

Communication Assessment and Action Plan for the Caribbean Region



In collaboration with:





Communication Assessment and Action Plan for the Caribbean Region

In collaboration with the Caribbean Institute for Media and Communication (CARIMAC),
University of the West Indies, Jamaica

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This paper presents the result of an assessment carried out in 2009 by Dr Maria Protz, Senior Associate at the Centre for Communication for Development (CCCD) of the Caribbean Institute for Media and Communication (CARIMAC), University of West Indies, and CSDI Coordinator for the region. Undertaken during the inception phase of the project, it constituted the basis to design a CSDI communication strategy and plan of action specific to the Caribbean region.

The study was developed under the supervision of Dr Mario Acunzo, CSDI Lead Technical Officer. Special thanks go to Marzia Pafumi and Fiona Foster for the text revision.

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Acronyms

ADLTC	Agri-Distance Learning and Training Centre
ADRM	Agricultural Disaster Risk Mitigation
AEOs	Agricultural Extension Officers
AKIS	Agricultural Knowledge and Information System
BCC	Bluefields Community Cooperative
CAIS	Caribbean Agricultural Information Service
CAMID	Caribbean Agribusiness Marketing Intelligence and Development
CANARI	Caribbean Natural Resource Institute
CAPGERNET	Caribbean Plant Genetic Resources Network
CAPHNET	Caribbean Post Harvest Technology Network
CARDI	Caribbean Agriculture and Research Development Institute
CARICOM	Caribbean Community and Common Market
CARIMAC	Caribbean Institute for Media and Communication
CBA	Community Based Adaptation
CC	Climate Change
CCA	Climate Change Adaptation
CCCCC (5Cs)	Caribbean Community Climate Change Centre
CCCD	Caribbean Centre for Communication for Development
CDERA	Caribbean Disaster and Emergency Response Agency
COL	Commonwealth of Learning
COLME	COL's Media Empowerment Programme
ComDev	Communication for Development
CRIDNET	Caribbean Rice Industry Development Network
CSDI	Communication for Sustainable Development Initiative
CTA	Centre for Tropical Agriculture
DAEE	Department of Agricultural Economics and Extension, UWI
DRM	Disaster Risk Mitigation/Management
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer Field Schools
GEF	Global Environmental Facility
GHG	Green House Gases
GIS	Global Information Systems
ICM	Integrated Crop Management
ICT4D	ICTs for Development

ICTs	Information and Communication Technologies
IICA	Inter-American Institute for Cooperation in Agriculture
IPM	Integrated Pest Management
IWCAM	Integrated Watershed and Coastal Area Management
JCDT	Jamaica Conservation and Development Trust
JFTA	Jeffrey Town Farmers Association
JIS	Jamaica Information Service
JOAM	Jamaica Organic Agricultural Movement
L3	Lifelong Learning for Farmers programme of COL
LA	Livelihood Assessment
MMC	Multi-Media Centre
MOAs	Ministries of Agriculture
MT	Master Trainers
NGO	Non-Governmental Organization
NID	Networked Intelligence for Development
NID	Networked Intelligence for Development
NRM	Natural Resource Management
ODPEM	Office of Disaster Preparedness and Emergency Management
OECS	Organization of Eastern Caribbean States
OPAAL	OECS Protected Areas and Associated Livelihoods Project
PMC	Population Media Centre
PMC	Population Media Centre (RARE Radio)
PRA	Participatory Rural Appraisal
PRCA	Participatory Rural Communication Appraisal
RADA	Rural Agricultural Development Authority (Jamaica)
SIDS	Small Island Developing States
SWOT	Strengths, Weaknesses, Opportunities and Threats
TCP	Technical Cooperation Programme
UNDP	United Nations Development Programme
UWI	University of the West Indies

Introduction

The ***Communication for Sustainable Development Initiative (CSDI)*** is a global programme of the United Nations Food and Agriculture Organization (FAO) and the Italian Ministry of the Environment and Territory that is working in Bolivia, Bangladesh, the Philippines, the Democratic Republic of the Congo and the English speaking Caribbean.

The initiative was established to provide the type of critical value that Communication for Development (ComDev) can facilitate as rural communities face the livelihood challenges that accompany Climate Change Adaptation (CCA). For Small Island Developing States (SIDS) such as many of those in the Caribbean, the implications of climate change are profound – especially with respect to food security, natural resource management (NRM), and for the economic sectors of agriculture, fisheries, and tourism upon which most Caribbean economies depend.

Objective of the CSDI project

The overall objective of the global CSDI project is to strengthen communication services in support of NRM, community-based adaptation (CBA), and sustainable rural development policies and programmes in selected pilot countries, and to then share the results and lessons learnt by scaling up best practices at the international level. In the Caribbean region the project aims to develop, test and implement communication strategies and tools that will support sound environmental practices and enable rural communities to better cope with, and adjust to, the realities of climate change (CC).

What is Communication for Development?

Communication is a critical key to promote sustainable development. *Communication for Development (ComDev)*, an approach pioneered by FAO, combines a variety of participatory rural communication appraisal (PRCA) processes and tools, ranging from rural radio to the latest Information and Communication Technologies (ICTs). As an approach, CSDI holds that ComDev is central to the task of enabling rural communities successfully adapt to CC. The systematic use of ComDev strategies and services at the field level contributes to the sustainable use of natural resources and to new development opportunities in rural areas by: (i) facilitating equitable access to knowledge and information to improve rural livelihoods; (ii) promoting people's participation in decision-making and collaborative Natural Resource Management (NRM); (iii) enhancing the capability of local development institutions and rural services; and (iv) supporting innovative research and advisory services.

Purpose of the Assessment

As a process, ComDev can make use of a wide variety of tools and techniques depending on local needs and requirements. This paper is the result of an assessment carried out in 2009 to outline the needs and priorities in communication for NRM and CC adaptation in agriculture for the Caribbean. This analysis in turn served to guide the development of an action plan for CSDI implementation within the region. Specifically, the assessment aimed:

1. to provide an overview of Climate Change (CC) realities for the agriculture and NRM sectors in the Caribbean and to identify some of the specific challenges that the region faces;
2. to outline a few key activities related to disaster risk management (DRM) and CC adaptation that FAO has been or is currently supporting within the region and to determine where there are gaps and needs in these initiatives that ComDev through the CSDI could facilitate;
3. to determine existing capacities of extension services for supporting CC and ComDev within the region;
4. to identify key regional actors working in agricultural research for Climate Change Adaptation;
5. to identify some of the best ComDev actors (key champions) and resources available for ComDev technical assistance at both community and regional levels;
6. through this exercise, to then outline the various strengths, weaknesses, opportunities and threats (SWOT) that might exist for ComDev to support CBA regionally;
7. to identify potential partners for CSDI implementation; and
8. to suggest key activities for an action plan that the CSDI can support.

The data reported in the following chapters depict the situation as it was assessed back in 2009. Despite part of this information may not be up to date, it was considered useful to document how the project proceeded to identify relevant actors, needs, capacities and priorities in the specific area of intervention. Those are the basis for designing a ComDev strategy and plan of action, as the one the CSDI project developed and implemented in the Caribbean region.

I - Overview of Climate Change Realities Facing Agriculture and NRM in the Caribbean

“*Feeling Hot, Hot, Hot*” is the catchy refrain of a popular calypso song that people in the Caribbean have been singing from the mid-1980s. But it is even more relevant today given that the region is becoming an even “hotter” place to be thanks to Climate Change. Germanwatch in its 2009 Global Risk Index analyses ranks countries according to how severely they have been affected by weather-related loss events such as hurricanes and floods. Out of an analysis of almost 150 countries¹, six Caribbean Islands were ranked as Climate change “Hot Spots” as follows:

- Dominican Republic – 12th
- Haiti - 16th
- Martinique – 24th
- Dominica – 25th
- Saint Lucia – 27th
- Jamaica - 34th

This analysis by the Global Risk Index proves that Caribbean Small Island Developing States (SIDS) are especially vulnerable to Climate Change for several reasons. For one, Caribbean SIDS economies are highly vulnerable to climate change impact since they depend largely on agricultural production and tourism – both sectors which have been experiencing adverse CC effects for many years already. Known for beautiful beaches, coral reefs, biodiversity flora and fauna, these natural resources that draw visitors to the Caribbean islands are also the same resources that are absolutely critical to the livelihoods of many Caribbean people – especially small farmers and fishing folk who depend on these assets for their very survival. Added to this is the recognition that agriculture in the Caribbean today is in a state of crisis as the sector experiences stiff competition from globalization and trade liberalization. In every country, the sector is being forced to radically, and rapidly, diversify. Now, more than ever, if the sector is to survive, it has to become much more proactive and must anticipate and satisfy niche markets which demand high quality products for the discerning food, cosmetic, health, chemical and industrial markets.”² At the same time, diversification must happen in a sustainable manner without jeopardizing the region’s fragile eco-systems.

¹ “Six Caribbean Islands in the top 40 climate hot spots” by Indi Mclymont Wednesday 10 December 2008, [Panos Caribbean](http://www.climatemediapartnership.org/spip.php?article601) (Jamaica) <http://www.climatemediapartnership.org/spip.php?article601>

² Ventura, Arnoldo. December 2002. A Framework for Developing and Implementing Information Systems for Agricultural Research and Development: The Jamaican Case. Special Advisor to the Prime Minister, Paper presented to ISNAR/IICD. The Hague.

These challenges come in the face of several other difficulties that the region is also experiencing. The decline in the agricultural sector has threatened food security and contributed to growing levels of poverty and rural unemployment, particularly among rural women and youth. Farmers are also aging and young farmers are not replacing them as they do not see agriculture as a “high tech,” cutting edge, profitable business.

To overcome these hurdles, farm families need to quickly adapt to new markets and to adopt the most up-to-date technologies available for integrated pest management, soil fertility, irrigation, harvesting, agro-processing and all other aspects of agricultural production and marketing while also calculating their potential risks in the event of hurricane, drought or other CC related disasters. Farmers require accurate up-to-date information on a range of factors including weather, inputs, crops, animal husbandry, pest control, trade opportunities and market requirements. More effective and closer ties with research are also needed and farmers will need to be more directly involved in participatory agricultural technology development to find solutions that are sustainable for Climate Change adaptation.

In short, coupled with the need to adapt to Climate Change, in the global competitive environment, farm families now require greater access to information. They also need mechanisms that will allow them to be fully engaged in the governance decisions that affect their lives as they adapt. This in turn requires that farm families are able to access all the networks of information that exist to serve the rural sector – including extension services, media channels such as farm radio and TV shows, research centers, and private sector export data. All of these are activities for ComDev consideration.

While some larger farmers have more resources and can access the information they need to adapt and compete effectively, several small farm households and more vulnerable groups are still highly dependent on face-to-face extension services. Many still lack capacity to articulate demands and make their needs known. However, in several Caribbean countries, in order to deal with global competition, agricultural policy has adopted a highly entrepreneurial and professional business approach and has shifted to focus on the needs of successful champion farmers. As a result, extension service providers are less and less geared to serving the need of resource poor farmers and those groups who are more vulnerable, yet nevertheless highly dependent on agricultural and NRM for their own survival.

1.1 *When di big breeze blow, di trees dem shake!*³

Whether or not farm households are resource poor or rich all face certain risks associated with climate change and will have to adapt one way or another. In recent years, natural disasters – such as floods, landslides, droughts and especially hurricanes have threatened the Caribbean’s agricultural livelihood base: Ivan (2004), Dean (2007) and Gustav (2008) all brought incredible devastation in the last few years alone. Table 1 below gives an idea of the type of damage that hurricanes have caused to the agricultural sector in one island alone – that of Jamaica.

Type of Disaster	Date	Sector	Economic Impact
Hurricane Gilbert	1988	Entire Agriculture Sector	Domestic crop damage J\$769 million (at 1988 exchange rates); banana industry totally destroyed; 60% loss of bearing coconut trees; 30-40% loss of citrus production; 17% loss of sugar cane; trees stripped of foliage; 90% of poultry/broiler stock destroyed; 80% of tourism/hotel sector damaged; major damage to entire island’s road network ⁴ 60% of coffee damaged ⁵
Hurricane Ivan	2004	Coconut	Increased costs in insurance for the sector - \$4.50 per \$100 of insurance ⁶
Hurricane Dean	2007	Banana	90-100% of banana cultivation devastated in Portland and St. Mary ⁷
Hurricane Dean	2007	Poultry	At least 100,000 day-old chicks dumped ⁸ . 20,000 to 30,000 birds lost in the field ⁹
Tropical Storm Gustav	2008	Coffee	Damage to crops: \$J108 million or 6% of total crop value; damage to farm roads: J\$30 million Damage to private farm roads: \$J 3.5 million ¹⁰ 5-10 percent of production damage to coffee trees; high increases in insurance costs and in pesticides and farm chemicals ¹¹

Table 1. Impact of hurricanes on the agricultural sector in Jamaica

³ When the big breezes blow (hurricanes), the trees will shake! A proverb that more implies when the big accusations start flying, guilty people get very nervous.

⁴ ODPEM. 10 September 2008. “Jamaica 20th Anniversary of Hurricane Gilbert’s Impact on Jamaica” http://www.cdera.org/cunews/news_releases/jamaica/printer_2225.php

⁵ Jamaica Recovers from Hurricane Disaster <https://entrepreneur.com/tradejournals/article/11921188.html>

⁶ Brown, Jermain O. July 26, 2005. “Coconut Board Urges Farmers to Minimise Loss During the Hurricane Season” <http://www.jis.gov.jm/tools/printable.asp?print=/agriculture/html>

⁷ FAO/GIEWS Global Watch. 22 August 2007. “Thousands in Need of Humanitarian Assistance After Hurricane Dean: Banana Plantations Destroyed on Several Islands” <http://www.fao.org/GIEWS/english/shortnews/carib070822.htm>

⁸ “Damage by Dean Hurting Poultry Farmers” www.jamaica-gleaner.com/gleaner/20070828/news/news5.html

⁹ “Jamaica Broilers Group Resumes Full Operations – Minimally affected by Hurricane Dean” August 29, 2007. <http://www.jamaica-gleaner.com/gleaner/20070829/business/business8.html>

¹⁰ Gentles, Christopher C. Friday, September 26, 2008. “How Hurricanes are Undermining Jamaica’s Coffee Industry” <http://www.jamaica-gleaner.com/gleaner/20080926/business/business5.html>

¹¹ Damaged Roads, Drains from Tropical Storm Cited as Setbacks to Coffee Sector. September 23, 2008. <http://www.jis.gov.jm/tools/printable.asp?print=/agriculture/html/20080923t100000-050>

Because of hurricane destruction in the Caribbean, the focal point for considering Climate Change and CBA has to be through the lens of disaster risk mitigation and preparedness. While climate change impact will also bring along health risks, drought, plant pests and diseases, and other related disasters with which SIDS will need to cope, mitigation and preparedness of the impact of hurricanes is foremost in the minds of people here and is the 'hook' for engaging SIDS in the Climate Change discourse. Everyone – young or old, rich or poor - now has some type of direct, first hand experience with the hurricanes that have pounded the region's shores in recent times.

While sustainable Community Based Adaptation to Climate Change will require testing of new technologies, shifting livelihood activities, and weighing of the pros and cons of various options, the region's small farmers are not waiting for long-term results from scientific studies and agricultural research stations. There is no "**soon come**" for the agricultural sector and for the rural communities whose livelihoods depend on farming. They are not waiting for science. Instead, they are already changing, adapting and putting in place a variety of measures to mitigate impact. For the most part, these coping strategies have been found through their own experience (trial and error) and in some cases through discussion with other farmers. Some of these include:

- Trimming banana leaves off prior to a hurricane to reduce wind damage
- Traditional banana producers are now moving out of banana altogether and into other types of low-risk, crops;
- Non-traditional banana growing farmers (who live in less risky agro-ecological areas) are now moving into banana production to meet local demand
- Planting only tuber crops (such as yam, dasheen, coco) that lay close to the ground to reduce wind damage
- Planting of dwarf fruit tree varieties (Mango, June Plum, etc.)
- Cultivation of hedgerows as wind brakes
- Use of pineapple barriers and productive hedgerows
- Planting of nurseries and extra seedling materials ahead of time in case of hurricanes, etc.
- Using improved green houses that can be taken down easily in the event of hurricanes
- Creating raised beds or platforms to avoid flooding
- Among others practices.

Meeting the needs of all farmers therefore, is a process that will require “*all hands on deck*” and demands the harnessing of all stakeholders and champions in agricultural research, technical assistance, community development and communication. ComDev can provide the type of support that can greatly facilitate this mutual effort.

With this background established, the paper now outlines:

- a) some of the key types of technical assistance that are being provided in the region by FAO to address DRM and CC;
- b) the capacity of rural services – especially extension services to facilitate and address CBA effectively
- c) the key research, rural knowledge centres and organizations working in NRM that will need to play a role
- d) and the key communication actors that are championing ComDev at the regional, national and local community levels.

By doing so, an analysis of the key strengths, weaknesses, opportunities and threats (SWOT) will be carried out and an appropriate course for CSDI action in the region will be proposed to address existing needs and to leverage maximum use of available resources and partnership opportunities.

II - FAO Regional Activities in Climate Change Adaptation and Disaster Risk Management for the Agricultural Sector

As a first step in analysing the current state of ComDev for NRM and CCA in the Caribbean, it is useful to consider some of the Technical Cooperation Programmes (TCPs) that FAO itself is working on regionally and to acknowledge how ComDev can be of assistance in supporting and facilitating these existing activities. Several technical assistance programmes have been operating in the region and a few are discussed below.

2.1 Jamaica

In Jamaica, **TCP/JAM/3202 (D) – National Disaster Preparedness and Emergency Response Plan for the Agriculture Sector** – has been working to help the country develop an Agricultural Disaster Risk Management (ADRM) plan as a component of the island's overall Disaster Risk Management Plan. This TCP also helped to identify a number of 'best practices' and mitigation measures that farmers can put in place to minimize the impact of hurricanes on their farming systems.

Under this initiative, training was also provided to staff of the Rural Agricultural Development Authority (RADA), the Ministry of Agriculture (MOA) and related partner organizations in Livelihood Assessment (LA) methodologies. It helped Agricultural Extension Officers (AEOs) and others to complete LA baseline assessments in advance of potential CC disasters, and more effectively do initial LA assessments and detailed assessments in the event that disasters occur. A further manual for doing Livelihood Assessments for the Agricultural sector is being finalized specifically for the Jamaican context¹².

Under the Livelihood Assessment approach, several participatory rural appraisal (PRA) tools are being used including: transects, community mapping exercises, seasonal calendars, and so forth. However, all of these could be enhanced if additional communication tools are used under a PRCA approach. ICTs (mobile phones and digital cameras) for example can greatly assist with digital recording of transects and hazard mapping in both the 'before' baseline assessment processes and also in the post-disaster contexts. Additional LA tools, such as

¹² FAO (forthcoming). The Livelihood Assessment Tool Kit. A Manual for Jamaican Agriculture and Fisheries.

focus group interviews and oral history documentation can also be facilitated through the use of video and audio recording.

During the LA training, participants strongly recommended the need for additional training in focus group interviews, key informant interviewing, digital photography, GIS training and other forms of participatory communication methods that would enhance their LA efforts even further – all are activities which can be facilitated under ComDev technical assistance¹³. They also requested assistance with the development of fact sheets, bulletins, and other public awareness communication materials that would help to sensitize farmers and vulnerable households as to the nature of the LA process and how it would benefit farm households. However, under this current TCP – there is no scope for concentrated and specific communication activities.

2.1.1 Jamaica Organic Agricultural Movement (JOAM) Demo TCP

Another TCP initiative started in 2009, implemented by the Jamaica Organic Agriculture Movement (JOAM) with a focus on organic agriculture as a key mitigation approach to climate change. It involves the establishment of 14 different demonstration sites around the island and promotes a variety of organic technologies including green house technologies, organic pest management, composting and so forth.

As a non-governmental organization (NGO), JOAM recognizes the critical role that communication can play in advocacy and raising awareness about climate change and the contribution that organic farming can make to reducing CC negative impacts. JOAM's commitment to communication is very strong, and they currently rely on a variety of ICT networking tools to share information, as well as on-farm training. However, the organization faces considerable constraints in terms of personnel and resources that would allow them to do greater communication work with their partners and with the farming community.

Indeed, TCP resources are being delegated for the provision of a digital video camera so that the demonstrations sites can be documented for later information sharing and creation of instructional materials. However, there are no resources for training in video production, for video editing, for communication strategy design, or for training of personnel to actually

¹³ Dr. Maria Protz. July 2009. "The Livelihood Assessment Training Analyzing and Responding to the Impact of Disasters on the Livelihoods of People: Final Report of the Livelihood assessment Training Sessions Technical Assistance Project (TCP) TCP/JAM3202 (D), "National Disaster Preparedness and Emergency Response Plan, For the Agricultural Sector. FAO-Jamaica Office, Kingston.

ensure that the video documentation is done properly and in a way that will yield rich material for message development. Neither is there scope in the TCP for training in instructional material design. These are critical gaps that the CSDI ComDev initiative could and should address. Without ComDev, the danger is that much of the effort spent to implement viable organic activities will not be sufficiently captured in ways that can benefit others.

2.2 Belize

In Belize, FAO is supporting a similar DRM TCP project entitled ***“TCP/BZE/3202 (E) Improved National and Local Capacities for Hurricane Related Disaster Mitigation, Preparedness, and Response in the Agricultural Sector”***.

This TCP project shares many similar components to that of the Jamaican TCP described above, but its focus is also on demonstrating best practices to farmers through on-farm training and the establishment of 100 demonstration plots. It also makes much more concerted mention of the need to share lessons learned through *“fact sheets developed by the project with national research institutes and extension services; documentation of good practices through international databases and national training workshops.”* (p.2).

Likewise, this TCP suggests conducting *“a study to identify and document existing/locally known technologies for disaster risk reduction (DRR) related to agriculture and sustainable natural resource management ... (to) enrich the range of locally identified options through good practice examples documented elsewhere in similar agro-ecological contexts, including findings from recent DRM projects implemented by FAO in the region.”* (p.11). This activity could be enhanced through the use of PRCA research tools that would not only allow for documentation, but also for the later development of communication messages and educational materials.

The model of extension in this TCP is very much in keeping with the diffusion model: relying on demonstration and replication of best practices for CC and for DRM mitigation. Provisions are made for fact sheets, workshops, training, and production of manuals. But unfortunately, outside of these, no specific mention of communication is made. In short, there is no consideration of the value added that a ComDev approach could bring to this TCP initiative.

2.3 Saint Lucia

In St Lucia, FAO is also supporting a similar DRM initiative **entitled “TCP/STL/3202 (D) Enhanced Capacities for Disaster Risk Mitigation in Agriculture, Fisheries and Forestry”**. This technical assistance programme is especially targeting farmers whose livelihoods depend on the banana industry as this sector is not only vulnerable to hurricanes and other meteorological events, but also faces severe constraints to changes in trade agreements. The country is now trying to actively diversify its agricultural sector to make it less dependent on banana production and to reduce the amount it now spends on food imports, while at the same time also trying to protect its natural resources.

As is the case with the Belize TCP, this initiative employs on-farm demonstrations, and the development of training systems and manuals. But of the five objectives it seeks to implement, the following three lend themselves specifically to the type of technical assistance that CSDI ComDev can provide:

- *To foster a collaborative approach to hazard risk reduction among all stakeholders;*
- *To empower local community groups, institutions, and individuals to undertake hazard mitigation measures;*
- *To increase the awareness of hazard mitigation at every level of society and to encourage their involvement in hazard risk reduction. (p.5).*

Unlike the TCPs designed for Jamaica and Belize however, this TCP for St. Lucia clearly identifies areas for ComDev support and also delegates specific resources for communication.

For one, it recognizes that although a DRM plan has been outlined to reduce disaster risks to the agricultural sector, *“few staff are aware of it and even fewer farmers and producer organizations are aware of the operations and measures it outlines”* (p.7). This is a task for ComDev. Second, it indicates that one of its key outcomes is *“enhanced know how of farmers’ and fishermen organizations to implement natural hazard risk mitigation and preparedness measures”* (p.9). Again, this is a task for ComDev.

Another key expected outcome is *“testing of demonstration activities and promotion of mitigation measures at the community level”* (p.10). To do this, training, demonstration and documentation are seen as the key communication activities and ComDev responsibilities.

But one of its most important outputs is “*development of a communication public awareness programme, making use of the local dialect “Kweyol” and local media including the Government Information Service and the Agricultural Communications Unit, targeted to farmers and civil society*” (p.11). This output is expected to be achieved through the development of a targeted public communication strategy that identifies key audiences and uses a multi-media approach (p.12). This specific expected output is highly laudable, but unless executed through the adoption of ComDev principles and using a ComDev strategic, targeted methodology that will result in measurable behaviour change, the effort may remain vague and only serve to raise general public awareness or public relations without producing real impact.

2.4 FAO’s Past Support for Communication for Disaster Mitigation

In September 1996, the eastern Caribbean suffered the full force of hurricanes Luis and Marilyn which severely crippled the agricultural sector in several island economies. As a result, the Organization of Eastern Caribbean States (OECS) asked FAO to send a team to assess the damage and devise projects for rehabilitation in the agricultural and fisheries sectors. A joint project with the Caribbean Disaster and Emergency Response Agency (CDERA) was implemented to promote disaster mitigation measures in the agriculture, forestry and fisheries sectors and to develop hurricane-resistant farming methods, crops and forestry techniques and to reduce the impact of hurricanes on the fishing industry.

In 1998, a regional communications strategy was also developed that encouraged widespread use of ICTs – radio and the Internet and to enhance public awareness in rural communities, and also made proposals to strengthen extension services in DRM communication throughout the OECS region. Unfortunately, since then, it has been difficult to learn if any of the recommendations from that initiative were put into practice at the national extension levels.

III - Communication Capacity of Extension Services

Having presented some of FAO's efforts to address DRM and CC, and identified the role that ComDev could facilitate in these initiatives, it is now appropriate to review additional issues that must be addressed if ComDev for NRM and CBA is to be enhanced throughout the region. One issue that is of most importance is the capacity of extension to deliver ComDev services for CC.

Whether or not the above-mentioned TCPs identify ComDev as a critical component, what is common between them is the recognition that the existing capacity of extension to provide communication services that support CBA for CC is limited and needs to be strengthened. National agricultural research and extension systems, many of which have deteriorated in their effectiveness, also need to increase their capacity to respond to the technology needs of small-scale farmers. In most countries, acute shortage of resources has resulted in weak extension services. Cutbacks in public sector funding have had negative repercussions for the Ministries of Agriculture in many countries within the region. These cuts have in turn reduced the number of extension staff available to serve rural areas. This has limited their mobility and lessened opportunities for the traditional face-to-face interaction to which farmers are most accustomed.

The general trend is towards decentralization and privatisation. Where they exist, services are now provided by multiple providers, including private enterprises, commodity boards, agricultural educators, researchers, extension workers and communicators. But this leads to a more complex Agricultural Knowledge and Information System (AKIS), that in turn requires effective coordination among the various knowledge-generation sources. As a theoretical concept, an "AKIS" is a noble idea, but in practice it is difficult to see a viable AKIS system working at either the national or regional levels.

3.1 Changing Role of the Extension Officer

Traditionally, extension officers were the main 'interface' within an AKIS, facilitating interactions between scientific researchers ministries of agriculture, markets and farmers. But within the Caribbean, as elsewhere, the days of regular face-to-face contact have diminished drastically.

While better-off farmers are able to get the agricultural information they need to cope with climate change, diversify their production and compete within the new global market place without the aid of extension services, many of the region's poorer and more vulnerable farmers are not. Highly entrepreneurial farmers are able to access information via the internet on their own directly without support from extension, but for many small holders who may face obstacles related to literacy and numeracy, visits from their extension officer are still very much desired.

Moreover, even if vulnerable farmers are able to access information through the net, existing information is predominantly in a form that is too scientific, or too culturally foreign to have much local significance for this client group. In Jamaica for example, the technical communication division has produced a number of brochures and fact sheets that promote best practices for disaster risk mitigation in various sub-sectors of agriculture. These are produced primarily in black and white and are distributed as part of regular farmer training sessions are not distributed nearly as widely as is desired. Farmers who are not registered with RADA's Agricultural Business Information System (ABIS) likely also miss this information.

Table 2 provides a sample of some of the materials that have been prepared related to disaster risk mitigation in some of the agricultural sectors. But these types of print-based fact sheets require literacy skills that are not necessarily common to all farmers who need the information they contain.

	FARMER FACT SHEETS FOR DRM PREPAREDNESS
ADRM-H1	RADA. July 2008. Hurricane Risk Management Measures. <u>Livestock</u> . Agricultural Disaster Risk Management Programme (ADRM).
ADRM-H2	RADA. July 2008. Hurricane Risk Management Measures. <u>Fruit Tree Crops</u> . Agricultural Disaster Risk Management Programme (ADRM).
ADRM-H4	RADA. July 2008. Hurricane Risk Management Measures. <u>Coffee</u> . Agricultural Disaster Risk Management Programme (ADRM).
ADRM-H5	RADA. July 2008. Hurricane Risk Management Measures. <u>Marine Fisheries</u> . Agricultural Disaster Risk Management Programme (ADRM).
ADRM-H7	RADA. July 2008. Hurricane Risk Management Measures. <u>Short-term Crops</u> . Agricultural Disaster Risk Management Programme (ADRM).
ADRM-H9	RADA. July 2008. Hurricane Risk Management Measures. <u>Pesticides</u> . Agricultural Disaster Risk Management Programme (ADRM).

Table 2. RADA farmer fact sheets for DRM preparedness

RADA has also broadcast radio and television public service announcements related to DRM on the Jamaica Information Service (JIS) and on the government radio broadcast segments and have thus tried to get messages out to the farming community using the resources that they have available. However, the audience reach for these channels is generally limited and as a result it is difficult to assess if they truly do get to rural audiences they are intended to reach.

Extension services in many of the other Caribbean countries also face similar challenges in communicating DRM messages. Tight financial resources usually only allow for limited government broadcast channels with limited audience reach. But to be useful, information must be available to the rural users in appropriate languages and formats. Information should also be sent through the most up-to-date and appropriate channels. While there are programmes (such as RARE Radio in St. Lucia) and community-based media centres that do reach these audiences effectively, most extension services and Ministries of Agriculture do not link with these opportunities and thus do not communicate as effectively as they could.

IV - Regional Activities and Programmes Related to Natural Resource Management, Agricultural Research and CBA to Climate Change

This section outlines those organizations (national and regional) that are currently working on climate change, community-based adaptation (CBA), NRM and agriculture using ICTs and other communication approaches and tools. These include the Global Environmental Facility for CBA, CANARI, CABI, CARDI and IICA primarily.

4.1 UNDP's Global Environmental Facility (GEF) Fund for CBA

The UNDP-GEF for Community-Based Adaptation (CBA) project recognizes that small communities are often those most affected by, yet least equipped to cope with, the impacts of climate change. As a result, it supports pilot projects to build the resilience of communities, their livelihoods and the ecosystems upon which they rely in the face of climate change impacts.

Jamaica is one of the 10 countries that was globally selected for the GEF CBA initiative and several projects are being implemented. A project particularly relevant to the mandate of CSDI is being implemented by the Jamaica Conservation and Development trust (JCDDT) on *“Reducing Climate Change-Driven Erosion and Landslide Risks through Sustainable Agriculture for Safer Slopes”*.

The project aims to work with two communities of farmers in Jamaica's Blue Mountains – highland areas where high-value cool-climate crops are grown, such as coffee. The region also plays a key role as a watershed to the nearby city of Kingston. It is vulnerable to erosion, particularly from hurricanes and strong storms, which can lead to landslides that destroy livelihoods and threaten lives. The main objective of the project were to increase community-level capacity to manage climate change induced erosion and landslide risks on the slopes of the Blue Mountains. The specific CBA activities that have been promoted were training in cost-effective soil conservation methods, demonstration of soil conservation practices on farms, which include intensive greenhouse farming and organic farming, and agro-forestry.

The project builds on existing JCDDT sustainable agriculture activities, and addresses additional climate change pressures by reforesting mountain slopes and working with

communities to raise awareness and build capacity around climate-resilient natural resource management practices.

Unfortunately, while JCDT has a strong commitment to communication and public awareness, there are no resources or in-house skills for the video or digital documentation of the demonstration sites as they are being established. Value experience is not being captured that could later inform and shape instructional materials so that the best practices can be shared more widely. This is an area of technical assistance that could be provided through the CSDI.

4.2 CANARI

Over the past few years, the Caribbean Natural Resources Institute (CANARI) has been implementing a project entitled Climate Change and Biodiversity in the Caribbean (CCBIC) under funding from the John T. and Catherine D. MacArthur Foundation.

The objectives of the project have been:

- to increase understanding and consensus on what is known about the predicted climate change trends and their impact on biodiversity in the islands of the Caribbean
- to identify gaps in regional knowledge and develop a research agenda to address these gaps and to identify the capacities that need to be developed to implement the agenda.

The first stage of the project has been a desk review of the current state of knowledge on the impacts of climate change on biodiversity in the region and the related research capacities. Working groups were established for this purpose and the following draft reports have been prepared:

1. Climate change models and scenarios for the islands of the Caribbean
2. Climate change impacts on marine and coastal biodiversity in the islands of the Caribbean
3. Climate change impacts on terrestrial biodiversity in the islands of the Caribbean.

Another CANARI project dovetails very closely to the goals and objectives of the CSDI as it is focused specifically on climate change and disaster risk reduction. The vision of this programme is for *“Improved livelihoods and resilience to climate change and related disasters, particularly in the most vulnerable communities, through effective participatory management of ecosystems and enhanced awareness of viable responses to climate change”* and the goal of the project is *“To improve livelihoods and resilience to climate change and related disasters by building the capacity of stakeholders, particularly those most vulnerable to climate change, to participate effectively in ecosystem management and develop appropriate responses to climate change, through participatory action research and application and dissemination of lessons learned.”*

4.2.1 Objectives of CANARI’s Climate Change and Disaster Risk Reduction Programme

The objectives of the programme all have clear ComDev implications as follows:

1. To conduct research that contributes to improved livelihoods and effective responses to climate change, including analysis and/or testing of:
 - a. effective tools and methods to facilitate participatory management of the ecosystems which underpin greater resilience to climate change and sustainable livelihoods;
 - b. communication strategies that increase understanding of, and stimulate appropriate responses to, climate change;
 - c. ways in which traditional knowledge can be used to reduce vulnerability to climate change;
 - d. successful community-level adaptation strategies, including a review of how approaches used elsewhere, and particularly in other small island states, can be applied in Caribbean islands.
2. To build the capacity of key stakeholders in tools and methods for participatory ecosystem management and the development of effective response strategies, through training workshops, demonstrations, small grants, mentoring etc.
3. To enhance stakeholders’ knowledge of climate change and their ability to respond effectively by increasing their understanding of climate change impacts and response options by:
 - a. conveying scientific knowledge in a way that is accessible and relevant to diverse audiences;

- b. explaining how effective management of natural resources, including sustainable use (e.g. for tourism or agriculture), can contribute to both increased resilience to climate change and improved livelihoods;
- c. disseminating and promoting the application of research findings

Together with PANOS, CANARI has also been actively engaged in the creation of a regional strategy to promote public awareness about climate change and has been working in Laborie, St. Lucia to engage community people in the creation of their own media about CC.

4.3 CARDI

CARDI is the premiere agricultural research organisation within CARICOM and as such has an important role in developing and articulating the sector's response to the effects of global climate change. In doing so, CARDI works closely with the Caribbean Community Climate Change Centre (5Cs) in Belize to identify programmes of action for the agricultural sector. These programmes are to improve knowledge sharing and capability among personnel and increase infrastructural capacity to measure climatic parameters and relate them to agricultural production and productivity in the Caribbean. This is all in an effort to increase the ability of the region's agricultural sector to adapt to and mitigate against global climate change.

Some of the specific actions CARDI has pursued in furtherance of the objectives above are:

- Conducting an inventory of greenhouse gases (GHG) for the agricultural sector in Jamaica
- Participation in a workshop of Caribbean stakeholders to start the implementation of the project *Regional Consultation to Assess Regional Priorities, Capabilities and Research Gaps on Climate Change and Poverty Reduction in Latin America and the Caribbean*
- Participation in a workshop to assist with the preparation of the Vulnerability and Adaptation (V&A) Assessments for the water resources and agricultural sectors in Jamaica

CARDI further recognizes that adaptation to CC involves a "New" Vision of Agriculture that:

- Spans the entire agri-food chain and delivers diverse products including starches, proteins, minerals and vitamins, biofuel, and medicinal, cosmetic and nutra-ceutical products
- Develops direct and indirect linkages with the other productive sectors and, is market oriented
- Requires significant quantum of human capital that is technologically trained and more organised
- Is significantly driven by appropriate technological processes and measures
- Has an improved image through greater use of the media and corporate communication programmes

The areas that would be pursued or given greater emphasis form 2008-2010 include:

- Undercover / protected agriculture (greenhouse technology)
- Organic agriculture
- Herbals
- Agroenergy (biofuel)
- Foodsafety

In addition to these specific agricultural activities related to CC, CARDI has also been a major leader in the forefront of ICT applications for the sharing of agricultural research activities, and also for the sharing of technical information among agricultural professionals and extension personnel. Working closely with support from CTA, the Caribbean Agricultural Information Service (CAIS) was established in 1998 through a series of national consultations with CARICOM member countries.

The main goal of CAIS is “to provide access to timely, accurate, relevant and current agricultural information in order to assist users in becoming more competitive” as well as to facilitate better planning and management and to enhance other aspects of Caribbean agriculture. At the national level, CAIS also seeks to assist countries to collect, organize and repackage agricultural information for dissemination and to communicate agricultural information to relevant target groups as well as to assist in the development of national agricultural information networks. This has been achieved though such activities as ‘Technical Writing’ workshops for agricultural professionals (St. Kitts, February 2003) and support for the creation of the Caribbean Farmers’ and NGO Network (CaFANN) among many other activities.

Procicaribe is a networking system, provided through CARDI, that links several different agricultural research services together. Some of these include the Caribbean Rice Industry Development Network (CRIDNET), the Caribbean Plant Genetic Resources Network (CAPGERNET); the Caribbean Post Harvest Technology Network (CAPHNET), among many others.

The Caribbean Agribusiness Marketing Intelligence and Development (CAMID) Network, is another network linked through Procicaribe that has been further supported by FAO. CAMID seeks to provide up-to-date agricultural information to agricultural producers and entrepreneurs to enhance competitiveness and production efficiency. The CAMID database provides current information on various activities within the agricultural sector and industries, import and export information, market studies, demand information and supply information, - all of which not only help Ministries of Agriculture plan better, but which can also aid producers directly, if they access the CAMID system.

4.4 CABI Caribbean (Farmer Field Schools)

CABI Caribbean is part of CABI International and CABI Caribbean and Latin America (CLA). CABI Caribbean has been at the forefront of developing and implementing integrated crop and pest control mitigation efforts that have been of priority concern for the region (e.g. for the pink hibiscus mealybug, *Maconellicoccus hirsutus* and citrus blackfly, *Aleurocanthus woglumi*). Activities have included training and capacity building efforts at the national and regional levels and also sensitising various stakeholders to the benefits of ICM and IPM, particularly in the use of natural enemies as an environmentally friendly alternative to chemical pest management.

Participatory approaches for improved farmer decision making through farmer-field schools is how CABI has worked to sensitise farmer groups to the use of ecological approaches to crop production. In 2002, the Centre was the Technical Agency for the Training of Master Trainers (MTs) Programme (using the Farmer Field School (FFS) Model) and this initiative involved Dominica, Dominican Republic, Haiti, Jamaica, Surinam and Trinidad & Tobago. The FFS approach builds on the face-to-face adult learning process through which farmers learn from each other, are engaged in on-farm experimentation and trials, and are involved in partnerships with knowledge based institutions.

By harnessing CABI's collective skills and resources, CABI Caribbean focuses its efforts on complementing national capacities and providing leadership in the following key thematic areas:

- Sustainable pest management strategies
- Prevention and management of invasive alien species
- Conservation and utilisation of biodiversity
- Support for small holder commodity chains

CABI's approach is critical, because ComDev cannot forget the profound value of face-to-face communication and farmer-to-farmer group learning and direct adult learning when it comes to CBA. Documenting successes and sharing these with wider farming audiences perhaps through ICT applications is an area that ComDev can possibly help to assist with under the CSDI.

4.5 Inter-American Institute for Cooperation in Agriculture (IICA)

At a more advanced farmer level, the Inter-American Institute for Cooperation in Agriculture (IICA) is also serving the region's farmers and extension services through its Agri-Distance Learning and Training Centre (ADLTC). Through the ADLTC, courses have been designed and developed in conjunction with McGill University and the University of Nova Scotia in Canada, as well as with the Caribbean Export Development Agency and other regional entities. The courses are not accredited, but are technically highly detailed and are officially recognized by the contributing agencies.

Courses are available on CD-Rom and through the Internet and are taught in conjunction with certified trainers. Courses offered include:

- An introduction to E-Commerce (an internet based course)
- Organic Farming for Entrepreneurs (CD-ROM)
- Farm Management (an internet based course)
- Health and Occupational Safety for Entrepreneurs (a CD-Rom course) and
- Information and Extension Methods in Agriculture (CD-ROM).

The distance-learning courses have the added advantage of allowing real-time interaction with instructors and 'learning facilitators' using the Internet or video-conferencing.

Another value-added feature of the ADLTC courses are the scope they offer for networking among farmers and students taking the courses. Chat rooms and user groups allow course clients to share ideas and learn from one another. An additional important client group is that of agricultural professionals and extension practitioners who wish to upgrade their technical knowledge and to keep current with new agricultural developments.

4.6 Department of Agricultural Economics and Extension – St. Augustine, UWI Trinidad

The University of the West Indies (UWI)'s, Department of Agricultural Economics and Extension (DAEE) in St. Augustine, Trinidad, is the highest academic certification institute for extension in the English speaking Caribbean region and serves all CARICOM countries. It is therefore an important potential partner for any capacity building and extension training that the CSDI may be required to undertake.

The DAEE has close ties with CABI, CARDI, and several other regional agricultural research institutions.

V - Opportunities to Bridge the Gap in Extension through ICTs

Climate change adaptation will need to make use of all available communication opportunities in the region, especially new and emerging ICTs. Indeed, in the Caribbean, ICT expansion is taking place through unprecedented growth in the use of mobile phones, cyber cafes and even the establishment of community-managed telecentres.

Traditionally extension has relied on the use of radio, video and print based technical packages combined with field demonstrations and farmer group extension methods. Much of the technical information that resource poor farmers need is currently available within many of the extension divisions in the region. However, in order for farmers to take advantage of this new ICT era, most of the resources will need to be digitized and repackaged as DVDs, CD-ROMs and as animated video packages that can be downloaded or made available through the internet (YouTube, Facebook, etc.) and/or the new community multi-media centres, which are being established throughout the region. If this can be done, and mechanisms are put in place to allow regular contact with extension officers through real-time webcam discussions, phone calls, and radio or TV 'call-in shows' that facilitate the type of face to face oral discussions, then in effect, 'virtual extension services' can still be delivered to these farmers in the region.

Some FAO models may show how to create such virtual extension services through the use of ICTs. FarmNet (<ftp://ftp.fao.org/sd/farmnet.pdf>) is one such example to consider.

5.1 FAO's experience with using ICTs and other media to improve communication between farmers and extension services, FarmNet

FAO's experience with FarmNet began in Latin America in the early 1990s where farmer electronic information networks were established in Chile and Mexico. FarmNet is a network of rural people and supporting organizations, such as extension services using ICTs and conventional communication media, that facilitates, generates, gathers and exchanges information. The networks provided information on crops, inputs, prices, markets, weather conditions and credit facilities. The process started with an assessment of the local knowledge and information needs of farmers and their associations.

The purpose of a FarmNet is to empower farmers through participatory networks managed by them to access, generate, share and utilise information and knowledge for improved rural livelihoods. To achieve this purpose, a FarmNet focuses on the following activities:

- *Participatory information audits and needs assessments* to understand the differentiated constraints, opportunities, resources and skills of farm groups;
- *Rural networking* using farmers' own communication channels combined with conventional communication media and the new ICTs;
- *Capacity building* with all FarmNet partners to strengthen their abilities to generate, access and manage knowledge and information for better farming and improved livelihoods;
- *Participatory monitoring and evaluation* to update FarmNet activities and information services and to document and share successful experiences and best practices with other farming communities and development partners.

5.1.1 New Applications

Farmnet systems can also facilitate 'real time' linkages among extension, farmers and researchers through live radio-call in shows that respond to farmers' queries. These shows are sent in on-line, and through responses to other digital information packages that are highly audio-visual in nature. If more digital agricultural technical content is created as virtual audio-visual fact sheets and demonstrations, for example, and they are then made available through the websites of Ministry of Agriculture or through regional entities, farmers could access audio-visual instructional packages and sound clips with pictures while also communicating directly to extension staff and asking questions through webcam technology, cell phones or other means. Extension officers and subject matter specialists can talk face to face in real time to groups of farmers in a telecenter, for example, about specific issues and problems that farmers face. Extension services will increasingly act as knowledge facilitators – helping to identify client needs and facilitating feedback.

Virtual 'demonstration days' could also be arranged where-in times are set for farmers to gather to watch demonstration either on line or via video or even radio with more detailed follow-up discussion afterwards. To date however, such applications have not yet been established to serve farmers in the Caribbean region.

At the same time, there is still a missing link to make this happen. Information and communication technologies (ICTs) can help make the necessary conditions and access, but

they cannot assure proper interpretation and expeditious application. This will depend on well-trained multi-skilled extension officers with a good knowledge of the local ambiance, culture and needs. However, with the constraints that many of the region's extension services face, it may also demand the creation of a new agency or service that employs the information from CAIS-CARDI, ProciCaribe, IICA's distance learning materials, and other knowledge institutions and repackages it into even more digestible formats for local farmers in each country (perhaps as draft radio scripts, PSAs, local fact sheets, video clips, and so forth). Much of the agricultural and scientific knowledge that is produced at the regional level, even when presented as scientific case study material, still needs to be digested into locally relevant, farmer-friendly material.¹⁴ As a result, the success of ICTS to contribute to growth in the agricultural sector will demand a more active and empowered role for rural intermediate organizations, such as extension with links to community-based multi-media centres.

¹⁴ Ventura, Arnaldo. December 2002. A Framework for Developing and Implementing Information Systems for Agricultural Research and Development: The Jamaican Case. Special Advisor to the Prime Minister, Paper presented to ISNAR/IICD. The Hague.

VI - Best ComDev Practices for Agriculture, NRM and CBA

Having reviewed key regional actors working in NRM, and identified the importance of contributions by agricultural knowledge institutions, including their work with ICTs, it is now beneficial to consider ComDev in examples where it is involved with farmers and NRM resources.

Some of these 'best practices' and champions of ComDev work primarily at community based multi-media centres. Others work at both the local level and at the level of extension training and assistance. Still others focus more at the national and regional mainstream media levels. A few best practices are included here that are less focused on CC or CBA, but are engaged in communication for biodiversity protection and sustainable NRM, and are included in the analysis because they are excellent examples of ComDev working in NRM broadly speaking. A quick review of their activities will indicate where there is scope for synergies and where there is need for additional technical assistance through the CSDI.

6.1 Commonwealth of Learning (COL)

The Commonwealth of Learning (COL) has several programmes of relevant to the CSDI and will likely be an important partner to work with. These include COL's L3 Farmers Lifelong Learning programme and the Media for Learning Programme.

6.1.1 COL's L3 Farmers Lifelong Learning

Lifelong Learning for Farmers was introduced as a pilot project in four villages in southern India in 2004. The success of this initiative led to it being adapted and introduced in Jamaica where it is currently working with the Jeffrey Town Farmers Association (JTFA) and in conjunction with the Caribbean Agricultural Research Development Institute (CARDI).

Lifelong Learning for Farmers (L3 Farmers) encourages the use of ICTs to facilitate learning for development. COL's L3 Farmers programme helps rural communities find appropriate technology-based open and distance education to improve their livelihoods.

The L3 programme recognizes that there is a wealth of information resulting from agricultural research and development often fails to travel the last mile to the villages of the developing world where it is most needed. This gap needs to be addressed.

Lifelong Learning for Farmers addresses these issues by empowering vulnerable families to:

- gain knowledge
- create their own self-directed learning process
- organise themselves to solve problems of marketing their products and food security
- improve their living conditions, and
- increase their freedoms and independence from government support

The programme involves four key partners:

1) Farmers. Rural farmers form an association and create their own vision of development for their village.

2) Learning institutions. A consortium of learning institutions brings together expertise in agriculture, veterinary science, open learning and technology, serving as an information resource for farmers.

3) Information and communications technologies (ICT) kiosks. These commercial ICT kiosks link the farmers to this consortium and also provide other useful information such as weather forecasts. The centres facilitate the transfer of information from scientific and research institutions to rural farmers.

4) Banks. Commercial banks are encouraged to provide loans to farmers who have increased their knowledge, capacity and productivity thanks to information from the consortium and ICT kiosks.

In September 2009, COL launched its L3 programme in Jamaica in partnership with RADA, with CARDI, with JOAM and with the JFTA.

6.1.2 Jeffrey Town rural radio and multimedia centre

One way that COL has been facilitating the L3 programme in Jamaica is in partnership with the Jeffrey Town Farmer's Association (JFTA) and its Jeffrey Town FM radio Station. In fact, the creation of the multi-media centre was a joint initiative of COL's ***Lifelong Learning for Farmers programme***, and its partner ***Media for Learning Programme***. In July 2008, COL sponsored a four-day community media development workshop that drew more than 30 participants who learned how to develop effective learning programmes using multi-media

(radio, video, ICTs, print, etc.). Sessions focussed on addressing community educational needs with local resources, interviewing techniques, creating radio drama, radio production skills and programming. Workshop leaders included resource people from ICT4D, inner city Kingston community radio station ROOTS FM and the University of the West Indies' Caribbean Institute of Media and Communication.

In Jeffrey Town, farmers themselves – are working to generate rural programming, produce rural newsletters, develop rural dramas and other form of communication that will help engage their fellow farmers in viable NRM options. They bring a deeper communication dimension to the more traditional extension approach, and if linked with technical content experts and trainers from extension and knowledge institutions, they will prove to package valuable CBA technical knowledge in formats with which rural audiences will truly resonate.

But JFTA still needs assistance in communication strategy design, in audience analysis, training in monitoring and evaluation, among other areas through which the CSDI could provide technical assistance. They also need assistance in identifying credible sources of NRM and CBA content and learning how to turn that content into viable local programme. As one of the communities that will establish an organic demonstration under the FAO-JOAM TCP, however, there is a very easy fit for JFTA to leverage many existing resources through the CSDI.

6.1.3 Media Empowerment Programme (COLME)

Outside of community-media and direct farmer training, the Commonwealth of Learning (COL) has in the past been one of the regional leaders in the provision of technical ComDev assistance for extension. For example, through its “Commonwealth of Learning’s (COL) Media Empowerment Programme (COLME)”, COL has sought to provide high quality agricultural/environmental training by employing Open Distance Learning (ODL) techniques using video and audio programmes produced by extension services and then distributed via radio, television, workshops and field days to reach farmers.

Under this initiative, in the late 90s and early 2000s, several countries (Jamaica, St. Kitts, Grenada Dominica and Trinidad and Tobago) benefitted through the training of extension officers in video production skills for their rural extension units. This in turn has allowed some degree of content to be adapted for local cultural conditions.

6.2 TOCO Foundation

While JFTA is getting started, another NGO has already had years of experience doing regular agricultural radio programming. The TOCO Foundation is a community-based multi-media centre that is in the heart of one of Trinidad's most active agricultural communities. Launched in November 1997 with a small 22 watt transmitter, TOCO provided only a 5-mile radius of coverage and originally transmitted five hours a day to its single village audience. Since then it has acquired a larger transmitter, extending coverage to 30 miles (30 villages) reaching an approximate population of 100,000 people. Programming is upbeat and includes interviews with the public, health advisories, consumer and environmental capsules, farming, and news items and all-Caribbean music.

The TOCO centre also boasts on-line agriculture courses and the use of ICTs for farmer education. It has an organic pilot farm and offers courses in organic farming, runs an agro-tourism centre, and also does much of its work through the media of local television, community radio, newsletters/newspapers, and distance learning. TOCO is an excellent example of how hands-on pilot farming techniques can be mixed with ICTs and multi-media applications for CBA. The aim is to provide the people of rural communities with access to training relevant to their needs and goals. Courses include:

- Food processing
- Parenting and teenage sexuality
- Radio and television production
- Turtle Protection Programme
- Eco-tourism
- Business management

As a rural-based organization, TOCO acts as a broker representing the needs of its own rural clients and helps to facilitate better provision of information and resources from both public sector and private sector entities, as well as donor agencies.

6.3 Bluefields Community Cooperative (BCC)

In addition to the TOCO Foundation's experience linking rural radio with ICTs to promote rural development, one of the cybercentres established through the Jamaica Sustainable Development Network Programme (JSDNP) is managed by the Bluefields Community

Cooperative (BCC) to make the same link. In addition to its cybercentre, Bluefields also operates a rural radio station that promotes agricultural information and works with fishing communities.

The ICT component of its work has recently expanded, but so has a client-base. Rural youth who are interested in learning more about ICTs and multi-media skills are offered free training, on the condition that they are first involved in community-based environmental activities – such as coastal and community clean-ups. By putting in hours and time protecting the environment, youth develop community pride and enhance their local environment and while also learning more about how to use ICTs to enhance self-sufficiency and rural livelihoods.

BCC has also established a community portals and a website that provides its client base with a variety of information from basics like weather, market prices and jobs to local and international news, government announcements to specialist themes on health, agriculture, education, governanceⁱ. A web portal enables communities to quickly and efficiently build their own gateway website, enriched with their own local content and connect to knowledge sources and services that are tailored according to their own information and communication needs.

Climate Change Adaptation is now a high priority activity for Bluefields. But like the JFTA, Bluefields staff will need training in strategy design, audience analysis, message development and several other areas which could be supported through CSDI technical assistance.

6.4 Best Practices in ComDev – National and Regional Mass Media Levels

6.4.1 RARE Radio - Population Media Centre, St. Lucia

RARE Radio, a program of the Population Media Centre (PMC) in St Lucia, is a further example of how culture can be promoted through radio, and drama used to encourage environmental behavior change. Working in the nine island states of the OECS, and using the Sabido methodology, the PMC has developed a long-running radio drama called “Coconut Bay” and another called “Island Drama” that focuses on ecological conservation and biodiversity protection. Ecologically important areas, particularly those classified as

biodiversity “hotspots,” are home to some of the fastest-growing and densest populations on earth. This makes them more susceptible to human threats, such as deforestation, agricultural expansion, HIV/AIDS, and lack of family planning. Using radio, a medium as a mainstream form of entertainment in these developing islands is clearly beneficial and achieves extraordinary results.

Both programmes use beloved and credible characters that audiences from all part of society are able to connect with. When characters make life-changing decisions by weighing their options, the audience pays attention because the dramatized scenarios often represent real life events. PMC also always employs “Knowledge, Attitudes and Practices” surveys in their work, pre-tests episodes with audiences, and consistently monitors and evaluates their results in order to measure behavior change impact. Their model is one that can truly help to bring CC adaptation measures to a very wide group of audiences in a planned, systematic and strategic way while fully embracing cultural specificities and reflecting community dynamics.

RARE remains one of the only groups systematically using the Sabido methodology methods to bring about positive change related to biodiversity conservation. RARE’s approach includes:

- **Thorough research** to ensure real-life context for scripts and characters
- **Focus groups** to test themes and episodes for resonance with target audience
- **Participation of local stakeholders** from the health and environmental fields in the initial research and script design and a weekly review of scripts
- **Use of local actors, writers, and technicians** from across the country and/or region trained in radio drama, storytelling, and production
- **Regular monitoring of dramas** through surveys, focus groups, and data from health providers and governments to measure changes in listenership, behavior change, and other social, health and environmental indicators

6.4.2 PANOS Caribbean - Voices for CC, Jamaica

Under its “Voices for Climate Change” programme, Panos Caribbean has been working with artists (musicians and performers) to promote public awareness about Climate Change through the popular mass media. Their “HEAR, HEAR” workshops have allowed Jamaican entertainers to better understand the threats that climate change pose and have encouraged artist to “**tek it to dem**” by promoting CC messages through their own media. Getting the

message out to the public at large, through the media of popular reggae and dance hall artists, is a critical first step that needs to be sustained on a timely basis.

But Panos has also done considerable communication work at the rural community level as well. The case study experiences show how farming communities can also be engaged in promotion of climate change messages. Through its oral history documentation programme, **“Voices from Mocho” (tales from back beyond)** – farm families have been involved in recording their observances of climate change impact over the past 20+ years. Through this they have also produced regular community newsletters and publications (among other types of media) and illustrate how media can document positive indigenous practices.

Panos’ work provides an excellent starting point for exploring ways in which CBA communication can be made culturally relevant and linked to local experience and advocacy awareness.

6.4.3 IWCAM

The Caribbean Environmental Health Institute (CEHI) and the Secretariat to the Cartagena Convention (UNEP-CAR/RCU) are co-executing a regional project (referred to as IWCAM) which seeks to improve the integrated management of watersheds and coastal areas in Caribbean small islands. The GEF-IWCAM Project has the overall objective of strengthening the capacity of participating countries to implement an integrated approach to watershed and coastal area management. The long-term goal is to enhance the capacity of the participating countries to plan and manage their aquatic resources and ecosystems on a sustainable basis.

Nine demonstration projects on-the-ground are targeted at national hotspots where specific threats have been identified. Participating IWCAM countries include Bahamas, Cuba, Haiti, Grenada, Jamaica, St. Kitts and Nevis, St. Lucia, Trinidad and Tobago, and St. Vincent and the Grenadines. Each demonstration activity has been designed to substantially involve concerned stakeholders from national and local NGOs and community groups.

The development and implementation of communications activities to help promote and strengthen IWCAM at community, national and regional levels are fundamental to the success of each demo project. As such, in January and May 2008, the GEF – IWCAM Project held communication strategy workshops with its nine member countries from the

wider Caribbean region. Since then, countries have been successfully implementing their communication agendas.

IWCAM's experience is important because it provides technical capacity building assistance to government staff of environmental ministries in the wider Caribbean. While not focusing on agriculture per se, the areas of responsibility definitely overlap and must be acknowledged.

6.4.4 The OECS Protected Areas and Associated Livelihoods Project (OPAAL)

Under the OECS Protected Areas and Associated Livelihoods Project (OPAAL), the Organization of Eastern Caribbean States (OECS) is helping Member States to fulfill their obligations under the St. George's Declaration (SGD) while balancing the need to enhance livelihoods and protect the environment. Achieving these goals, requires improved awareness and a change in the negative behaviours that currently harm the environment and protected areas. These changes necessitate that the general public within the OECS understands: what protected areas are; how PAs support long-term sustainable economic development; and also how individuals and communities can benefit personally from the creation and maintenance of PAs.

To do so, like the IWCAM project, OPAAL supported a six-country workshop on communication strategy design in July 2009 that was also led by the CSDI officer from CARIMAC. OPAAL is working in Antigua and Barbuda, Dominica, St. Kitts and Nevis, St. Lucia, Grenada, St. Vincent and the Grenadines. Since then, countries have been implementing their ComDev strategies to support specific OPAAL demonstration projects. A regional communication strategy was also developed that supports national level activities.

As is the case with IWCAM, OPAAL is working with staff of environmental ministries throughout the OECS and these may also be stakeholders for the CSDI.

6.4.5 Caribbean Institute for Media and Communication (CARIMAC) of the University of the West Indies

The Caribbean Institute for Media and Communication (CARIMAC) of the University of the West Indies is the region's premier institution for professional training (academic and short-courses) in all things media and communication. CARIMAC serves all countries within

CARICOM and, as part of the University of the West Indies, provides undergraduate training in a wide-range of communication areas of expertise: public relations, journalism (print and broadcast), radio production, TV-video production, print media, website development, distance learning, photography, social marketing, alternative media, and several other communication skills and interests. At the graduate level, CARIMAC offers a variety of courses in development communication and behaviour change communication.

In addition, CARIMAC supports outreach activities and training through its Caribbean Centre for Communication for Development (CCCD) and has worked on projects related to disaster preparedness and mitigation, HIV/AIDS, Communication and Caribbean culture, youth and gender, and environmental education.. Through the CCCD and other avenues, CARIMAC staff and CCCD associates provide consulting services to a variety of regional and global initiatives.

In terms of technical execution of media skills and training, CARIMAC's undergraduate programme is excellent. Competition to get into CARIMAC at both the graduate and undergraduate levels is very high. But in terms of ComDev some additional needs have been identified. For example, at the undergraduate level, while some students take outside courses in foreign affairs or international relations, most are not required to minor in another subject outside of their communication area of focus. They are not required to develop a ComDev subject area of expertise – in either health communication, environmental education, or another 'content' related area. As a result, graduates leave CARIMAC as solid communication experts, but perhaps lack full appreciation of specific development issues to which communication skills can be fully applied.

At the graduate level, the situation is different. Students are usually mature and enter the programme with years of experience in a specific subject area or realm of work, but do not receive the type of hands-on, in-depth practical training in specific media production skills as in the undergraduate degree.

The creation of an undergraduate programme in Communication for Development for Natural Resource Management would help to address some of these needs, as would specific course offerings at the graduate level for students interested in NRM.

VII - Strengths, Weaknesses, Opportunities and Threats for ComDev in the Region

Clearly there are many ComDev and CC related activity in the Caribbean region and great potential to work at all different levels. To help identify where the CSDI should focus and target its energy and in order to maximize and leverage resources, it is useful to present the previously discussed activities in a SWOT format. The tables in the following pages do so.

TABLE 3 - STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS
AGRICULTURAL TECHNICAL SERVICES

Programme/ Organization	FAO TCP Initiatives	UWI AE&E Programme	National Extension Services	JOAM	GEF Community Adaptation Fund	CANARI	CARDI	CABI	IICA
Location and geographical scope	Jamaica Belize St. Lucia	Caribbean wide, Trinidad	Individual countries	Jamaica	Jamaica has 2 agricultural based CBA projects one in the Blue Mountains and one in the Cockpit country	Caribbean, Trinidad based	Caribbean wide	Caribbean wide, Trinidad	Caribbean Wide
Focus	DRM technical assistance	Academic training in Extension & Communication	Serving farming clientele in all sectors	Organic farming	Community based projects in CCA	NRM Biodiversity CC research	Agricultural research, CC adaptation	IPM and agriculture	Agricultural Technical Assistance
Communication Modalities	On-farm demonstrations Farmer training Production of fact sheets and manuals primarily	Traditional extension methods; Adult learning approaches	Fact sheets On-farm demonstrations Farmer-group discussions Traditional extension methods	Demonstrations Training sessions ICT linkages and networking	The JCdT project focusing on improved green house technology for CC adaptation, considers only on-site demonstration	Uses PRA tools and techniques for research with communities; also have a close partnership with PANOS	CAIS sharing of scientific resources; Fact sheets; also looking at COL's L3 programme	Farmer-field schools	ICTs and distance learning for entrepreneurs I farmers Training workshops & seminars
Key audiences and clients	Farmers Extension officers and staff of MOAs	Students and professional extension officers	Farmers, fishers	Organic producers mainly in Jamaica	Hillside farmers	Rural communities using coastal resources, protected area resources and biodiversity	Ministries of Agriculture and farming communities within CARICOM	MOAs within the region	MOAs within the region, NGOs, farmer associations, entrepreneurs I farmers
Key partners	Ministries of Agriculture and extension services	Other UWI depts, CARDI, CABI, CANARI, TOCO, JOAM	Donors in respective countries; CARDI CABI	NID CARDI	JOAM	PANOS	COL-L3 JOAM	MOAs within the region. UWI Extens. department	Some partnership with JOAM
Strengths for ComDev and CSDI	The St. Lucian project calls for Communication; The Jamaican TCP in DRM have recognized the need for additional training in ComDev and have laid a foundation related to DRM TCPs are using	Is the highest level of academic training for extension officers and is highly respected within the region. CARIMAC and the Caribbean CSDI Officer have a good historical relationship.	Several FAO TCPs are currently working to strengthen extension services in Jamaica, Belize and St. Lucia In all of these countries, there is a recognized need by extension staff for the types of training and	Will be getting support and some video equipment through a new FAO TCP Strong commitment to ComDev and rich content material exists – manual produced 14 demo sites to be established and several farmers already trained	Jamaica is only one of 10 countries in the world that is part of the GEF Community-Based Adaptation programme One of the CBA communities in Jamaica is also linked with JOAM	Committed to participatory communication approaches and already partnering with PANOS in some oral history documentation activities in St Lucia Also worked in Jamaica and	CARICOM wide; Strongest Agricultural Research institution within the region; already a partner with COL	Strong experience in Farmer-field school approaches; have already trained extensionists in most countries throughout the region	Experience in ICT applications and distance learning

**TABLE 4 - STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS
COMMUNICATION FOR DEVELOPMENT (COMDEV) BEST PRACTICES**

Programme/ Organization	NID and Knowing and Growing Group	COL L3 Programme	COL MLP	JFTA	TOCO	Bluefields
Location and Geographical Scope	Caribbean wide	Jamaica	Jamaica	Local community Jamaica	Toco Trinidad	Local community Jamaica
Focus	Organic agricultural through ICTs, women farmers, CC	Transfer of scientific ag research to farmers through ICTs and DL	Adult learning through community media	Community multi-media centre and radio for farmers	Community multi-media centre and radio & TV for farmers; DL	Multi-media for youth; coastal fishing communities, organic farming
Communication modalities	ICTs, workshops, training	ICTs, Distance learning, community multi-media centres	ICTs, Distance learning, community multi-media centres	Radio, print, drama	Radio, TV, distance learning, ICTs	Radio Group discussions
Key audiences and clients	Organic farmers, especially women small producers	JFTA Also workshops with participants from wider Caribbean	JFTA	Local Jeffrey Town farming community, rural youth	TOCO area farming community	Youth in Bluefields, fishing communities, local farmer groups
Key Partners	JOAM, JFTA, COL, others	JFTA CARIMAC CARDI	JFTA CARIMAC CARDI	CARIMAC, COL, CARDI ICT4D, JSNDP	Wide variety of donors, COL UNESCO	JSNDP JOAM
Strengths for ComDev	Strong commitment to ComDev Vast experience in ICT applications; producing content for organic certification, focus on CC	With partnerships, can perhaps help to provide additional resources for mutual activities	With partnerships, can perhaps help to provide additional resources for mutual activities	JFTA is already very active in rural radio and other media, keenly interested in learning ComDev strategy design, partners with JOAM and new FAO TCP project	TOCO is well established and has been very active in ComDev for some time already.	Bluefields radio is in the process of re-organizing itself under a new director. The director is very keen to partner with the CSDI in the region.
Weaknesses for ComDev and CSDI	Members are distributed throughout the region	none	none	As a small CBO, JFTA relies on volunteer programmers and most are overworked	None really. They are already very active. Perhaps too busy.	May be understaffed.
Opportunities for ComDev	Keen willingness to partner	Very strong interest to collaborate and partner	Very strong interest to collaborate and partner	While JFTA is actively doing radio programming, most of it is in music. CSDI can provide assistance in a range of ComDev activities – strategy design, audience analysis, monitoring and evaluation, etc.	CSDI may be able to assist with strategy design	Opportunities to link with JOAM TCP and to extend focus to CBA for fishing communities
Threats to ComDev	None foreseen	Some areas of technical assistance may overlap, need to have clear roles and responsibilities delineated	Some areas of technical assistance may overlap, need to have clear roles and responsibilities delineated	Many partners are looking to JFTA to be their "showcase". Care is needed not to overburden them.	Like JFTA, TOCO may already be over partnered with too many different groups	None seen. Staff capacity limitations may exist.

TABLE 4 - STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS COMMUNICATION FOR DEVELOPMENT (COMDEV) BEST PRACTICES - CONTINUED					
Programme/ Organization	RARE Radio	PANOS	CARIMAC	OPAAL	IWCAM
Location and Geographical Scope	Work in all 9 OECS Based in St. Lucia	Caribbean Wide, Jamaica	Caribbean Wide, Jamaica	OECS	countries in the larger Carib bean
Focus	St. Lucia primarily	Jamaica, Haiti – and some Caribbean wide activities Climate Change activities,	CARICOM region	Protected Areas, Biodiversity	Watershed and Coastal Zone Natural Resources
Communicati on modalities	Radio drama	Mainstream media – journalism; oral history video documentation, print production, etc.	ComDev, radio, TV, website development, print production	Public awareness campaigns, jingles, print, radio and TV PSAs	Public awareness campaigns, jingles, print, radio and TV PSAs
Key audiences and clients	St. Lucian general public	Journalists; Caribbean wide public in general	Graduate and undergraduate students; CARICOM consulting projects COL	Ministries of environment and their staff, communities	Ministries of environment and their staff, communities
Key Partners	Donor Agencies; OPAAL	5Cs CANARI	Various partners globally and regionally	Rare Radio, OECS mainstream media, CERN	National media within specific countries
Strengths for ComDev	RARE already uses the Sabido methodology, uses KAP research, pre- tests and so forth.	Already working at the advocacy and general public awareness level and doing an excellent job	Key regional institution for professional communication training; has long established CCCC	CSDI technical director has worked closely with OPAAL for the development of its regional strategy and provided training to all 6 country reps in ComDev. While not focused on agricultural CBA or CC directly, OPAAL is working on livelihood strategies for protected areas	CSDI technical director has worked closely with IWCAM for the development of its regional strategy and provided training to all 14 country reps in ComDev Many of these same environmental groups are likely also to be involved in CBA for CC
Weaknesses for ComDev and CSDI	Funding is not secure. Rely on funding for all activities.	None seen	Academic training is highly concentrated on media production skills with little or no attention to content and development issues		
Opportunities for ComDev	Could be linked to the St. Lucian TCP in DRM	A natural fit – as the CSDI can provide assistance within the MOAs and at the local farming community level	Opportunities for student involvement and for institutionalization of ComDev courses specifically for NRM and CC	Lots of opportunities for synergies. OPAAL communications officer actively participated in the CSDI virtual consultation	Lots of opportunities for synergies.
Threats to ComDev	None season, except perhaps for cost	None really foreseen. Maybe a little overlap at the community level in Jamaica	CARIMAC will be leading the CSDI. No threats.	None foreseen	None foreseen

VIII – Emerging Gaps in ComDev for CCA and NRM

From the analysis of strengths, weaknesses, opportunities and threats (SWOT), there are several broad gaps in ComDev for climate change adaptation and natural resource management, that can be addressed through the CSDI. These are now identified as follows:

Communication for CC is strongest at the General Public Awareness Level

Most existing CC communication throughout the region has been happening in the realm of general public awareness and advocacy – trying to make sure that the Caribbean people know what CC is, what causes it, and why it needs to be addressed, so that civil society can push for their governments to implement CC policy and actions. PANOS is leading the way in this regard. While these steps are vital, they do not provide rural audiences and vulnerable groups with the specific, detailed, “how to” information and solutions that they need to cope with CC on a daily basis. Communication activities are linking advocacy and public awareness work, as well as allowing for farm families to efficiently adapt their livelihood strategies to CC.

Packaging of research results from knowledge centres is still too technical

The agricultural research centres responsible for testing and introducing vital CCA technologies, are not always suitable for translating this information into a version easily understood by farm communities. A step is missing, one that helps translate the technical scientific information into fact sheets that can be used by local media groups to share messages with farmers. Existing information (through CAIS and IICA’s distance learning, for example) is still quite sophisticated and more suitable for well-educated and highly literate farmers. More vulnerable groups cannot easily access these sources of information.

Limitations and lack of capacity among extension services

Likewise, with the severe limitations facing extension services, communication related to CC for agriculture and NRM is likely to not be part of an overall communication strategy. As a result, extension services produce material and messages that do not reach the majority of their audiences. CSDI can help to facilitate the link between official government information channels and community-based multi-media centers.

Linking effective FFS approaches with broader edutainment opportunities and ICTs

The Farmer-Field-School approach has proven to work extremely well, but it can also be enhanced through the inclusion of ITCs and ComDev approaches. Use of media to

document demonstration practices, farmer discussions, and learning sessions can go a long way to duplicate best practices and to share them with a wider group of people. However, this is rarely done as there is a tendency to rely on fact sheets and on-farm demonstrations without thinking of alternative communication and multi-media strategy that through 'dramatised scenarios' can help farmers create their own CBA options. Likewise, extension messages are rarely tested or developed with cultural considerations. Dramatisation should be used to share messages with a wider audience, such as RARE Radio drama does promoting mitigation in coffee production, banana production, or livestock.

Challenges remain for community-based multi-media centres

Multi-media centres do not have sufficient, non-scientific agricultural content to create viable CBA messages. On the other hand, community producers are not producing programming as part of an overall strategic 2-5 year communication plan that includes indicators for measuring success and impact. Nor have community groups been trained in KAP analysis, focus group testing, etc. As a result, while they are closer to the audiences who are most in need of CBA options, many of their programming efforts are in danger of being scattershot and ad hoc. CSDI technical assistance can facilitate communication between researchers and farmers and the creation of agricultural materials with viable CBA messages.

Stretched NGOs and community based channels

Similarly, NGOs such as JOAM, that will be actively involved in CBA demonstrations around organic agriculture and who wish to use video for documentation purposes, are understaffed and not necessarily trained in instructional video production or ComDev basics. Poorly done recording may be unusable. Similarly, too much may be expected of community multi-media centres such as the TOCO foundation, JFTA, Bluefields and others, to deliver CBA communication without additional human and financial resources.

Professional regional ComDev training challenges

Media training institutions such as CARIMAC produce excellent professionals equipped with solid, state-of-the-art-media production skills, but these people do not necessarily have an appreciation for the information and content needs of rural groups engaged in CBA. New professional training programs are required that can link training in professional media skills and ComDev with an understanding of NRM and CC scientific and technical issues so that graduates understand how to design a message that encapsulates the technical realities.

Another challenge faced by both CARIMAC and the entire ComDev practice in the region, is the lack of resources to publish case studies and standardize a Caribbean level of professional practice. There is a great amount of culturally relevant ComDev experience and

practice in the Caribbean. But it is seldom captured through studies and academic papers that can be more widely shared with the region's professionals and support academic programmes. Resources (human, physical, and financial) are always tight to achieve such objectives. Additionally, while the region is very small by global standards it is also quite difficult to meet and share experiences, because opportunities to travel across the region are rare and expensive. This impedes the creation of a Caribbean association of 'professional practice' as those working in the field are few and far apart. Opportunities for regular sharing of experiences and lessons learned among peers must be identified and created.

These are just a few of the gaps that CSDI could address, but they are the most important. Before identifying the key activities that CSDI should consider to address these gaps, it is important to review the existing ComDev and NRM activities also from a geographical perspective. This will help to provide an analysis of which potential countries have the most opportunities for synergies, leveraging of resources, and solid partnerships.

Potential Partner Programs for ComDev and CBA							
	BELIZE	JAMAICA	ST. LUCIA	TRINIDAD AND TOBAGO	OECS	CARICOM REGION	WIDER CARIBBEAN
FAO TCP in DRM	●	●	●				
FAO TCP in Organic Agric		●					
UWI Extension Dep				○		●	
CARDI		○		○		●	
IICA		○	○				●
CABI				●			●
CANARI				●			
GEF CBA		●					
COL		●					
JFTA		●					
TOCO Found				●			
Bluefields		●					
RARE Radio			●		●		
Panos		○					●
CARIMAC		○				●	
OPAAL			○		●		
IWCAM		○	○ ●	○	○		
CDERA						●	
5Cs	●					●	
Key: ○ Country Office/programme ● Regional Office or Programme							

Table 5 - Geographical matrix of potential partners for ComDev and CBA in the region

Based on this analysis, it is clear that there is significant ComDev activity in Jamaica and strong potential for partners who are working on CBA related activities that may require CSDI technical assistance. As a result, Jamaica should be considered as one of the three priority countries for CSDI to pilot activities in the region. The next country with the clearest potential for collaboration is St Lucia where there is great potential for synergies especially between FAO's TCP in DRM and RARE Radio/PMC, but also with IWCAM and OPAAL and CANARI. Trinidad would also hold much promise, but unfortunately does not have an existing FAO TCP related to CC or DRM. Belize has a TCP project and is also home to the 5Cs, which would make it an important consideration for a third country.

Clearly though, for regional training activities partnerships with several of the organizations and agencies in Trinidad would be especially important. For example, ComDev training in communication strategy design for community based-multi media centres that might involve JFTA and Bluefields, should also include TOCO and possibly other regional agencies. Likewise, any institutionalization of regional activities related to extension staff should also involve UWI's extension department in St. Augustine.

IX – Potential Areas of Technical Assistance for CSDI

From the analysis conducted so far, it is evident that there is need for ComDev support in several areas. The following are identified as potential areas of intervention for CSDI:

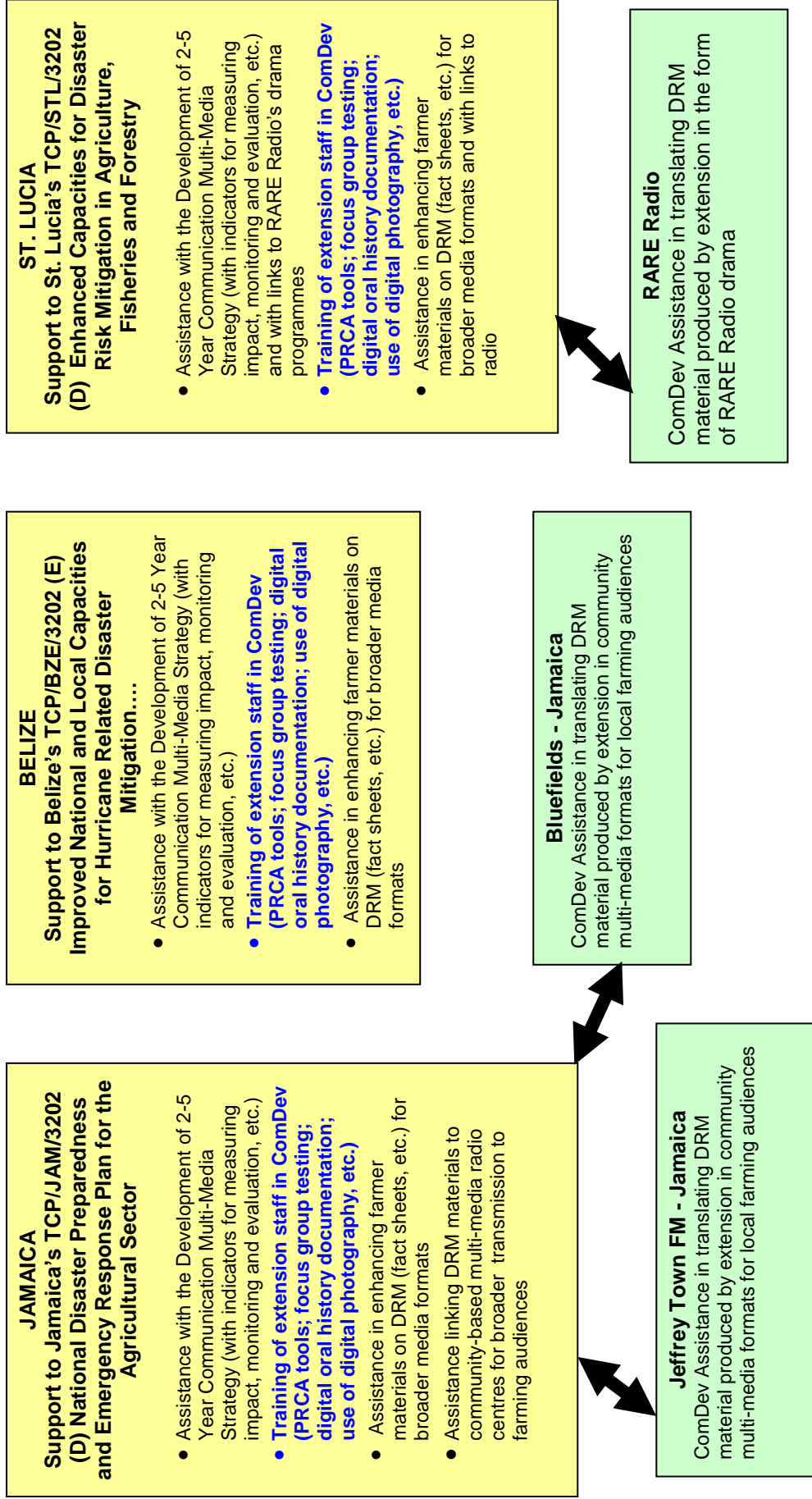
- a) Provide ComDev assistance to specific FAO TCPs working in DRM. For example, helping the TCP activities develop solid communication strategies, train extension staff, develop more vibrant farmer learning materials in multi-media materials, and linking to community based media centres. At the regional level this area of assistance could also result in the development a regional extension training programme in ComDev for CBA. This proposal is outlined in Figure 1 in the following pages.
- b) Provide concentrated assistance to JOAM as it implements its TCP demo project and help to maximize communication reach through links with multi-media centres in JFTA, Bluefields, and with JCDDT. This proposal is outlined in Figure 2.
- c) Provide very concrete, practical assistance in ComDev to specific community multi-media services who directly serve farmers. This should also result in regional sharing of experiences and lessons learnt. This proposal is illustrated in Figure 3.
- d) Explore assistance for ICT applications of ComDev for CBA, including linking with community-based multi-media centres. Regional level activities could include the creation of a community level portal on CBA practices. This proposal is outlined in Figure 4.
- e) Assist in the formalization of professional ComDev practice for NRM and CC within the region. The various activities under this proposal are illustrated under Figure 5.

For all the figures, colours have been used to distinguish community levels, national levels and regional levels of assistance.

The following outcomes can be expected as a result of the CSDI work:

- Mainstreaming of ComDev practices among extension services and MOAs in at least 2-3 countries receiving TCP technical assistance
- Professional training of Extension staff in ComDev and the institutionalization of a Professional Development Course in ComDev for NRM for Extension Officers
- Enhanced ComDev of the JOAM project objectives
- Improved linkages between extension and community multi-media centres in selected countries
- Improved materials and messages for farming communities
- Improved capacity of community media centres
- Greater access to CBA info by vulnerable groups in specific countries
- Enhanced and more creative “agricultural instructional materials” due to links with community radio and other media formats
- Enhanced academic programmes in ComDev for NRM and CC
- Improved professional practice and cohesion of ComDev regionally
- Publication of culturally relevant case studies and best practices
- Creation of short-courses and training modules for improved ComDev professional practice through CARIMAC’s CCCD
- Creation of an undergraduate programme at CARIMAC in ComDev for NRM
- Opportunities for CARIMAC students to serve as interns in support of technical assistance to specific TCP activities
- Greater collaboration and synergies among programmes
- Establishment of ICT mechanisms for virtual extension services
- Improved cultural relevancy of scientific technical CCA info

FIGURE 1 - CSDI ASSISTANCE TO COUNTRY LEVEL TCPs IN DRM



**FIGURE 2 - CSDI ASSISTANCE TO THE JOAM-FAO TECHNICAL ASSISTANCE PROJECT
COUNTRY - JAMAICA**

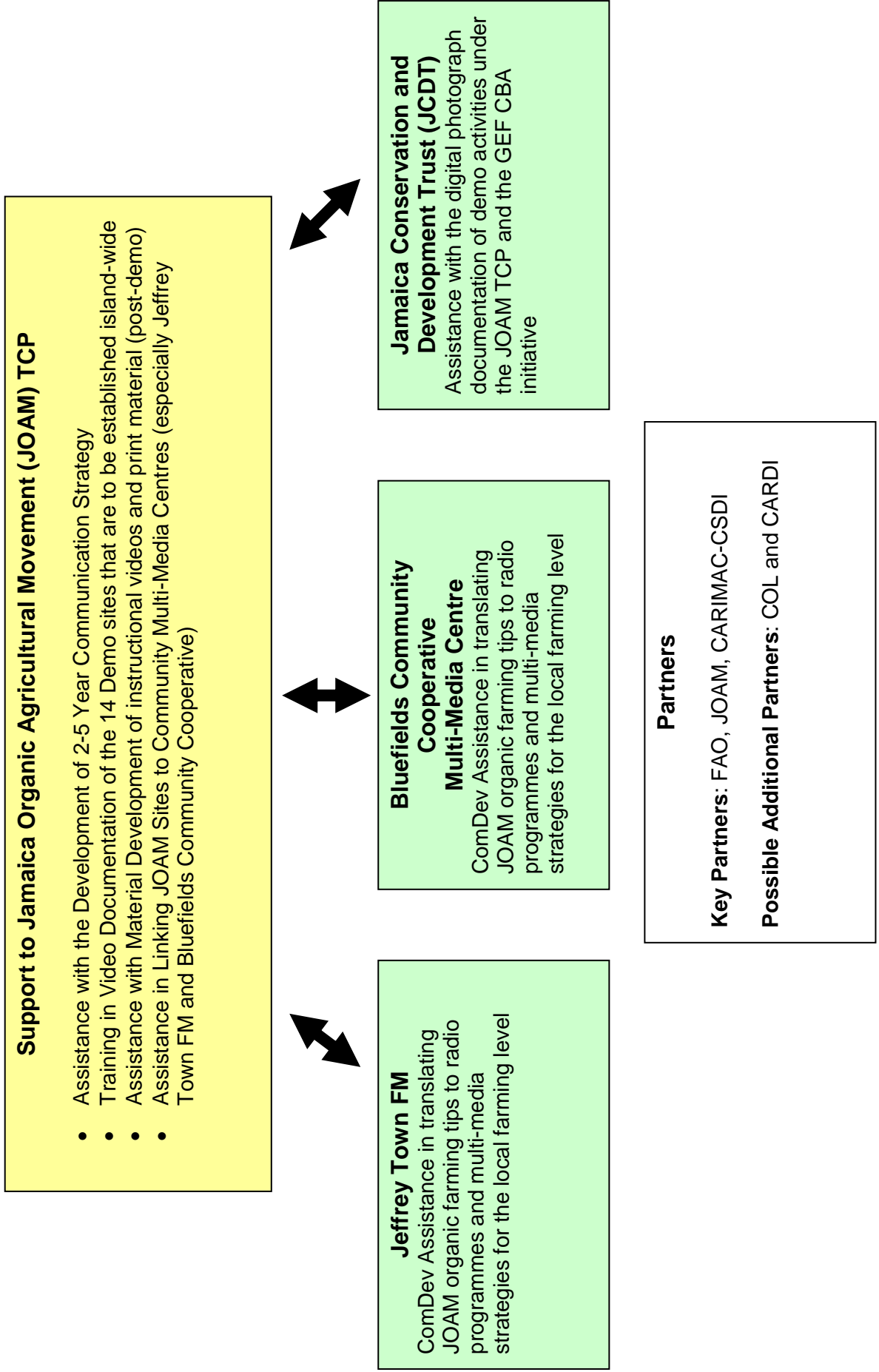


FIGURE 3 - CSDI ASSISTANCE FOR CBA LEVEL COMDEV ACTIVITIES

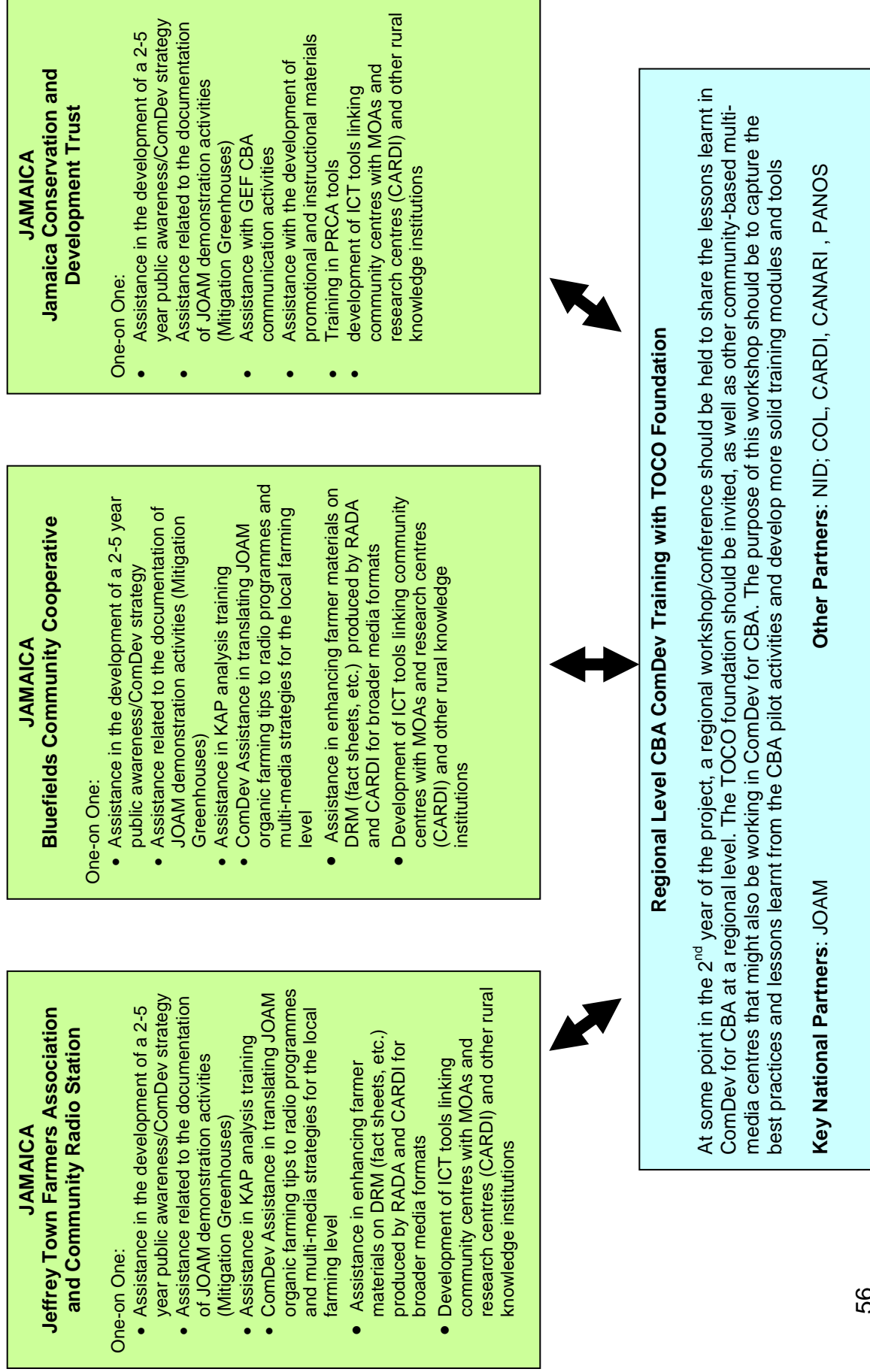


FIGURE 4 - CSDI ASSISTANCE FOR ICT APPLICATIONS IN COMDEV FOR CBA

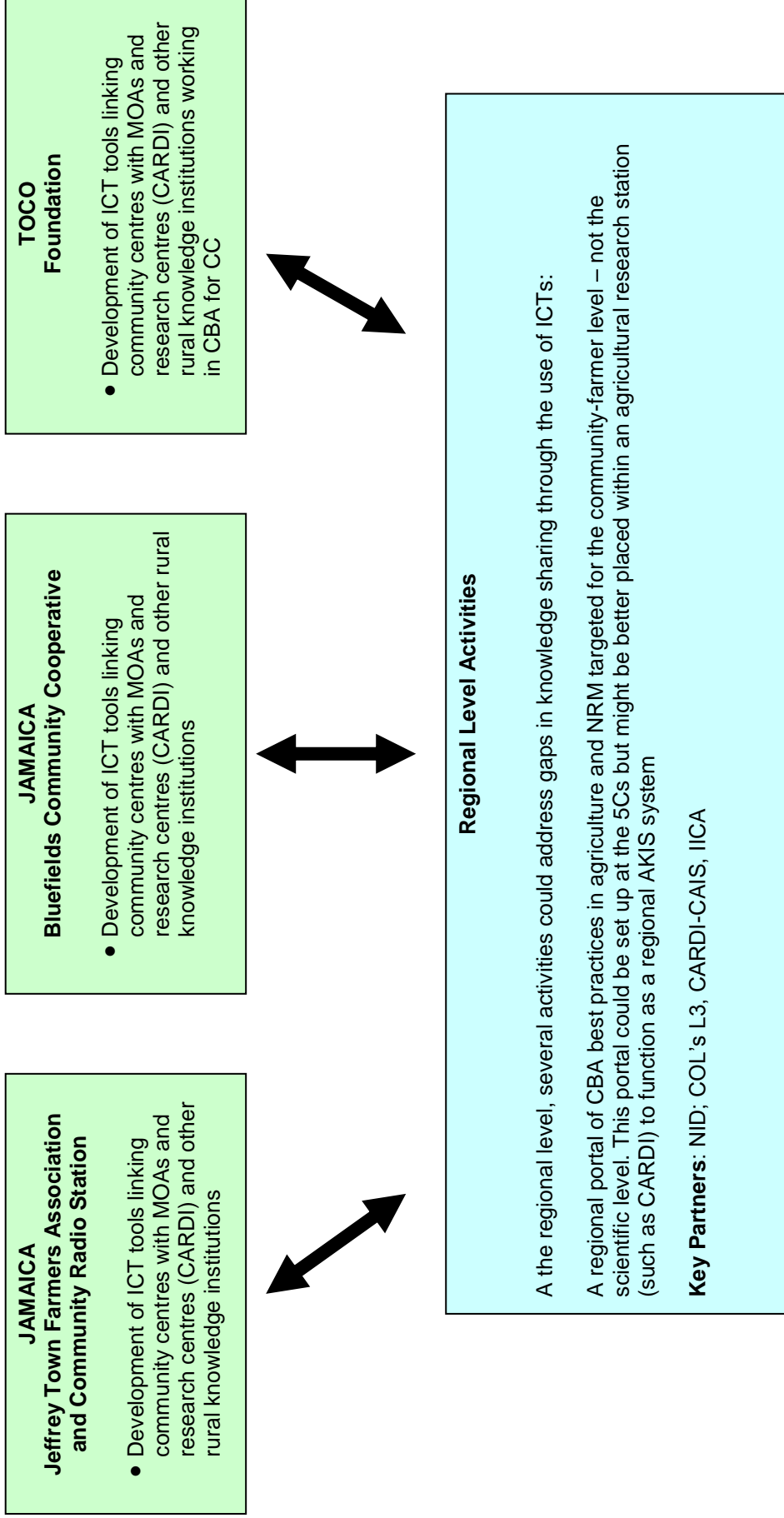
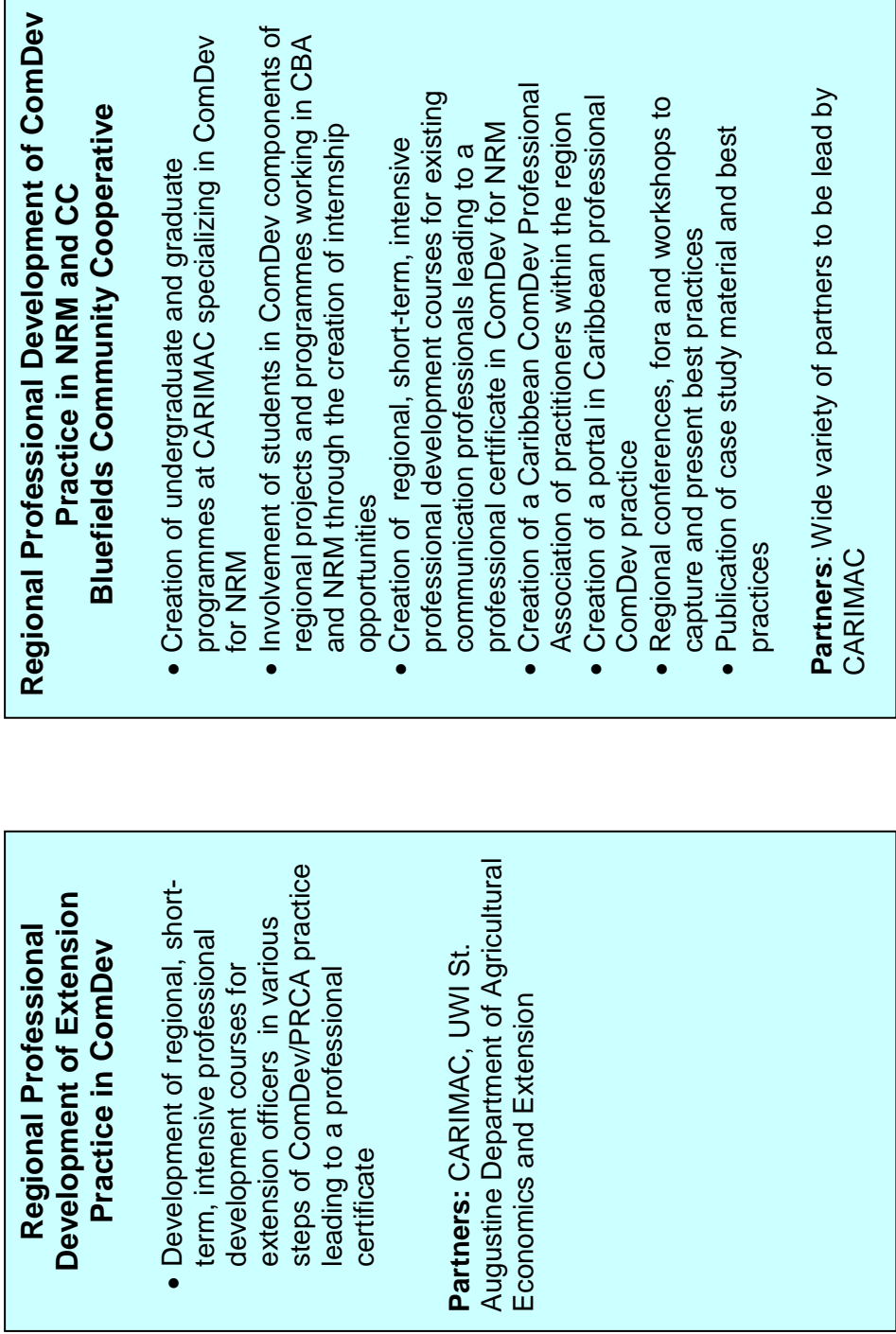


FIGURE 5 - CSDI ASSISTANCE FOR IMPROVING PROFESSIONAL COMDEV PRACTICE

ALL REGIONAL LEVEL ACTIVITIES



X – CSDI Caribbean Plan of Action

The CSDI Caribbean Communication Action Plan identifies the key outcomes and expected outputs for the CSDI project in the region, based on the situation and needs analysis conducted earlier in this document. The plan presented below details the activities foreseen by the project to achieve each of those goals.

OUTCOME 1: Effective application and management of ComDev strategies and services to support sustainable Natural Resource Management (NRM) and Climate Change Adaptation (CCA)

OUTPUT 1.1: Communication strategies and services identified and assessed for CCA and sustainable NRM in the Caribbean.

Activities

1.1.1 Assessment of trends, needs and opportunities for implementing ComDev activities in the Caribbean region - this includes identification of approaches, stakeholders, programmes, topics, needs and opportunities for DRM and CCA, as well as the preparation of a framework on communication for community-based NRM, DRM and CCA and an assessment of relevant ICTs applications in the region.

1.1.2 Finalization of the Communication Action Plan for community based CCA and NRM in the Caribbean - including the selection of key projects or programmes in at least three countries (e.g. Jamaica, St. Lucia, Belize or Dominica) and the production of a regional Communication Action Plan and its detailed workplan in consultation with key stakeholders.

1.1.3 Support to a regional communication strategy on climate change and CBA - in conjunction with UNFCCC and other regional partners.

1.1.4 Design and implementation of a monitoring system for the regional Communication Action Plan – this includes the regular submission of progress reports and the conduct of a final evaluation on completion of the project.

OUTPUT 1.2: Communication Action Plan implemented in support of priority field projects in selected countries.

Activities

1.2.1 Design of ComDev strategies and plans for at least three priority projects in selected Caribbean countries - this includes the design of ComDev initiatives for community-based CCA and DRM in Jamaica, St. Lucia, Belize/Dominica, the conduct of participatory communication appraisals and technical assistance to the development of ComDev components and plans.

1.2.2 Support to the implementation of the communication strategies and plans for the selected projects – specifically technical assistance to the Jeffrey Town Farmers Association (JTFA), Jamaica Organic Agriculture Movement (JOAM) and possibly Bluefields Community Cooperation (BCC), and follow-up with remote support to national consultants to TCPs in other countries.

1.2.3 Documentation and validation of ComDev activities.

OUTCOME 2: Improved capacities and partnerships in communication for sustainable NRM and CCA.

OUTPUT 2.1 Improved knowledge and skills on ComDev for CCA and NRM.

Activities:

2.1.1 Production of documents, case studies and multimedia materials - such as the framework on communication for community-based NRM, CCA and DRM, and a paper on good practices in communication and learning approaches for NRM, CCA, DRM and extension.

2.1.2 Preparation of guidelines and training modules on ComDev for DRM and CCA - as resources for capacity development of regional extension and agricultural projects staff on ComDev aspects such as audience research, video production, etc. to be later upgraded and finalized for global level application

2.1.3 Delivery of workshops and training courses on communication, rural livelihoods and agricultural/ environmental services – this involves the design and implementation of a regional training workshop for extensionists and communication professionals, organized in collaboration with the different TCPs in the region.

2.1.4 Delivery of one intensive professional development course in ComDev – involving extension workers and field agents from RADA Jamaica

OUTPUT 2.2 ComDev partnerships and platforms implemented.

Activities:

2.2.1 Letter of Agreement with CARIMAC

2.2.2 Implementation of a regional ComDev platform/ community of practice - this includes creating a CSDI portal in conjunction with CARIMAC and a web-based repository of information on good practices, case studies and multi-media materials.

2.2.3 Knowledge exchange, e-fora and other information activities - including online discussions on ComDev in the Caribbean region, participation to regional/ international events or thematic conferences, and provision of technical assistance to countries in ICT applications as, for instance, a regional TECA on DRM and CCA.

2.2.4 Design and launching of a partnership programme - this would entail the identification of mechanisms for cooperation in ComDev in the region, the development of an undergraduate programme in ComDev and a full-fledge sustainability proposal to institutionalize ComDev within CARIMAC, and the creation of a professional Association of ComDev practitioners.

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“People live the impacts of climate change, hence, they need knowledge and communication to better cope with it”