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Emergency preparedness tools and activities in Latin America and the Caribbean

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1. Introduction

Preparedness activities are of particular benefit in the Latin America and Caribbean region, which is often hit by “silent” emergencies. Especially in low-income countries, recurrent minor disasters with low international visibility have drastic effects on poor rural livelihoods, exacerbating socio-economic inequalities and hampering the solution of basic problems affecting the most vulnerable areas of the region. The effect of recurrent natural disasters on poor livelihoods also diminishes the impact of national social programmes combating food insecurity and undernutrition.

In view of this, WFP has developed a strategy for enhancing preparedness in the region, for itself and for the humanitarian community as a whole. The strategy was achieved through the creation of the Latin American and Caribbean Emergency Preparedness and Response Network (LACERN), which focuses on augmenting logistics capacities for storing and moving food rapidly within the region, developing the capacities of WFP staff and counterparts to respond to disasters effectively and efficiently, and creating information systems that can alert practitioners to the possible hazards and risks of disasters and their impact on food security, working in partnership with national, regional and international institutions.

This chapter details WFP’s innovations and achievements in the areas of preparedness and early warning in Latin America and the Caribbean, highlighting the value added of working in partnership with governments and humanitarian actors, which makes WFP a recognized player in facilitating South-

South and triangular cooperation in emergency preparedness and response interventions in the region.

2. Emergency preparedness and response strategy

The Latin American and Caribbean region is highly prone to emergencies, owing to its high levels of vulnerability and to recurrent natural hazards. Countries on the Pacific coast are prone to earthquakes and volcanic activity, and suffer the effects of El Niño Southern Oscillation (ENSO), including drought and/or excess rainfall. Countries in Central America and the Caribbean islands are in the North Atlantic hurricane path, putting them under permanent threat every season, from June to November. All these phenomena trigger hazards such as drought, floods and landslides; deforestation is an additional well-known cause of hazards in some countries. Emergencies in Latin America and the Caribbean generally lead to damaged agriculture and infrastructure, food shortages and inequitable access to food.

WFP has been working on emergency preparedness and response (EPR) in Latin America and the Caribbean since the early 1960s. Its emergency response role in the region has been historically strong, but a lack of preparedness at the national and regional levels had led to deficiencies in some areas of its emergency response implementation, and these required strengthening. In 2005, the WFP Regional Bureau for Latin America and the Caribbean therefore developed a strategy for improving its capacity to respond to sudden-impact emergencies, orienting most of its activities towards preparedness. The EPR strategy was based on three main pillars:

- strengthening WFP's own capacity to respond faster to emergencies, providing food assistance and common services when required;
- developing a regional information management platform to provide pre- and post-crisis information for preparedness and response;
- building local capacity in food assistance, logistics and emergency preparedness and response tools.

These pillars were in line with the WFP Strategic Plan for 2004–2007, and are still in line with the Strategic Plan for 2008–2013, which focuses on: (i) saving lives and protecting livelihoods, as WFP Strategic Objective (SO) 1; (ii) preventing acute hunger and investing in disaster preparedness and mitigation measures, SO 2; and (iii) strengthening countries' capacities to reduce hunger, SO 3.

LACERN was established in 2005 to allow WFP and its partners – governments, United Nations agencies and non-governmental organizations (NGOs) – to improve the emergency response capacity and deliver food aid

immediately and cost-efficiently to disaster-affected areas in the region.

This network was originally based on four hubs – one regional and three subregional – for supporting disaster-affected countries by providing emergency food rations and relevant emergency equipment as required for specific crises throughout the year.

As well as establishing these hubs, the LACERN project's goals were to:

- strengthen risk analysis capacity in the Latin America and Caribbean region, refine early warning tools, and develop assessment and estimation tools for use in the early stage of emergencies;
- develop a knowledge-based virtual space for sharing information on best practices;
- seek the support of civil defence and regional organizations in coordinating and preparing joint actions;
- collaborate, in partnership with the United Nations family, with academic research centres, specialized agencies and NGOs;
- develop national capacity through international exchanges of staff and experts and the organization of inter-agency workshops and distance learning;
- promote South-South cooperation and joint actions in emergencies, with the assistance of leading governments whose capacity is the most advanced.

The creation of a true network within LACERN implied an active advocacy role for all partners, through participation in conferences and seminars and the dissemination of best practices related to EPR. WFP presented its regional strategy and established links with the main actors in emergency response – governments, United Nations agencies and NGOs – signing several cooperation agreements for the strategy's implementation throughout the region.

Preparedness tools and response capacities were then developed to satisfy the region's needs as defined in the strategy.

3. Prepositioning: depots and standby personnel

3.1 Depots

LACERN initially comprised one main hub in Panama, where equipment is stored, and three subregional depots – one each in Central and South America and the Caribbean – where small stocks of ready-to-eat food and non-food items are kept for rapid interventions. Associated with each of the depots, centres of excellence were established where WFP and its partners can share experiences, pre-crisis information and operational data in order to optimize prediction and

the timeliness of responses. The hubs provide logistics services for governments and partners, reinforcing the capacity for humanitarian emergency response.

The locations selected for hubs where food aid is coordinated and dispatched were El Salvador for Central America, Ecuador for South America and Barbados for the Caribbean. Governments hosting the hubs provided WFP with warehouse facilities for the storage of pre-positioned food and non-food items, and cooperation agreements were signed.

The pre-positioned ready-to-eat food is nutritious high-energy biscuits (HEBs), which can cover the most urgent needs of a nominal beneficiary caseload in the acute phase of an emergency, when the affected population is unable to cook owing to displacement or lack of access to basic facilities such as clean water and cooking equipment. HEBs are subsequently complemented by food rations, usually provided by the government or WFP through wider-scope emergency projects following the initial phase of an emergency. The HEB is an ideal food to be pre-positioned in warehouses for rapid responses to the sort of emergencies that occur in the hot and humid tropical weather that prevails throughout most of Latin America and the Caribbean. Each subregional depot has an initial stock of 150 mt of HEBs, which is replenished immediately after every dispatch.

Over the past four years, the three subregional hubs have responded efficiently to different emergencies, providing food assistance within 72 hours to the most vulnerable populations affected by disasters.

3.2 Ecuador, South American hub

In November 2006, WFP signed a cooperation agreement with the Government of Ecuador to establish the LACERN hub for South America. The Ecuadorean Ministry of Agriculture provided WFP with a 7,900-m² warehouse in Tumbaco, near the new international airport, for a period of ten years, free of charge. As well as HEB stocks, this facility houses a fully equipped training area with capacity for 100 people, for use as a centre of excellence.

In addition to providing the hub – known as the Logistics Centre for Food Assistance (CELAH as its Spanish acronym) – the government also supported WFP by loaning the initial HEB stocks. Over the years, the Ecuadorian government has provided air transport for moving food from CELAH to Cuba, Guatemala, El Salvador, Bolivia, Peru and the Dominican Republic when disasters strike, thereby becoming an active player in South-South and triangular collaboration for emergency response in the region.

The emergency food aid dispatched from CELAH to countries in the region is as follows:

- In 2005: 68 mt of HEBs to Cuba during Hurricane Dennis, and to Guatemala and El Salvador during Hurricane Stan.

- In 2007: 115 mt of HEBs to Bolivia during floods, to Peru during an earthquake, and to the Dominican Republic during Tropical Storm Noel.
- In 2008: 233 mt of food commodities to Bolivia and Ecuador during floods, and to Cuba during hurricanes Gustav and Ike.

3.3 El Salvador, Central American hub

WFP signed a Memorandum of Understanding with the Government of El Salvador in February 2006 to establish the LACERN subregional hub for Central America. A temporary warehouse of 12,500 m² was provided to store food and non-food items until the definite hub at the Comalapa airbase, adjacent to the international airport, was ready. The Central America subregional hub was provided with a stock of 150 mt of HEBs for immediate dispatch to affected areas in the region. This Regional Centre for Humanitarian Response (CRRH as its Spanish acronym) was officially inaugurated in June 2007. It also hosts an emergency management/disaster preparedness centre for knowledge and information sharing and emergency preparedness and response capacity building activities.

The emergency food aid dispatched from CRRH to countries in the region is as follows:

- In 2007: 130 mt of HEBs to Belize during Hurricane Dean, and to Mexico during floods.
- In 2008: 92 mt of HEBs to Cuba during hurricanes Gustav and Ike, to Haiti during hurricanes Fay, Gustav, Hanna and Ike, and to Panama during floods.
- In 2009: 44.1 mt of HEBs to Guatemala and Nicaragua during drought, and to El Salvador during floods.

3.4 Barbados, Caribbean hub

The Barbados hub used a warehouse in the Bridgetown harbour area, provided by the government through intercession of the Caribbean Disaster Emergency Management Agency (CDEMA), with which WFP signed a cooperation agreement in 2007.

Emergency food aid dispatched from this hub to countries in the region included, in 2007, 101 mt of HEBs to Jamaica during Hurricane Dean, and to the Dominican Republic during Tropical Storm Olga, and the pre-positioning of 40 mt in Haiti.

Barbados was initially considered the ideal location for the hub, because most players in the region, including CDEMA, have their Caribbean offices and representatives there. However, it later proved to be logistically inefficient for the rapid delivery of goods to other islands, owing to its limited sea and airfreight

connections; the dispatch of emergency aid from Panama and El Salvador proved to be more timely and cost-efficient. The Barbados hub was therefore closed, and WFP provided emergency response assistance to the Caribbean from its other hubs in Central and South America.

3.5 Panama, regional hub

A central hub was established in Panama for the pre-positioning of non-food items and emergency equipment to support response operations throughout the region. The depot is currently situated in Corozal, Panama City in a temporary location that needs to be enlarged; conversations are ongoing with the Government of Panama for this purpose. In August 2006, management of the Panama central hub was transferred to the United Nations Humanitarian Response Depot (UNHRD) network, managed by WFP logisticians. UNHRD is a WFP network established to provide storage, logistics support and services to humanitarian organizations, to reinforce emergency response capacities throughout the world (chapter 19). The network is formed of five depots located in Panama, Ghana, Malaysia, Dubai and the central depot in Brindisi, Italy.

The equipment that was purchased and pre-positioned in the Panama warehouse for dispatch includes:

- warehousing and handling equipment: tents, fuel bladders, pallets, polypropylene bags, etc.;
- radio and telecommunications equipment: HF, VHF, satellite phones, solar panels;
- safety items: anti-ballistics helmets, bullet-proof vests, etc.;
- vehicles: 4x4 cars, quad bikes, motorbikes, flat-bottomed aluminium boats.

This one-time purchase of equipment provided adequate stocks for rapid interventions in affected countries of the region. Since coming into operation, UNHRD Panama has made a total of 126 rapid deliveries of humanitarian cargo to WFP and partners, in response to emergencies in the region: eight in 2007, 22 in 2008, and 96 in 2009.

3.6 Stand-by personnel

One of WFP's most powerful tools is its highly trained and experienced staff, so the regional EPR strategy envisioned a roster of personnel from the various technical areas covered by the regional bureau and country offices and available to support response operations within the region. The roster serves the dual purpose of: (i) deploying experienced Spanish- and French-speaking staff from within the region to emergencies, to ensure greater efficiency of WFP operations; and (ii) promoting on-the-job learning for less experienced staff, to enhance

capacities in the various technical areas and to allow staff to gain hands-on experience of a wider range of emergency interventions than may occur in their own countries – for example, staff from Colombia deployed in a hurricane response in the Dominican Republic, or staff from Honduras deployed to respond to frosts in Bolivia are unlikely to face similar events in their normal day-to-day activities.

The WFP regional response roster grew from 55 in 2006 to more than 100 in 2009. These emergency staff members are located in the 12 WFP offices throughout the region, and the network has been activated in most emergency response interventions since it was established. The regional bureau has also deployed roster staff from different units to carry out preparedness activities such as procurement capacity assessments, contingency planning, and the development of EPR strategies in Central America and the Caribbean.

4. Information systems for emergency preparedness

4.1 Information products

The regional bureau regularly produces information products that are disseminated among staff, partners, counterparts and donors. These include the daily news *Emergencies Update*, and seasonal newsletters during the hurricane season, El Niño and WFP EPR activities.

A LACERN information platform has been developed in collaboration with the Emergency Preparedness and Response Branch at WFP Headquarters, with the aim of supporting the humanitarian community at large. A number of technical solutions and Geographic Information System (GIS) products developed for the WFP global intranet *EPweb* have been incorporated into the regional inter-agency web portal *redhum.org*, which was developed with WFP's active participation. The EPR information products regularly disseminated to WFP, partners and donors include:

- a daily update on crisis situations, based on the consolidation of regional information sources – national emergency management centres, civil protection, the press, WFP and other United Nations agencies – and disseminated via e-mail as a news service, *Emergencies Update*, which has more than 300 e-mail subscribers, and is also accessible on *EPweb*, *redhum.org* and the regional knowledge management system *nutrinet.org*;
- the *LACERN Update* newsletter, informing partners and donors about the progress of LACERN and regional emergency preparedness and response activities and events;
- seasonal newsletters that inform humanitarian actors on the evolution of

weather phenomena such as El Niño, the hurricane season and drought, as well as on crises that affect the food security situation of vulnerable groups, such as the international food price and economic crises of 2007–2008.

4.2 Early warning

WFP collaborates with institutions in the Central American Integration System (SICA) to apply and improve early warning tools in the subregion. The following subsections describe these in more detail.

Central America Early Warning System (SATCAweb)

SATCAweb is the result of two dynamics coming together: WFP's concern to strengthen capacity and systems for early warning of multiple natural hazards by using the most advanced information technology; and Central America's situation as one of the most disaster-prone regions in the world, exposed to multiple natural hazards and using conventional means of information gathering, often separately, to monitor hazards and manage its risk.

SATCAweb is a logical outgrowth of WFP's experience in global early warning. In 2004, WFP developed a web platform for this, HEWS web,¹ which gathers and presents the latest bulletins and warnings on possible droughts, floods, hurricanes, tsunamis and other hazards in Asia, Africa and Latin America. The system was developed with the collaboration of scientific institutions including the United States National Oceanic and Atmospheric Administration (NOAA), Dartmouth Flood Observatory, the United States Geological Service (USGS), the Smithsonian Institution and United Nations agencies. HEWS web was launched at the World Conference on Disaster Reduction in Kobe, Japan, in January 2005, and was considered to be "the first global clearing-house for early warning information on natural hazards" (United Nations, 2005).

In 2006, WFP sought similar success in developing an early warning system for Central America. SATCAweb represents an innovative investment in strengthening capacity in risk management and early warning in the region. Over the last 30 years, constant natural hazards in Central America, such as droughts, floods, hurricanes, earthquakes, volcanic eruptions and the effects associated with the phenomena of El Niño and La Niña, have caused losses and damage estimated at more than US\$10 billion.²

As a subregional initiative managed by WFP's office in El Salvador, SATCA was developed within the framework of SICA and in close collaboration with SICA's Centre for the Coordination for the Prevention of Natural Disasters in Central America (CEPREDENAC). Scientifically, it has benefited from the collaboration of international and regional partners such as NOAA, the National Aeronautics and Space Administration (NASA), Dartmouth Flood Observatory,

USGS, the Benfield UCL Hazard Research Centre, the International Research Institute for Climate and Society (IRI), the Hydrologic Research Centre, Tropical Storm Risk, InfoAgro, Water Resources, Mesoamerican Famine Early Warning System Network (MFEWS) and the Water Centre for the Humid Tropics of Latin America and the Caribbean (CATHALAC).

SATCA brings together scientific institutions, national governments and humanitarian actors around the common theme of mitigating the potential impact of disasters, especially among the most vulnerable and food-insecure populations in Central America. It promotes South-South cooperation with institutions such as the National Service for Territorial Studies (SNET) and Civil Protection in El Salvador, and the Permanent Commission for Contingencies (COPECO) and National Meteorological Service in Honduras.

Since its inception, the system has developed through cooperation with national institutions. It was launched on 1 November 2006 at a meeting attended by representatives of national institutions responsible for monitoring natural hazards, issuing warnings and providing humanitarian aid. Agreement was reached regarding the scope, opportunities and challenges of establishing the system in Honduras and El Salvador.

A major challenge was that scientific and disaster management information sources throughout the region were using different technological languages and systems, nomenclatures, etc. In addition, the information produced was often not shared or adequately organized. Each institution had its own methods: some monitored only one hazard at a time; others, such as Civil Protection, also issued warnings and managed responses; and some also carried out early warning analysis and forecasting, using the media to disseminate the information to a wider audience. Even the colour coding used to represent warning levels sometimes differed from country to country, generating confusion that affected decision-making on regional humanitarian actions. Another serious challenge was that not all national services were generating information that could be incorporated into SATCA.

To overcome these challenges, WFP provided institutional strengthening to its regional partners, focusing on technical and technological aspects and on establishing common standards for early warning information management throughout the region. Although the aim of developing an operational monitoring system for early warnings of multiple threats has been achieved, countries have found it difficult to assume responsibility for managing the initiative at the national level.

Currently SATCAweb provides the following important services:

- Early warning and emergency preparedness information: Using a platform for collecting, integrating analysing, visualizing and disseminating

information to a large audience of actors and partners, the SATCAweb homepage provides summaries of the latest warnings across the region. The platform is 90 percent automated and is easy to navigate. Maps are used to illustrate events, with simple clicks providing access to increasingly detailed information.

- The Advanced System for Warning Dissemination (SADA): Using a variety of communication technologies, SADA allows the national institutions responsible for issuing alerts by e-mail, SMS and fax, to notify their target audiences and the general public about potential hazards and the actions to take. These notifications can be of different levels, depending on the severity of the phenomenon.
- Early impact tool and geo-assistant: This collects information on populations and infrastructure that are vulnerable and at risk and combines it in a common system, using maps. It can use local-level information to provide rapid estimates of the expected impact of a potential emergency, informing users, allowing them to take preparedness measures, and facilitating an early assessment of emergency requirements. This tool was recently used in El Salvador during a Pacific tropical depression and Hurricane Ida, in November 2009.

Direct enquiries account for 22 percent of total visits, but SATCAweb is also visited from references and links on various websites, which provide 46 percent of visitors. Search engines provide 31 percent of the total traffic.

In El Salvador and Honduras, the National Meteorology Service and SNET use SATCA to keep themselves informed, and SATCAweb is included as a direct link in many of the web pages of other disaster tracking sites.

Future plans include using SATCAweb to gather information at the municipal and local levels and providing maps with more detailed information. SATCAweb aims to become a knowledge management centre for early warning information that will enable the region to manage effectively the threats from natural hazards and their possible impacts on food security.

Figure 17.1 Main page of www.satcaweb.org



Central America Flash Flood Guidance (CAFFG)

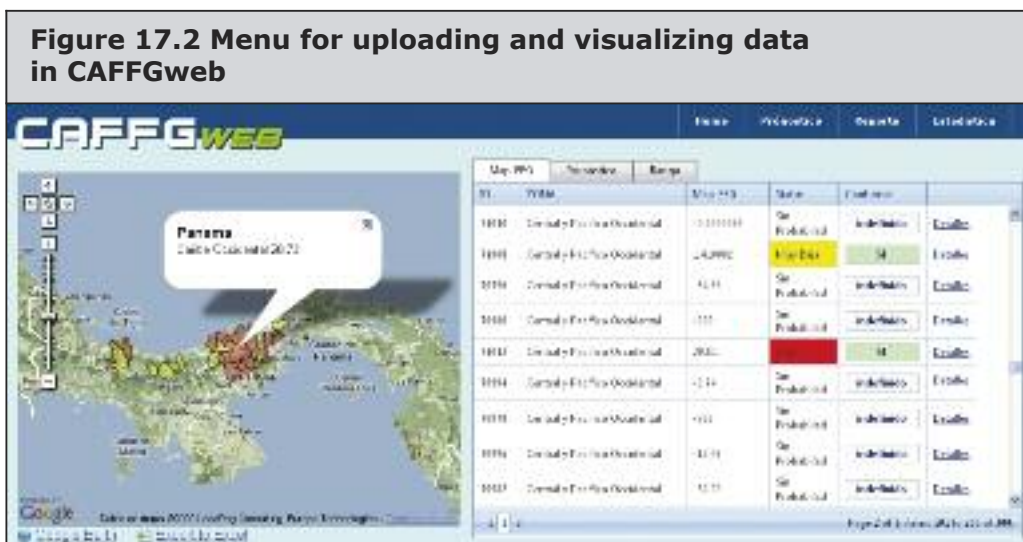
CAFFG is a model for determining the impact of intense rainfall and hurricanes in the Central America subregion. It was developed by the Hydrologic Research Center (HRC), sponsored by United States government institutions, and in collaboration with Central American institutions under the coordination of SICA’s Regional Committee of Hydraulic Resources (RCHR). It provides guidance for estimating what volumes of rainfall in small river basins will produce overflowing and, ultimately, flooding. It uses data such as satellite information to estimate precipitation, soil absorption and rainfall forecasts. Because its use and interpretation require trained meteorologists, CAFFG was designed exclusively for the meteorological services of Central American countries: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and

Panama. To begin with, however, only Costa Rica was operating CAFFG to its full potential as an early warning tool, so in 2006, WFP and RCHR started to collaborate on improving its use regionally.

Since then, WFP has contributed to testing CAFFG during rainy seasons and improving it with various inputs and regional collaboration. In 2008, CAFFGweb was developed to link CAFFG to Google Maps; through this, many processes were automated, the work of meteorology services was facilitated, the monitoring and analysis of results were improved, and maps of flood risks were made available for periods of three, six and 12 hours for consultation by Civil Protection, local disaster management services, response groups, communities and the general public.

In addition, CAFFG can easily incorporate relevant geographic information, such as populated areas, hydrologic networks and landslide-prone areas, as well as a module for estimating the potentially affected population in sub-basins at risk of flooding. These options provide further elements for guiding decision-making. The use of Google Maps in its interface allow CAFFG to incorporate geographic information without requiring map servers or specialized Internet software.

Figures 17.2 and 17.3 show some of the interfaces of CAFFGweb.



CAFFGweb outputs can be exported through standard protocols, for sharing information with other systems and commonly used applications such as KML, GeoRSS, CSV text files, Microsoft Excel and ESRI shapefile.

Figure 17.3 CAFFG results – floods in El Salvador, 8 November 2009



Sources: RCHR and WFP.

Figure 17.3 gives an example of CAFFG results for the 8 November 2009 floods in El Salvador. Although areas that the system identifies as high-risk, in red, are somewhat displaced to the north owing to atmospheric circumstances, CAFFG also showed that there was potential for important flooding in the affected region, alerting to the risk. Through continuous use of the tool, national teams will be able to refine the models for producing alerts on potential floods.

In association with CRRH, WFP elaborated regional meteorology forecasts for Central America and the Caribbean, which are published daily during the hurricane season in the WFP EPR news service *Emergencies Update*.

Monitoring of basic grain prices in Central America

Much of the Central American population is affected by child undernutrition and food insecurity, and an increase in the price of staple foods has a significant impact on the vulnerability of these people. Early warning on food price rises allows WFP to prepare for possible interventions in response to food insecurity crises caused or aggravated by a lack of purchasing capacity at the household

level. Since 2009, WFP has been working closely with SICA's Central American Agriculture Council (CAC) to improve the availability of and access to information on food prices. These efforts focus on optimizing the information system on wholesale prices for basic grains and other staple products, and improving information management and the presentation and transfer of data to users. CAC provides SICA with an institutional link between the agriculture sector and other Central American integration bodies, and is formed of national ministers of agriculture.

The price monitoring system allows:

- storage and maintenance of a historical database of prices;
- queries, by country, product and/or group of products, such as a basic food basket;
- generation of graphs, by product and/or country;
- identification of values that are outside the normal range, and automatic e-mail alerts to national focal points and the system's regional administrator;
- automatic SMS and e-mail alerts to decision-makers when prices increase above established ranges;
- presentation of maps in Google Maps at the national and/or sub-national levels;
- storage of information on market locations, collection centres, distribution networks and market flows.

Market flow maps

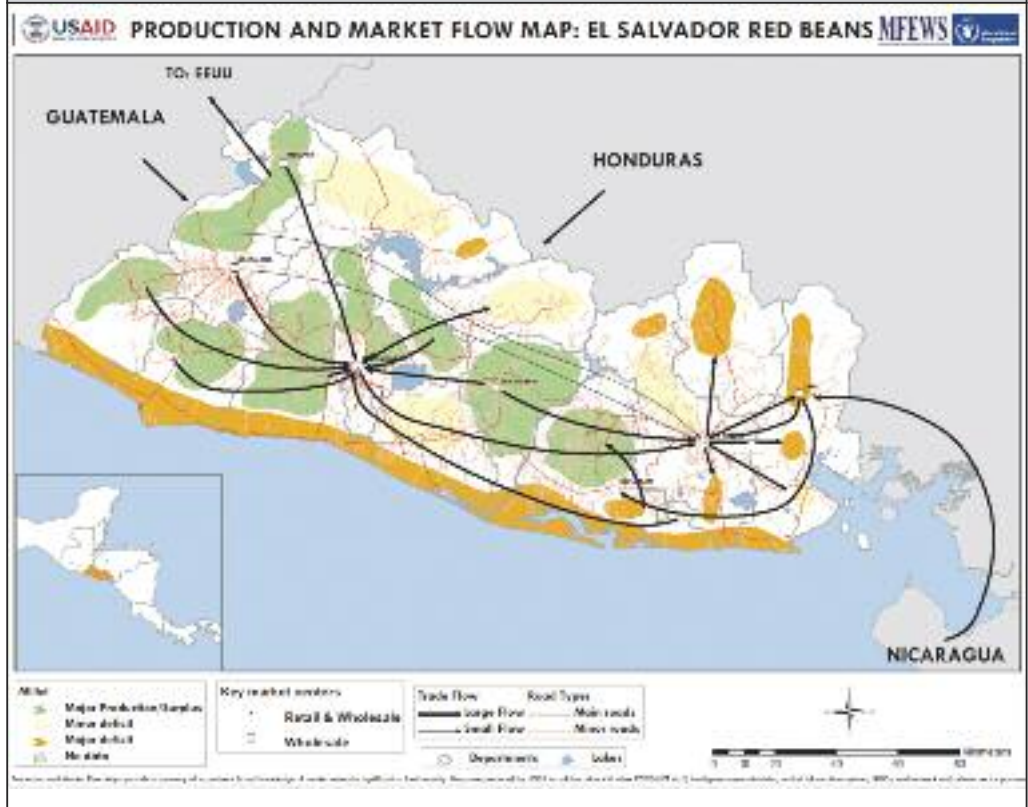
WFP has joined an MFEWS and CAC initiative to produce schematic maps that show the main flows of basic grains within countries and throughout the Central American subregion, where markets are closely interrelated and interdependent.

Such maps have been generated at workshops where participants are the main players involved in the planting, storage, distribution and commercialization of grains, as well as institutions for agriculture, food security and nutrition.

Maps are available for the staple grains of each country, identifying the main markets and distribution centres. Generation of the maps involves the integration/updating of agricultural calendars for planting and harvesting, and provides a space for interaction among producers, marketers and the technical staff of institutions and organizations that monitor crops and/or provide technical assistance.

The maps provide valuable information for identifying areas that may suffer from food deficit if affected by socio-economic or natural events.

Figure 17.4 Red bean production and market flows in El Salvador



Sources: MFEWS and WFP.

5. Networking

Partnership among humanitarian participants are critical to effective response in emergencies. In general, governments in Latin America and the Caribbean have good capacities, so are the primary partners for WFP.

5.1 Capacity development

WFP has supported national governments and institutions in strengthening their preparedness and response capacity, with particular emphasis in areas where WFP has recognized expertise and a comparative advantage: logistics, vulnerability analysis, needs assessments and food procurement. By providing training and technical assistance to the LACERN initiative over the last four years, WFP has established itself as an important technical partner for national counterparts and regional institutions. It now has a central role in disseminating

best practices and EPR experiences among governments in the region through its knowledge management platform and in-house technical expertise.

LACERN's subregional hubs have served as centres of excellence for seminars and training courses involving personnel from national counterparts, United Nations agencies and NGOs. More than 350 people have been trained in various aspects of preparedness and response interventions.

For example, in 2006, staff from WFP's national counterpart in Peru, the National Programme for Food Assistance (PRONAA), were trained in the WFP emergency food security assessment (EFSA) methodology at the El Salvador and Ecuador hubs. PRONAA later funded and carried out two assessments using the methodology in areas of the Peru highlands affected by frosts and in southern areas affected by the high-magnitude earthquake of August 2007. The results were used to align WFP and government responses and food distributions to vulnerable populations.

Other successful examples are the capacity development activities carried out in middle-income countries. WFP has no operational offices in these countries, but governments have requested its technical assistance and expertise in augmenting their EPR capacities. Following floods in 2007 that left more than 1 million people displaced, provincial governments in Mexico contacted WFP for logistics support in managing warehouses and for training in contingency planning, as their own plans had proved inefficient during the flood response. WFP held workshops for government personnel in two provinces, supporting the government's own preparedness activities and tools. In Panama, following floods in 2008, the civil protection authority requested WFP to provide training in warehouse and commodity management, as that aspect of the response had been particularly weak during the emergency. WFP held a week's training course in Panama for civil protection personnel from all provinces, and presented a series of lessons learned from the operation, which was greatly appreciated.

These examples show the positive results of capacity development initiatives in technical areas where WFP can provide wider food assistance, including in middle-income countries that have the means to provide food aid in response to minor emergencies, but may lack the expertise to do so effectively and efficiently.

5.2 Coordination

Latin American and Caribbean governments have created regional intergovernmental institutions for coordinating and promoting preparedness and response actions. These technical institutions are normally part of wider political agreements that create regional bodies, sponsored by donor countries and agencies. WFP has been collaborating with these institutions as part of its regional EPR strategy, aligning frameworks and priorities for ensuring the

protection of food security during crises and emergencies. Partnering regional humanitarian organizations has also been important to WFP, and forms the basis for inter-agency preparedness activities in the region.

The Caribbean Community (CARICOM)

WFP and CDEMA signed a cooperation agreement in Panama in March 2007. This understanding strengthens the agencies' partnership for building strong, effective and efficient capacity at the national and community levels so that countries in the region can improve their mitigation and management of the effects of recurrent natural disasters. From CARICOM institutions, CDEMA is the main partner of WFP and participates in the Eastern Caribbean Donor Group for Disaster Management.

WFP's regional bureau is currently developing a strategy for strengthening the region's capacities in preparedness, assessment and response to disasters, and for incorporating food security dimensions into the preparedness, disaster risk reduction and livelihoods recovery efforts of national and regional institutions. The strategy has been designed to support CARICOM countries, and is in line with their Comprehensive Disaster Management Strategy and Framework.

Central American Integration System (SICA)

WFP has advanced its regional EPR strategy through partnership with SICA, drawing on SICA's regional influence and recognition to mobilize political and financial support for priorities shared with WFP and addressing food security, undernutrition and emergency preparedness and response.

The complementary strengths of SICA and WFP will help ensure stronger engagement among institutions towards a truly integrated approach to food security, early warning, risk reduction and disaster response in the subregion.

Risk, Emergency and Disaster Task Force (REDLAC)

REDLAC is the Regional Inter-Agency Standing Committee for Latin America and the Caribbean, created in 2003 to improve information exchange, discussions and organization of joint efforts in preventing and mitigating the impact of crises and emergencies. The group's main strategy is to improve disaster response in the region through a consensual approach that emphasizes better coordination and exchange of information. As well as its ad hoc meetings whenever emergencies occur in the region, REDLAC meets monthly. Members include all the regional bureaux of United Nations agencies located in Panama, the Red Cross, NGOs, donors and subregional institutions. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) acts as the group's

executive secretariat and is responsible for facilitating communication among members, organizing meetings, and keeping records of agreements and decisions. To improve the coordination of emergency operations, working groups on information management, risk reduction, disaster preparedness and logistics have been established.

The Regional Inter-Agency Logistics Coordination Group is led by WFP and consists of diverse humanitarian organizations, including United Nations agencies, NGOs, international organizations, donors and foundations. The group provides a platform for logistics information sharing, addresses humanitarian logistics issues and supports preparedness and capacity building projects that have a positive impact on humanitarian logistics. The group started with only four members, expanding to 11 over the last two years. It has improved inter-agency logistics arrangements for the region, by establishing a stockpile of relief items in Panama and a database of suppliers and freight forwarders. REDLAC has coordinated inter-agency logistics capacity assessments in several countries, and humanitarian cargoes have been consolidated for transportation to disaster-affected areas, saving resources for all partners.

6. Conclusions

WFP's preparedness tools and response capacities in the Latin America and the Caribbean region are based mainly on the pre-positioning of food and non-food items in subregional depots, the development of information systems for preparedness and early warning, the creation of an emergency response roster, capacity strengthening for WFP staff and partners, coordination with other humanitarian actors, and facilitation of South-South cooperation within the region. Its most important role in this has been as the facilitator of coordination among governments and partners, creating a regional network of capable practitioners for humanitarian emergency response.

The Latin American and Caribbean model shows that WFP has the necessary competence to enhance the emergency preparedness and response capacities of counterparts and partners. In regions such as Latin America and the Caribbean, where governments generally have the means to provide food for their populations when disasters strike, WFP has an important role in promoting the development of preparedness and early warning tools that assist the forecasting of disasters, preparing and anticipating effective and efficient response interventions, and responding to disasters that exceed the capacities of national governments.

The network and tools developed in Latin America and the Caribbean are innovative for WFP, not only because of their focus on preparedness rather than

response, but also because they consider national and regional institutions the main players and partners in disaster management activities. This represents a move away from WFP's traditional role of providing emergency food aid, towards the use of WFP's capacity to offer wider food assistance, in cooperation and agreement with governments and partners.

¹ www.hewsweb.org.

² CEPREDENAC, Regional Context: www.sica.int/cepredenac/contexto_reg.aspx.

