresh shipments and some finished food products. Their facilities are ISO 9000-certified and have HACCP plans. DEXIA had little knowledge about organic requirements but expressed interest in certification if there were demand from exporters.

The following agroprocessors were interviewed:

PW Bellot and Co., Ltd., produces the most diverse number of products and has been in operation since 1938, although under different ownership since 1987. The majority of the ingredients used in its products are from the island. The company makes private-label and special formulations for customers in addition to Bello brand-name products. About 60 percent of its products are exported, which represents a 25 percent reduction since 2001. It is a HAACP-certified facility and Peter Dominique, the managing director, is somewhat knowledgeable about the requirements for organic certification. There have been customer requests for organic products. In the past there was a Taiwan-funded project that explored fruit drying as a new product line. The project was not implemented because of the need to invest in new equipment. If market opportunities were identified and sufficient organic ingredients available on the island, the company would likely introduce organic products. The company makes a product called guava treat (or cheese), a dried fruit product that would be unique to U.S. or European markets.

Dominica Essential Oils and Spices Cooperative has been around since 1968 and currently has 560 member producers. Dominica is the world's largest supplier of bay rum and the cooperative is the island's largest producer. There have been customer requests for organic versions of the product. Production and processing are simple and could easily comply with organic requirements. Because it is a cooperative and the crop is the same for all member producers, the cooperative could be certified as a group rather than as individual producers. The cooperative already has systems for managing and tracking production and output so it would be relatively easy to add organic requirements to these systems. The cooperative is a supporter of DOAM.

The Coal Pot and Natural Botanicals produce soaps and are interested in offering organic products. Sharon Young of Natural Botanicals was a founder of DOAM and has attended organic inspector trainings. The Coal Pot is exploring the feasibility of fruit drying and has begun to produce it on a limited scale. Suzie LeBlanc plans to visit the production site to view the drying operation.

Organic personal care products, including soap, are not regulated yet by governments but there are private-sector standards. This is a very fast-growing sector of the organic market but is quickly becoming occupied by large cosmetic and personal care companies such as Estee Lauder. Of course, supplying organic ingredients to these major companies is an opportunity, and there is also a strong consumer segment interested in artisanal products.

Shillingford Estates produces rum from sugarcane that is grown, fermented, and processed on the estate. According to Manager Yves Joseph, this is the only agricultural rum produced on the island because the company does not bring in commercial alcohol to add to the sugarcane. Mr. Joseph is an agronomist and quite knowledgeable about organic production. Except for the use of Roundup for weed control, production appears to comply with organic standards. Processing is simple and small-scale, so it would be relatively easy to ensure that it complies with organic requirements. Organic rum is a very small segment of the organic market but would allow entry for an operation like Shillingford Estates.

Other Agricultural and Business Initiatives

Other initiatives under consideration for Dominica provide opportunities to expand organic production and for market success:

COTS Business Support Component. This division focuses on building business opportunities and infrastructure. It may be interested in an organic project for the Carib Territory (native population). Two possibilities to consider:

1. *A brand of medicinal teas.* Ed Fletcher of Strategic Sourcing, Inc., from North Carolina, has been contracted for this initiative. Mr. Fletcher is knowledgeable about organic production and the market for organic herbal and medicinal teas. This is an excellent opportunity for a successful product from Dominica.
2. *Dried organic tropical fruit.* There is consistent demand in North America for good-quality dried tropical fruit, mainly organic pineapple rings and mango slabs (filets.) The key is quality. Both variety and size drive market demand and price, as well as good dehydration processing, but there are many competitors. Sri Lanka provides low-priced organic dried tropical fruit, and Mexico is the chief supplier to the United States and Peru, though both have problems delivering consistent quality and quantity. India has the largest volume and major investments in increasing production and processing capability. There is an opportunity for Dominica to break into this sector, particularly with guava, roll-ups, and fruit leathers. (See Section V)

New Orleans: Dominica/OECS Trade Initiative. A task force working on New Orleans' recovery from Hurricane Katrina has approached the Development Institute Ltd., which is working on restoration and recovery plans after Hurricane Dean in the Caribbean. The New Orleans: Dominica Initiative was proposed in August 2007; its main features are:

1. Dominica would identify a range of goods and services to trade with New Orleans.
2. The emphasis would be on agricultural goods that are naturally grown and/or processed.
3. Certified organic products would be produced and traded in the future.
4. Two critical conceptual pillars of this trade initiative are wellness and Creole links between Dominica and New Orleans, which would use Dominica's herbal and medicinal products.

A local group that includes DOAM, Dominica Banana Producers League, EDU, and DEXIA has been assembled to discuss and participate in the initiative. There are obvious reasons for DOAM and COTS to participate actively: if the New Orleans side of the initiative can facilitate trading contacts with buyers and suppliers in New Orleans and throughout the United States, this would overcome a major barrier to market entry. The banana producers' league was interested in the organic banana market but indicated that it would need technical assistance to meet organic production and handling requirements

and financial assistance for certification costs. The Carib medicinal tea project might fit well in this initiative, as might the agroprocessors presented previously (P.W. Bellot and Co, Ltd., Dominica Essential Oils and Spices Cooperative, The Coal Pot, Natural Botanicals, and Shillingford Estates.) Atherton Martin of The Development Institute is the organizer of this initiative.

Ecotourism. The National Tourism Policy Report states: “Dominica will re-position its tourism sector to expand market positioning from a nature destination to one that encompasses adventure and cultural tourism.” It also includes: “Dominica is far more advanced than most destinations in pursuing environmental protection through its significant national parks and protected areas program and the Green Globe designation. This progress needs to be matched by environmental practices of private sector operators.”

Two ecotourism operators, Jem Winston of 3 Rivers Resort and Sam Raphael of Jungle Bay Resort and Spa, were interviewed. Both acknowledged that the National Tourism Policy Report is a correct assessment of how to position Dominica to attract a larger tourist trade. For 3 Rivers, it is the adventure and camping experience; for Jungle Bay, it is the luxury and spa experience that attracts visitors. The Green Globe 21 Destination Program that had been funded by USAID has not been continued by many of the resorts and hotels since funding ended. But 3 Rivers and Jungle Bay are committed to sustainable (green) practices and policies in their operations, including purchasing local and organically grown farm products. They reported that, in general, the island’s hotels, restaurants, and resorts are ready to purchase local and organic farm products if consistent supply were available and delivery were reliable.

SECTION II. DOMINICA ORGANIC AGRICULTURE MOVEMENT: ANALYSIS AND RECOMMENDATIONS

DOAM is widely recognized by the government, businesses, farmers, and tourism associations. Even more than this recognition, however, there is the expectation that DOAM can and should do the necessary advocacy and promotion to build and expand organic production in Dominica. This is a huge advantage for the organization because this expectation means a greater probability for acceptance of DOAM's activities and initiatives. Though these expectations are great, they can be done — one step at a time. Although the island's population is small, there appears to be little coordination or communication among those engaged in organic production or related activities. DOAM can succeed by organizing and keeping farms, businesses, the tourism sector, and government in communication about organic production. The organization can facilitate dialogue about policies and initiatives to develop organic farm and business opportunities and create a spark that ignites change toward sustainable organic production island-wide.

A public/private partnership must be encouraged to bring together the resources to expand organic farming and increase the market for Dominican organic products. DOAM, the Ministry of Agriculture, the Bureau of Standards, COTS, and businesses all must be involved. An individual needs to step forward and assume the role of coordinator or DOAM must search for, persuade, and lend assistance to a volunteer. Progress will be steady as long as someone takes charge. As funds are secured from services, grants, or government programs, paying the coordinator should be a priority, with the goal of eventually having a full-time staffer. Other countries have seen accelerated development of the organic sector through having a dedicated lead person. The coordinator could also be from the Ministry of Agriculture, assigned to promote organic production and standards in conjunction with DOAM.

The following is a recommendation for actions to move DOAM and organic Dominica forward.

DOAM Coordinator

- Organize and use volunteers to implement activities.
- Outreach to current and potential members, the media, government officials, businesses, and other organizations.
- Implement a communications and advocacy plan.
- Identify and pursue funds to support the organization and its activities. Funding sources may include:
 - grants and donations (financial and in-kind)
 - government funding
 - membership, certification, or registration fees
 - service fees such as non-member listings and ads on Web site, farm field days, and training programs
 - Sales of compost bins, seeds, farm supplies, books, bumper stickers, etc.

- Work closely with the organic desk at the Ministry of Agriculture to collaborate and coordinate activities, especially the adoption and implementation of the National Organic Agriculture Enhancement Project, the implementation of which will compliment and expand DOAM’s work.

DOAM Communication Plan

- Survey of organic producers on the island — on what and how much is grown — is in progress and must be completed.
- Survey restaurants, hotels, and resorts about barriers to purchasing organic products.
- Organize DOAM members in a section of the farmers market, clearly identified by the DOAM logo or banner.
- Press releases on all DOAM activities and interviews with reporters and radio and TV talk shows.
- Launch a “Buy Organic, Locally Grown” campaign using Massachusetts’ “Local Hero” campaign as a model. This would promote awareness and educate the public and media about organic agriculture and its benefits.
- Launch and maintain a Web site with:
 - Survey results
 - List of members, with descriptions and contact information
 - DOAM organic standard, compliance forms, and checklists
 - Descriptions of organic projects on the island, activities, and events
 - Information on composting, pest controls, benefits of organic production and products, etc.
 - Government reports on agriculture
 - “Buy Organic, Locally Grown” campaign
 - Online sales of farm supplies, seeds, etc.
 - Links to other Web sites, such as IFOAM and other Caribbean island organic organizations
- Organize farm field days to demonstrate good organic farming practices, composting, seed saving, etc.
- Identify key influencers — current or former government officials, religious leaders, musicians, Carib leaders, business leaders — and cultivate them as spokespeople or advocates.

DOAM Advocacy Plan

- Adopt final version of DOAM organic standards
- Implement procedures prescribed by Bureau of Standards to get government recognition of DOAM organic standards
- Create registration program and develop compliance forms and checklists
- Identify one or two agricultural policy changes necessary to support organic production and advocate for adoption. Use influencers and media.
- Collaborate with other Caribbean island organic associations. Areas of collaboration include certification, inspection, training, and market development.

“Buy Organic, Locally Grown” Campaign

This proposal is based on a well-documented, successful campaign in U.S. communities with the same geographic and population characteristics as Dominica. The “Harvesting Support for Local Agriculture” manual, which describes the campaign and has tips and templates for adopting it, has been provided to DOAM. [Additional copies can be purchased from Community Involved in Sustainable Agriculture (CISA) at www.buylocalfood.com.] In interviews with farmers, processors, and DOAM, there was overwhelming and enthusiastic support for this type of campaign. CISA and its “Buy Local” campaign had been funded for many years by the Kellogg Foundation. In addition, components of the campaign bring in revenue that now supports the organization. In Dominica, the campaign could be self-funding if managed and implemented by DOAM volunteers. CISA has consulted other organizations seeking to launch similar campaigns. If funds were available, we recommend contracting with CISA for consulting services. Karen Sutherland of Roots Farm in Dominica knows the organization and the campaign and could be a liaison to CISA as a DOAM member. The Kellogg Foundation may be interested in funding DOAM to initiate such a campaign, so efforts should be made to research and approach Kellogg for funding to advance sustainable agriculture and local and regional food supplies.

DOAM Service and Product Sales

It is important that DOAM have a variety of funding sources because the island has a limited number of farmers and businesses that could contribute through membership, registration, or certification fees. It is not wise to rely on outside funding from grants or government, although with a variety of funding sources the organization would be more attractive to foundations, NGOs, and governments for additional funds. Through a mini-enterprise selling farm supplies and seeds suitable for organic farms, DOAM could provide access to supplies not readily available on the island, enabling farmers to succeed organically and bring revenue to the organization. DOAM would purchase in large quantities and potentially at wholesale prices, thereby reducing the costs of supplies and shipping. This should first be done as a collective pre-order by farmers through DOAM to eliminate the need for initial funds to purchase the supplies. A business plan could then be developed, based on response to the service, and a loan secured from a bank or a NGO to purchase supplies and storage space. Another possibility would be to partner with an agricultural supply business in Dominica, like 4D Ag Center, to increase the availability of organic farm supplies and seeds, with a small percentage of sales going to DOAM.

SECTION III. DOAM ORGANIC STANDARDS: ANALYSIS AND RECOMMENDATIONS

General Approach

The approach to organic standard setting in Dominica should reflect the unique situation of its producers and consumers and focus on stimulating both organic production and marketing. Market considerations should extend to internal and export markets. The standards should primarily serve an educational purpose, which would require that they be relatively simple and readily understood. They should not attempt to encompass all possible sectors of organic production and processing, especially those that are minimally developed for conventional agriculture on the island. As with any credible standard, they must be verifiable through a reasonable and inexpensive system of organic certification. DOAM standards should be established for internal markets, but producers and handlers interested in export markets should be able to obtain certification to the United States or EU.

The draft standards adapted from the Jamaica Organic Agriculture Movement needed to be significantly rewritten for many reasons. Many provisions are overly prescriptive and inappropriate to Dominica, while others are redundant and, in a few cases, internally contradictory. The language is opaque and difficult to comprehend and the document needs a clearer organization. Practices or materials that are specifically prohibited needed to be clearly identified in a single section using consistent terminology. Some key aspects of organic production and handling, such as record keeping, are inadequately addressed. In general, when exceptions are made, the criteria needed to be spelled out.

Following is a discussion and suggestions for revising each section of the existing document presented to DOAM representatives Al-Mario Casimir and Vanessa Prevost prior to revising the standards.

Review of Sections

Section A: General Information and Scope

The scope is clearly stated; however, the language identified in 1.1A is unnecessary. The term “must” should replace “shall” throughout the document, and in many cases “shall” is used where “should” would be more appropriate. This will make the tone much less intimidating.

Objectives and purposes should affirm a succinct definition of “organic agriculture” and clearly relate to agricultural products (not just food). The objectives appear to be more akin to principles. A clear set of principles is especially valuable as a foundation for standards, which should relate back to specific principles. Purpose and scope should be consistent with the needs of Dominica. The reference to certification and inspection is very unclear.

No requirements are identified for record keeping or traceability. This is important to permit verification of production and handling methods.

Definitions should only be given for terms used in the standards, and only for those that need clear and consistent interpretation. Significant revisions will be needed; for example, the definition of “natural hybridization” is inaccurate, and the term is not found anywhere in the body of the standards.

Section B: Organic Production, Handling, and Labeling (insert)

- This should be broken into separate sections for general requirements and organic ecosystems, crop production, animal husbandry, processing and handling, and labeling.
- Certification requirements should not be addressed in this document. An agency that is accredited by the U.S. Department of Agriculture and/or EU (ISO) should carry out certification according to those rules.

2. Organic Ecosystems

- Much of this language is unverifiable, such as “10 percent of the farm/production unit shall be part of a biodiversity program.” There is no provision outlining what is meant by “biodiversity program.”
- Much of the material here is more appropriate for sections such as soil and crop management or water management and irrigation. For example, pasture management belongs in the section on crops and soils.
- There is no provision addressing the requirement for crop rotations or the integration of perennial polycultures into farming practices.
- Genetic engineering or genetically modified organism (GMO) prohibitions should be addressed in appropriate sections on crop propagation and livestock breeding and for ingredients in processed organic products. Terminology (i.e., references to genetic engineering or GMOs) should be consistent.

3. General Requirements

- This section belongs in front of land management provisions.
- Conversion requirements are very unclear. Different conversion times for different types of crop or livestock species are unnecessary and extremely cumbersome.

4. Crop Production

- The requirements for use of organic seed and propagating material are unclear and may be very difficult to comply with or enforce. It is not necessary to list all acceptable breeding methods; just identify those that are unacceptable.
- Diversity in crop production is vague about what it requires and fails to address perennial cropping systems. It appears to require removal of vegetative mulch from the field after harvest.
- Soil fertility needs significant revision — U.S. National Organic Program (NOP) composting requirements may not be appropriate here, and manure from any source should be freely allowed so long as it is not mixed with toxic materials. Sewage sludge is not the same as human wastes, which are not addressed by the NOP.

- The requirements for mineral fertilizer use are contradictory and unclear.
- Pest management needs extensive revision. Avoiding contamination belongs in the section on ecosystem management — i.e., identification of boundaries and buffers. Production aids should be addressed in Appendices, as appropriate for Dominica.

5. *Bee Keeping*

- Specialty crops, including mushrooms and honey, should be addressed as the need arises.

6. *Animal Husbandry*

- If livestock products are unlikely to seek an export market, livestock standards should be adapted to practices in Dominica and achievable by Dominican livestock producers. In particular, requirements for outdoor access, pasture vs. “carried fresh fodder,” and confinement allowances should be clearly identified.
- Detailed animal welfare-oriented standards are overly prescriptive and not strictly relevant to organic practices. Commitment to animal welfare should be included as part of organic principles. Section C is not appropriate as requirements, but may be useful for guidance.
- Conversion period requirements are totally confusing.
- Specifications for animal sources or origins are mutually contradictory and confusing.
- Allowing in conversion feeds requires certification as in conversion. This is overly complicated and all but impossible to verify.
- List of permitted feed additives belongs in the appropriate appendix.
- Livestock manure requirements belong in the section on soil management and protection of water quality.
- Detailed specifications for free-range areas and housing are excessive and difficult to verify.
- How appropriate are transport and slaughter requirements for Dominica? Is there such a thing as an organic slaughter facility? Are animals ever transported off-island for slaughter (i.e., more than eight hours)?

7. *Processing and Handling*

- Editing is needed for better clarity and organization, but overall it has a reasonable level of detail.
- If multi-ingredient manufacturing is unlikely, standards should be limited to basic procedures with attention to sanitation, pest control, and protection of organic integrity.
- Ingredients and processing aids should be kept as appendices.

8. *Labeling*

- Provisions should be limited to those applicable to possible processing and labeling activities in Dominica. Products manufactured for export will have to comply with importing country rules.
- In conversion products should not be included in this program.

9. Social Justice

- This material is appropriate for statements of principles. Verification of these practices is beyond the scope of most certification programs.

Appendices

- These should be reviewed for applicability to Dominica. Reference to EU and NOP inputs lists should be the baseline for products that may be exported.
- The procedure for evaluating local inputs should be feasible within DOAM.

SECTION IV. DOAM CERTIFICATION PROGRAM: ANALYSIS AND RECOMMENDATIONS

General Overview

The existing national laws and regulations and the Codex guidelines for organic production, processing, labeling, and marketing include requirements for certification and accreditation (approval of certification bodies to verify compliance to these national laws and regulations). Certification bodies that operate under these national laws and regulations are expected to meet high standards of integrity and professionalism. Continuous training and improvement of staff and systems is necessary to meet these expectations. This results in ever-increasing costs for certification bodies to maintain status as recognized professionals. These costs are reflected in the fees charged by the certification bodies to producers, processors, and traders seeking organic certification.

Organic products exported to countries with national laws on organic production and marketing must meet the requirements of those laws and be certified by a body recognized by the national authority. Currently, 38 countries have regulations on organic production (the EU's 27 countries counts as only one) and 18 in the process of completing national organic regulations. In addition to the EU, East Africa is the other entity with regional organic regulations; it includes Tanzania, Kenya, Uganda, Rwanda, and Burundi. There are not yet any equivalency agreements between nations so trade of organic products between regulated countries is based on compliance.

If DOAM established a certification program, its volunteers or coordinator should attend certification training programs outside of Dominica or hire a consultant to train them and set up systems, manuals, applications, and forms to effectively provide organic certification. If training is not feasible, there are IFOAM training manuals available to guide DOAM. The following are provided as attachments:

- Guide to Develop Certification Documents
- Building Trust in Organics (overview of certification programs, alternatives to certification, costs to establish certification programs, and case studies)

The International Organic Inspection Manual is also recommended; it can be purchased for €3 through the IFOAM Web site, www.ifoam.org/bookstore.

In addition to DOAM members who attend training programs for organic inspectors, at least six others would have to be trained or make arrangements with other Caribbean islands that have trained inspectors, such as Jamaica and Trinidad and Tobago. Inspectors must be rotated periodically to reduce familiarity between them and the operations they certify and to prevent conflicts of interest.

Unless there is government or grant funding to pay for certification and inspection, farmers and processors/handlers seeking certification would pay fees sufficient to support the program. On Dominica, this will likely be an obstacle to participation in a certified

organic program. The EU had a number of support programs to assist farmers with the cost of transitioning to certification and organic production. Even in the United States, there are government funds that cover a share of certification costs, limited to 75 percent of the cost or US\$500.00. These programs have provided incentives for many farmers, processors, and handlers to not only adopt organic practices but to become certified and gain access to the organic marketplace.

Dominica Registration Program

Because cost and record-keeping requirements could be a barrier to farmer or processor participation in a certification program and there are costs to establish DOAM as a professional certification body with sufficient trained inspectors, an initially simple registration program is recommended. The program would serve as a transition for DOAM to build its infrastructure and gain experience with organic certification procedures, and for farmers and processors to become familiar with the requirements of the organic standard and with the record-keeping necessary for organic certification. The registration program would lower entry barriers such as cost and paperwork without lowering production standards. The registration program would consist of:

- An application for participation. A copy of the DOAM organic standard would be provided to applicants.
- The application could be a checklist of standard requirements or a written description of farm practices or processing procedures that comply with requirements.
- A visit from a DOAM volunteer, coordinator, or Ministry of Agriculture agents to observe the farm or processing operation and note any practices that should be corrected to meet the organic standard.
- Applicant would sign affidavits when their applications are approved, promising to comply with the standard and follow the practices described in their applications.
- Affidavits would be kept on file at DOAM and annual application renewals would be sent out.
- DOAM-registered farmers and processors would be allowed to use the DOAM seal on their products.
- Organic production training programs, farm field days, and visits from DOAM volunteers or managers or Ministry of Agriculture agents would provide ongoing technical assistance in organic practices, record-keeping, and certification requirements.

If farmers or processors wish to ship DOAM organic products to countries with mandatory national organic standards, a certification body approved by that country would be contacted for certification. This would be required even with a Dominican certification program. By having such a program, Dominica would serve organic farmers and processors in several ways: eliminating the need for two (or more) certifications, preparing operations for export market certification requirements, and encouraging the adoption of organic practices. With trained inspectors in Dominica, foreign certification bodies required to certify organic farms and products in Dominica could use the inspectors to do on-site inspections, which would cut costs for farmers and processors.

If a mandatory national organic program is considered and approved, the requirement for certification should be included in the legislation. This is the best way to make it necessary for people to transition to certification. But even without the legislation, if production of and market demand for organic increases, DOAM could revise the registration forms into certification forms. At the appropriate time, full certification would go into effect after notifying participants in the registration program. Ideally, the Bureau of Standards would take up certification and inspection for organic when legislation is in place.

Other Approaches to Certification

IFOAM has also developed a system for group certification, which has been implemented in developing countries around the world for the past 15 years and is recognized by the EU and Japan Agriculture Standard; the U.S. Department of Agriculture's National Organic Program is currently reviewing its criteria for group certification. Instead of each small farm applying for certification, keeping records, writing organic farm plans, and paying the certification fee, a group of small farms that produce the same organic crops organize as a single legal entity, such as a cooperative, and apply for certification. All members of the group operate under one organic system plan, record keeping system, and system of internal controls to monitor compliance with the standard. The certification is then held by the group, crops are sold by the group, and the annual inspection is done by sampling farms to ensure compliance and verify that internal controls are effective. Group certification is sought when farmers in developing countries produce crops for export and are required to use foreign certification bodies and inspectors. In this way, certification costs are shared by all members of the group. If export markets develop for Dominica organic crops and products, this will be an excellent option. The Smallholder Group Certification Training Curriculum for Producer Organizations and Guidance Manual describes in detail the group certification system.

Another approach is to organize English-speaking Caribbean islands to develop a regional organic certification and inspection program. With a number of islands participating in one program, the volume of farmers and processors seeking certification would be sufficient to make it cost-effective. This will take political will and a leader to bring governments and individual organic organizations together. Dr. McIntyre could provide this leadership based on his interest in organic agriculture while minister of Agriculture, Fisheries, and the Environment and in his new position as minister of Trade, Industry, Consumer Affairs, Private Sector Relations, CARICOM, OECS, and Diaspora Affairs. Since there is not yet a Caribbean country with mandatory organic standards and certification programs and there are similar challenges in terms of resources to advance organic production, a regional initiative would serve the needs of many islands and provide an appropriate solution to the barriers to organic production and certification.

Though the following had dominant Latin American countries that could make it difficult for participation by Dominica and neighboring islands, the following is an example of a regional initiative. The Inter-American Institute for Agricultural Cooperation sponsored the first annual Conference of Caribbean Organic Agriculture Officials in August 2007.

The primary purpose was to agree on alternatives to rules set by the United States and EU. Although called a Caribbean conference, participants included top agricultural officials from Barbados, Bolivia, Brazil, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, and Venezuela, with Canada and the United States attending as observers. Participants took the first step toward developing mechanisms that would harmonize organic production guidelines for participating nations. In addition, they set out to link quality standards to customs regulations to break down barriers to regional organic trade resulting from enforcement of inconsistent standards. The event highlighted regional rejection of the trend toward developing nations imposing standards that don't fit the level of economic development in the Caribbean and Latin America.

SECTION V. ORGANIC MARKET OPPORTUNITIES: ANALYSIS AND RECOMMENDATIONS

Local and Caribbean Markets

Because most of the fresh fruits and vegetables purchased by the local population and by retail stores, hotels, restaurants, and resorts is locally grown, and without much opposition to purchasing organic at reasonable prices, there is a ready market, especially for the eco-tourists that come to Dominica because it is the “nature island.” Reasonable prices will come with adequate supply and efficient, reliable delivery systems. The “Buy Organic, Locally Grown” campaign is one way to increase consumer awareness of the source and growing methods of the food they purchase at farmers markets, retail stores, hotels, restaurants, and resorts. The campaign gives businesses a way to participate that does not require full commitment to purchasing only organic products. The campaign hinges on building farmer-to-buyer relationships throughout the island and uses public recognition of participating farms and business to build customer loyalty. A sense of pride about preserving and improving Dominica for Dominicans can be generated by the campaign. This is a prime opportunity to increase domestic and Caribbean consumption of Dominican organic crops, both fresh and processed, by tourists, businesses that serve the tourist sector, Westerners living in the Caribbean, and the populations of the islands.

Implementation of organic standards through a registration program will enable more farmers and processors to enter into organic production and participate in the campaign. Increased supply should ease delivery problems but a wholesale distribution system for fresh organic produce may be needed. Increased supply will open the possibility of exporting organic produce to other Caribbean islands, especially large tourist destinations with eco-tourist and Green Globe-certified resorts, such as Sandals on Antigua. Dominica can be the market leader in organic for these types of resorts with a DOAM/Ministry of Agriculture program to encourage increased organic production.

Export Market Opportunities

There are barriers to exporting fresh organic produce to larger organic markets such as the United States or the EU, especially the limited capability to perishable products by air. Many other countries that produce similar organic crops with an efficient delivery infrastructure are already supplying these markets:¹

- Ecuador, Costa Rica, the Dominican Republic, and Peru supply most of the world’s organic bananas.
- Mexico, Paraguay, Ecuador, and, to a lesser extent, Costa Rica, the Dominican Republic, and Indonesia supply most of the world’s tropical fruit.
- Mexico, Peru, and, to a lesser extent, Indonesia, supply most of the world’s organic coffee.

¹ The World of Organic Agriculture: Statistics and Emerging Trends 2007, IFOAM.

- The Dominican Republic, Mexico, Ecuador, and Peru supply most of the world's organic cocoa.

Although the market for organic products is expanding rapidly in the United States and EU, the size of the organic market is small in sales and volume compared to the non-organic market. In the United States, the organic market is increasing at a rate of 20 percent a year, totaling \$17 billion in retail in 2006, but this still represents only three percent of all food products sold in the United States. Taken as a whole, the European market is growing at a rate of 10 percent annually, but by individual countries the growth rate is higher, with Germany and England leading in organic sales.² The scale of the organic market enables small-volume producers to garner space in the market.

In fact, the consumers that drive trends are shifting their attitude from an interest in anything organic to craft, artisanal, or unique products that are also organic. This is the market opportunity for processed or preserved organic products from Dominica. Investment, research, and development for the following products should be encouraged:

1. *Guava and other tropical fruit roll-ups or fruit leathers.* In snacks, the trend is healthier snacks and dried fruit products. In particular, organic dried fruit snacks have had a triple-digit growth rate in the past year, bringing the organic share of total dried fruit snack sales in the United States to one percent, totaling \$7.7 million in sales.³ The convenience of fruit roll-ups or leathers make these popular items at school, work, hiking and other outdoor activities, or in the car. Tropical flavor varieties are new to this product segment even though tropical fruits are familiar and desirable to U.S. and European consumers. These products will also appeal to domestic consumers and tourists who come to Dominica for outdoor adventure.

Mariani Packing Company (www.marianifruit.com) and Clif Bar (www.clifbar.com) are recommended for further contact to determine their interest in these products. They can contract with growers and possibly invest in development. Mariani is a long-established dried fruit company with contract production around the world, and is just launching organic products. Clif Bar quickly became the leader in the natural and organic snack bar sector with its product line for adult outdoor sports enthusiasts. Their line is expanding to include snacks for children, including dried fruit twists. Stretch Island Fruit Co. (www.stretch-island.com) was the first company to introduce fruit leathers to the natural foods market segment and now has two distinct lines: Stretch Island Fruit™ for non-organic and FruitaBu™ for organic.

2. *Rum.* Organic alcoholic drinks are an emerging sector in the organic industry. Though a very small segment of the total alcohol market, there is market interest, especially for products with an interesting story and produced in small batches or production runs. The product's appeal is that it is organic and unique. There are

² Organic Trade Association and Organic Monitor February 2007

³ AC Nielsen Trends February 2007.

few agricultural rums (sugarcane fermented into alcohol) because of pressure to produce large volumes. Rum produced from organic sugarcane, fermented and distilled in a facility near the sugarcane fields and perhaps with tropical herbs and spices, would command attention. This product could be exported through specialty distributors but it should also build its market demand through tourist shops, hotels, restaurants, and resorts on Dominica. Examples of organic rums available today on the market include Papagayo Organic Rum in Paraguay, which benefits a group of 800 family sugarcane farms. Matraga's Organic White Rum and its gold rum are fair-traded from Capanema in Southern Brazil. They are made in the traditional way directly from fermented cane, not from industrial sugar waste. From the Caribbean, Rivers Royal Grenadian Rum in Grenada is also organic and comes from a 200-year-old tradition.

3. *Medicinal or herbal teas.* Consumers seeking a wellness lifestyle look for products and activities that bring physical and mental well-being.⁴ Among the products that benefit from this interest are herbal and medicinal teas. Herbal bagged and packaged teas are ranked 10th of the top 15 products in terms of dollar share at retail. They have a 12 percent share of the organic segment in dollars and a 7 percent share in volume.⁵ Herbal and medicinal teas are now commonplace compared to five years ago, when they could only be found in natural food or health food stores. In terms of market appeal, COTS's potential to develop an herbal tea produced and harvested in the Carib territory and blended according to traditional Carib tribe medicinal culture ranks extremely high. It has all the components for success: a wellness product, produced organically or wild-harvested, linked to traditional tribal culture, generating income for the Carib community, and protecting the rainforest and natural beauty of Dominica.

These products should be proposed to the New Orleans: Dominica/OECS Trade Initiative task force. They not only meet the task force's criteria, but they are exciting new products that could be offered to the New Orleans (and U.S.) market to compliment the bananas, hot sauce, and other Creole products being considered.

4. *Organic ornamental flowers.* Gerald Prolman, chief executive officer of Organic Bouquet, has a strong personal interest in and connection with Dominica. He visited the island in the early '90s when his business was organic fruit and vegetable sales and distribution. He met with Eugenia Charles, then prime minister, to discuss the possibilities of Dominica supplying the U.S. market with organic fruit and vegetables. The concept of Dominica as an organic island is reported to have come from this meeting.

Organic Bouquet, www.organicbouquet.com, was the first online florist supplying organic and Veriflora™ flowers and gifts, and it remains the dominant business in this market niche. Veriflora™ standards were introduced by Mr. Prolman to help farmers transition to organic because of the limited supply of organic flowers.

⁴ Hartman Group Wellness Report 2007.

⁵ AC Nielsen Trends January 2007.

Sales of organic flowers grew by 16 percent from 2005 to 2006 according to the Organic Trade Association's annual survey. Because of continued strong growth, Mr. Prolman has indicated that his business is always seeking new supplies of organic ornamental flowers. Limited air shipments are less of a barrier for organic flowers than for organic fruit and vegetables, as weekly shipments would be sufficient to provide flowers to enhance those offered in bouquets. Seasonal variations are expected and substitution is accepted. Mr. Prolman might be persuaded to develop a program to support increased production and wild harvesting of organic tropical flowers in Dominica.

5. *Organic cocoa*. Frederick Schilling has made it his mission to convert cocoa production around the world to organic. To achieve his mission, he sold his small chocolate company, Dagoba, to Hershey Company. His story is featured in the October 29, 2007, issue of *The New Yorker* magazine. Dominica would appeal greatly to Mr. Schilling's sense of purpose, especially if he was contacted to help "save" the island from proposed non-organic cocoa production. He is already interested in the Caribbean and Central America and has begun working with farmer cooperatives in the Dominican Republic and Costa Rica.

Dagoba chocolates (www.dagobachocolate.com) are unique because of the unusual ingredients blended into the chocolate, such as lemon, ginger, goji, currants, and chili peppers. Dominica's herbal tradition and tropical fruits might further inspire Mr. Schilling to take an interest in investing in Dominican cocoa production.

Reaching out to entrepreneurs like Mr. Schilling and Mr. Prolman is uncertain and may be beyond the comfort zone, but if engaged, these types of individuals will bring enthusiasm to organic projects as well as market influence and access. It's worth taking the risk and could be exciting for DOAM members.

ANNEX A. CONTACTS

- Dr. John Colin McIntyre, previous minister of Agriculture, Fisheries, and the Environment, now minister of Trade, Industry, Consumer Affairs, Private Sector Relations, CARICOM, OECS, and Diaspora Affairs
- Mr. Garner Eloi, manager, Dominica Essential Oils and Spices Cooperative
- Mr. Peter Dominique, managing director, PW Bellot and Co. Ltd.
- Mr. Parry Bellot, Dominica Eco-Tourism Association
- Mr. Yves Joseph, manager, Shillingford Estates
- Vanessa Prevost, president, DOAM executive committee
- Al-Mario Casimir, organic desk, Ministry of Agriculture
- Keian Stephenson, , team leader — Central Region, Ministry of Agriculture
- Sharon Jones, Natural Botanicals, DOAM executive committee
- Jem Winston, owner/operator, 3 Rivers Resort
- Sam Raphael, general manager, Jungle Bay Resort and Spa
- Atherton Martin, The Development Institute, Ltd.
- Mrs. Avriel James, managing director, The Coal Pot
- Steve John, Ph.D., director, Dominica Bureau of Standards
- Tiadora Anthony, DEXIA
- Mr. Oliver Grell, director, Ministry of Agriculture
- Collins Lloyd, Gordon Royer, Roy Ormond, DOAM executive committee
- Karen Sutherland, Roots Farm
- Ed Fletcher, chief operating officer, Botanical Division, Strategic Sourcing, Inc.
- ESPWA
- U.S.-based importers of organic products: Multiple Organics, Inc.; Marroquin International Organic Commodity Services; Sun-Ridge Farms; Global Organics, Ltd.; Fine Dried Fruit International
- Gerald Prolman, chief executive officer, Organic Bouquet, Inc.

ANNEX B. INFLUENCERS

Suggested by San Raphael

Described as activists and those working with the media, these individuals represent a range of political interests:

- Thomson Fontaine, Ph.D. Economist, lives off island, publishes *The Dominican*.
- Anthony (Tony) Astaphan. Lawyer, strong supporter of the government but will take up issues that he strongly supports, such as Japanese whaling industry.
- Bill Revere. Lawyer and historian, PDM party — a new political party, encouraged him to include organic in his platform.
- Singoalla Blomquist-Williams. Lawyer and activist, concerned about destruction of rivers.
- Lorraine Bannis-Roberts. Minister of Community Development, Culture, Information, and Gender Affairs, can appeal to grassroots.

Suggested by Karen Sutherland

- Family of Rosie Douglas, former prime minister.
- Dr. John Colin McIntyre. Previous minister of Agriculture, Fisheries, and the Environment, now minister of Trade, Industry, Consumer Affairs, Private Sector Relations, CARICOM, OECS, and Diaspora Affairs.
- Curtis Gonge. Businessman (insurance company, import company, building company).

ANNEX C. REFERENCE DOCUMENTS

1. Draft DOAM organic standards
2. Jamaica Organic Agriculture Movement standards, revised 2003
3. Dominica Bureau of Standards Act
4. National Organic Agriculture Enhancement Project (Draft 1), June 2007
5. Transforming Dominica into an Organic Island, UNEP Report, February 2006
6. Caribbean Islands Organic Input Study, 2001
7. National Agricultural Development Policy for the Commonwealth of Dominica, 2006-2015, Parts I, II and III, August-November 2006
8. HSLA Manual: Harvesting Support for Local Agriculture
9. IFOAM Training Manual for Organic Agriculture in the Humid Tropics

ANNEX D. RECOMMENDED RESOURCES

- NOP Compliance Checklist for Producers, June 2003, www.attra.org/attra-pub/PDF/compliance.pdf
- Compliance Checklist for Handlers, November 2006, www.attra.org/attra-pub/PDF/organic_handler.pdf
- Preparing for an Organic Inspection: Steps and Checklists, www.attra.org/attra-pub/PDF/organic_inspection.pdf
- Organic System Plan: Templates for Certifiers, www.attra.org/attra-pub/PDF/osptemplates.pdf
- Forms, Documents, and Samples Letters for Organic Producers, www.attra.org/attra-pub/PDF/producerforms.pdf
- Organic Market Farm Documentation Forms, www.attra.org/attra-pub/PDF/marketforms.pdf
- ISEAL 2005 Managing Conflict of Interest in Certification, www.isealalliance.org
- Farm Plan Questionnaire, www.ioia.net/images/pdf/NOPfarmQfinal.pdf
- Organic Handling Plan Template, www.ioia.net/images/pdf/organichandlingplanfinal2002.pdf
- Organic Farm Plan Certification Update Questionnaire, www.ioia.net/images/pdf/NOPfarmcertificationupdateform.pdf
- IFOAM International Organic Inspection Manual, www.ifoam.org/bookstore
- IFOAM Building Trust in Organic
- IFOAM Guide to Developing Certification Documents
- IFOAM Smallholder Group Certification Training Curriculum for Producer Organizations and Guidance Manual