Responding to the food crisis: synthesis of medium-term measures proposed in inter-agency assessments







# Responding to the food crisis: synthesis of medium-term measures proposed in inter-agency assessments

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#### **Preface**

The global food and financial crises of 2007 and 2008, which have pushed an additional 115 million into hunger, highlight the severity of the hunger and poverty crisis that has challenged the world for decades and is now at risk of being subsumed by the world economic recession of 2009. Although the soaring food prices of 2008 have abated, the cost of basic food commodities remains persistently high and volatile, particularly in many developing countries, posing a continuing threat to global food security. The economic crisis is expected to further aggravate the food insecurity situation by affecting employment and incomes.

The fight against hunger remains one of the greatest challenges in achieving the Millennium Development Goals, and requires a strong and sustained response from the international community, all governments, non-governmental organizations and the private sector. Encouragingly, there have been positive signals from the international community, including a unified call to define a new governance of the fight against world hunger. Other notable signals include the support for early responses to the food price crisis by the International Fund for Agricultural Development (IFAD) 8th Replenishment, the European Commission (EC) Food Facility and the recent G20 Conference in London. These demonstrate the world community's understanding of the depth of the food crisis, its recognition of the basic human right to adequate food, and its determination not to forfeit past gains.

This report describes the initial outcomes of a process of exceptionally strong and cohesive action by the development community to curtail the immediate impact of the global food crisis. The establishment of the FAO Initiative on Soaring Food Prices (ISFP) in late 2007 was an early recognition of the seriousness of the situation. It was followed by the appointment of the United Nations High-Level Task Force on the Global Food Security Crisis (HLTF) and the development of the Comprehensive Framework for Action (CFA), the High-Level Conference organized by FAO in June 2008, the G8 Summit in Japan in July 2008 and the Special Session of the FAO Conference in November 2008, together with a range of other public and private crisis response initiatives, which, collectively, have laid the foundation for possible reform of the governance of world food security.

The inter-agency assessments (IAAs) described in this report were prepared in collaboration with the targeted countries and are the first steps of a reinvigorated, harmonized and holistic approach to eradicating hunger. The report provides a summary of the short- to medium-term actions proposed or undertaken to respond to the food crisis, and draws conclusions concerning the orientation of these actions. The vibrancy and diversity of the initiatives proposed in the IAAs and adapted to specific country situations provide relevant information on priorities for additional funding. In this regard, it is encouraging to note the commitment from development partners and member governments to significantly increase investment in agriculture within a global approach, including human capital. These interventions will undoubtedly contribute to improved food security and more efficient and sustained agricultural systems.

The inter-agency process should be continued, to closely monitor and report on the outcomes and lessons learned from implementation of the actions proposed in the IAAs, with a view to identifying and expanding development initiatives and delivery modalities that will most effectively reduce and eventually eradicate world hunger. The reader is encouraged to join the international community, governments, civil society and the private sector in building a world free of hunger.

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## **Acronyms and abbreviations**

ABU Agriculture Business Unit

ADMARC Agricultural Development and Marketing Corporation (Malawi)

ADP Agro-Dealer Development Programme

AfDB African Development Bank

AFMA Agricultural and Food Marketing Association for Asia and the Pacific

AFSR ASEAN Food Security Reserve Agreement
AGRA Alliance for a Green Revolution in Africa

APHIS Animal and Health Plant and Inspection Service

ASEAN Association of Southeast Asian Nations

ASPRODEB Senegalese Association for the Promotion of Small Development Projects

AU African Union

BOAD West African Development Bank

CA Andean Community

CAC Central American Agricultural Council

CAR Central African Republic

CBPP contagious bovine pleuropneumonia
CCPP contagious caprine pleuropneumonia

CEB United Nations System's Chief Executives Board for Coordination

CFA Comprehensive Framework for Action
CFAF Communauté Financière Africaine Franc

CFW cash for work

CGIAR Consultative Group on International Agricultural Research

CILSS Permanent Interstate Committee on Drought Control in the Sahel

COMESA Common Market for Eastern and Southern Africa

CPSSA Social Welfare and Food Security Comission (Mauritania)

CRS Catholic Relief Services

CSA Confederation of Independent Trade Unions

CSO civil society organization EC European Commission

ECOWAS Economic Community of West African States

FAO Food and Agriculture Organization of the United Nations

FEWSNET USAID Famine Early Warning System

FFS Farmer Field School(s)

FFT food for training

FFW food for work

FIN FISH INFONetwork

FMG Madagascar Franc

FMD foot-and-mouth disease

GIEWS Global Information and Early Warning System on Food and Agriculture

GLOBALGAP Global Partnership for Good Agricultural Practice

HIMO High-Intensity Labour

HIV/AIDS human immuno-deficiency virus/acquired immuno-deficiency syndrome

**HLTF** High-Level Task Force on the Global Food Security Crisis

HOA Horn of Africa

IAA inter-agency assessment IDP internally displaced person

**IFAD** International Fund for Agricultural Development

**IFDC** International Centre for Soil Fertility and Agricultural Development

**IFPRI** International Food Policy Research Institute

ILO International Labour Organization **IPM** integrated pest management **ISFM** integrated soil fertility management **ISFP** Initiative on Soaring Food Prices

**Egyptian Pound** LE

LIFDC low-income, food-deficit country

MAFF Ministry of Agriculture, Forestry and Fisheries (Cambodia)

**MAFFS** Ministry of Agriculture, Forestry and Food Security (Sierra Leone) MAIL Ministry of Agriculture, Irrigation and Livestock (Afghanistan)

**MARNDR** Ministry of Agriculture, Natural Resources and Rural Development (Haiti)

MDG Millennium Development Goal

**MDRAYMA** Ministry of Rural Development, Agriculture and Environment (Bolivia)

MFI microfinance institution

MOSS Ministry of Social Security (Egypt)

**MOWRAM** Ministry of Water Resources and Meteorology (Cambodia)

NBI Nile Basin Initiative

**NEPAD** New Partnership for Africa's Development

NFA National Food Authority

NGO non-governmental organization

NR Nepal Rupee

OCHA Office for the Coordination of Humanitarian Affairs ODE Office de Développement des Eglises Evangéliques

**OECD** Organisation for Economic Co-operation and Development

**PASS** Programme for Africa's Seed Systems

**PDR** People's Democratic Republic

**PNSADR** National Food Security and Rural Development Plan (Haiti)

**PRRO** protected relief and recovery operation

SAARC South Asian Association for Regional Cooperation

SADC Southern Africa Development Community

SISPAM Food Production and Market Price Information and Follow Up System

(Bolivia)

**SONADER** National Rural Development Company (Mauritania)

**TCP** Technical Cooperation Programme

UEMOA West African Economic and Monetary Union

UN **United Nations** 

UNADA Uganda National Agro-Input Dealer Association

**UNCTAD** United Nations Conference on Trade and Development

**UNDP** United Nations Development Programme

**UNESCO** United Nations Educational, Scientific and Cultural Organization UNICEF United Nations Children's Fund

USAID United States Agency for International Development

VAT value-added tax
WARDA Africa Rice Center

WFP World Food Programme
WHO World Health Organization

### **Executive summary**

The food crisis of 2008 provoked a strong coordinated response from the world community and exposed fundamental problems in the agrofood sector, which continue. Prices remain high in many domestic markets of developing countries, and the risk of future volatility persists. The present economy-wide crisis creates severe economic and social difficulties, which aggravate agricultural problems and the food situation – particularly for least-developed countries and small farmers – and which require stronger actions. More than ever, agriculture-led growth appears to be a major element in the fight against poverty. The Comprehensive Framework for Action (CFA) adopted in July 2008 provides a joint strategy and action plan based on two sets of approaches to promote a comprehensive response to the global food crisis. The first set focuses on the immediate needs of vulnerable populations, including boosting small farmer food production. The second set aims to build long-term resilience and contribute to global food and nutrition security. The CFA also underlines the need to strengthen the global information and monitoring system.

Among the numerous activities carried out in the context of this coordinated response are a series of inter-agency assessments (IAAs). These include full-fledged IAA missions and rapid appraisals in the context of the European Commission (EC) Food Facility, conducted between early 2008 and early 2009 in nearly 60 countries (Annex 1). This synthesis report aims to identify the priority actions, measures and policies that have emerged from the IAAs, at both the national and global levels.

The IAAs confirm the necessity, recognized in all international fora, to increase investments in agriculture substantially, through both physical and human capital, and to give higher priority to agriculture in all domestic and international policies. This requires significant additional funding, better coordination from the donor community and greater attention to food and agriculture in domestic policies and public expenditure. The IAAs give some indication of financial requirements and show that there is still an important gap, in spite of the support programmes that are being implemented or are envisaged.

More generally, the IAAs show the need to articulate short- and medium-term actions and to start the medium-term actions immediately. These require an integrated approach at several levels: i) addressing the agricultural system as a whole, and not through piecemeal actions on isolated factors; ii) giving more emphasis to the upstream and downstream sectors, notably to improve the participation of smaller farmers and the private sector in general; and iii) ensuring that non-agricultural policies (fiscal, social, environmental, etc.) contribute to the strengthening of the agrofood sector. Improving this policy and institutional coherence requires strengthened capacity building, particularly for farmers' groups. It also appears necessary in many cases to strengthen the regional approach.

The IAAs were carried out through a coordinated programme by international and regional agencies working in close cooperation with each of the countries concerned, often with the participation of other stakeholders, such as donors or farmers' organizations. Although they have different methodologies and contents, all the IAAs cover actions required in both the short and medium terms, and most provide details of financial requirements. They are based on a concrete analysis of the situation and problems faced in each country, and propose policies and actions that are often innovative.

This synthesis report has been prepared in the framework of the FAO Initiative on Soaring Food Prices (ISFP) programme, in close cooperation with the other agencies involved in the process (in particular, WFP drafted Chapter 2 and reviewed it together with FAO). It is based entirely on the IAAs and does not aim to be another comprehensive report on food and agricultural strategies. It presents the IAA outcomes thematically, covering the key issues of safety nets, strengthened agricultural production, markets and trade measures, and other general issues from across the agrofood system. It underlines the need for a global approach that combines all of these measures. It summarizes the conclusions and seeks to identify concrete recommendations, which are presented at the beginning of the report. The synthesis report can be seen as an original contribution to a dynamic action-oriented process that should be continued in a coordinated manner by the competent institutional frameworks.

#### Conclusions and recommendations<sup>1</sup>

#### The context in a nutshell

The sharp increase in commodity and food prices that peaked in mid-2008 was the most apparent symptom of the food crisis. However, this food crisis was the result of more than the short-term factors that have been widely analysed, such as the general price increase in all categories of commodity, climatic disasters in some regions, low levels of stocks, and competition for oil substitutes. It also reflected a more profound and structural imbalance in the world agricultural system, as supply failed to match the significant increase in demand resulting from economic and demographic factors. The reasons for this structural imbalance are multiple. On the supply side, the main factor is the insufficient flow of resources to agriculture from the private sector, the governments of developing countries and donors, which prevented sufficient investment in the agrofood sector. On the demand side, the persisting high incidence of poverty limited the food purchasing power of large segments of the population, particularly the poorest people.

The impact of the food crisis has already been well analysed, and is dramatically expressed by a sharp increase in the global number of malnourished people, to almost 1 billion. The present economy-wide crisis is creating additional economic and social difficulties for the agrofood sector, particularly small farmers and low-income consumers. Even when commodity prices have declined on world markets, they remain high in many domestic markets, and price volatility is expected to persist. More people are becoming vulnerable with an increasing risk of hunger.

Beyond its dramatic immediate impact, the food crisis has revealed a structural imbalance, which has to be addressed urgently by an effective combination of short- and medium-term actions within a broad socioeconomic framework. The inter-agency assessments (IAAs) support such an approach in a number of countries, and ways should be found to deepen and implement their proposed actions.

#### The institutional response

The extreme seriousness of the food crisis has been recognized by all actors, be they private or public, national or international. The international community's response, at both the world and the regional levels, has been rapid and well coordinated, and continues to develop. The Rome Conference in June 2008, the Assembly of the African Union (AU) in July 2008, and the Hokkaido G8 Summit in July 2008 provided the basis for international action. The creation of the United Nations (UN) Secretary-General's High-Level Task Force on the Global Food Security Crisis (HLTF), which includes all relevant UN bodies and international agencies, and the adoption of the Comprehensive Framework for Action (CFA) constitute major milestones. Within this coordinated framework, every organization has strengthened activities within its sphere of

<sup>1</sup> The main body of this synthesis report provides details of some of the proposed measures and policies in specific countries or regions. In the following conclusions, no individual country is mentioned, to shorten and lighten the text, but all the statements are based on concrete examples, which can be found in the main body of the synthesis report.

responsibility. However, the resources available have not increased sufficiently to meet all the priority demands, in spite of efforts such as the European Commission's (EC's) 1 billion euro Food Facility. Actions include FAO's Initiative on Soaring Food Prices (ISFP), launched in December 2007, and the World Food Programme's (WFP's) Global Initiative on Social Safety Nets. More recently, the High-Level Meeting on Food Security for All, in Madrid in January 2009, started a consultation process that includes a wide range of stakeholders. The Right to Food provides an overarching and operational concept that is receiving more attention in the present circumstances.

The IAAs carried out in 2008 and early 2009 covered 58 countries. Depending on the country concerned, each mission included various agencies and partners, mainly FAO, WFP, the International Fund for Agricultural Development (IFAD) and the World Bank, as well as regional organizations, non-governmental organizations (NGOs) and farmers' organizations. In all cases, the authorities and other partners in the countries concerned played a major role. A strong regional approach was used and advocated, particularly in Africa, where regional and subregional organizations were actively involved. The methodology and content of the IAAs differ from country to country, but all the IAAs identify priority programmes of action for the short and medium terms, and estimate the financial requirements, thereby providing a coherent framework for potential donors and, more broadly, for policy orientation.

Within the framework of the international community's strong and coordinated response to the food crisis, the IAAs – in spite of their diversity – provide a useful entry point for assessing the priority needs and identifying the actions required in the short and medium terms. Their inter-agency character is a major asset, which should be maintained in the following phases of implementation and monitoring, at both the national and regional levels.

#### Safety nets

The food crisis drew attention to the importance of safety nets to ensure household food security and to reduce poverty and vulnerability through food or cash-based transfers. A wide range of measures have been applied in a number of countries, such as short-term safety nets, which are sometimes seasonal, social safety nets targeting the nutrition of vulnerable groups, productive safety nets, food for work (FFW), or vouchers to facilitate access to the market. Most IAAs in all regions confirm the need to scale up protective and productive safety nets as a key element of predictable social protection and food security strategies. Activities aimed at enhancing agricultural productivity, improving nutrition and integrating environmental considerations deserve priority attention.

WFP and other agencies have significantly developed their expertise, diversifying and targeting their means of action. Innovative and cost-efficient solutions should be further developed and implemented, taking into account the specificity of each country and the need to integrate safety nets into global social protection systems and general programmes for agricultural development. Beyond their immediate objectives of coping with emergency situations, safety nets have an increasing role in medium-term strategies.

#### Measures, activities and policies to boost agricultural production

During the peak of the food crisis, very high priority was given to the provision of basic inputs for agricultural production, particularly seeds and fertilizers, with the objective of maintaining and improving the productive capacity of agriculture, especially for small farmers. Practically all the IAAs confirm this priority. The need to provide enough inputs has been stressed again for the new planting season, and proposals for doing so have been made recently in the context of the HLTF.

The IAAs also stress the need for medium-term programmes to increase not only the quantity, but also the quality of available inputs, particularly seeds. The whole seed system should be strengthened, including through seed legislation, early seed generation production, community seed production, seed distribution and quality assurance. The private sector should be involved, including through village-based activities with small farmers. The IAAs show that regional actions, especially in Africa, will be very important.

The IAAs also emphasize the need to make the overall production and marketing chains for inputs far more efficient, with the active involvement of farmers. This is a major element of the development of agricultural systems, particularly for small farmers. Improved access to fertilizers, sustainable soil fertility management and land conservation techniques and appropriate farm mechanization technologies are also important features of the integrated approach to increasing smallholder productivity. The reduction of post-harvest losses is another major component of this global strategy.

Many IAAs emphasize the improved efficiency of livestock production and fisheries as a major element in increasing the returns for farmers, particularly small farmers, providing insurance and capitalization opportunities, and improving nutrition. In this context, many countries pay particular attention to the dairy and aquaculture sectors. The IAAs indicate that in these and the crop sector, more financial resources are necessary for various elements of the production, processing and marketing chain, as are new institutional approaches that emphasize veterinary services, animal health and improvement of the breeding stock.

A global strategy requires significantly increased financial resources for investment in infrastructure (storage, processing, transport) human capital (extension, research) and institutional change, often in public-private partnerships.

Many IAAs mention environmental and ecological issues and programmes, particularly land and water management. In many countries, priorities include improved land tenure and the development of small-scale irrigation schemes, managed at the community level. Some IAAs stress the need for transboundary actions, notably in Africa.

Reference is also made to specific activities related to preserving biodiversity and diversifying production, to generate additional income for small farmers and improve nutrition. In this context, many countries are developing the homestead garden concept. New outlets can also be developed for traditional products such as cassava.

The provision of sufficient quantities of inputs, particularly high-quality seeds and fertilizers, is considered a major priority for coping with the present food crisis. However, this should be implemented through a comprehensive system approach, coupled with a medium-term strategy to improve the efficiency of the whole production and marketing chain for inputs, as part of the development of more efficient agricultural systems.

More attention should be given to the livestock and fisheries sectors, which can play very positive roles in income generation and nutrition. The actions proposed should be part of a global approach covering all elements of the value chain and emphasizing downstream activities – from both a physical and an organizational viewpoint – as much as production itself. The reduction of crop and livestock losses is a priority. Environmental and ecological considerations and the management of natural resources, particularly soil conservation, should be more systematically integrated into all programmes aiming to boost production.

#### Policies and measures in the area of market, price and trade

During the peak of the food crisis, many countries implemented market and trade measures with a view to mitigating price increases. Many of these measures were for the short term, particularly those involving stock release, imports or exports, and have since been removed. For example, most export bans have now been lifted. However, many other actions in the market and trade area also have medium-term dimensions, and should be addressed from this perspective.

Few countries have proposed schemes for stabilizing prices or reducing their volatility. A few countries have applied tax reductions or subsidy programmes, but direct price controls and their pitfalls have been avoided. Instead, governments have sometimes cooperated with the private sector to establish indicative prices, or have strengthened their commodity exchanges.

In many cases, national stock policies have been used or promoted to stabilize markets. An interesting feature of these is the emphasis on stocks held at the village or community levels. In some parts of Africa, Asia and Latin America, regional food reserves have received increased attention and could perhaps play a major role in addressing emergency situations.

Most of the import or export measures imposed during the food crisis have been removed, often as a result of drastic change in the international market situation. The value of regional trade cooperation has become more apparent, particularly in parts of Africa.

Although market and trade policies reflect countries' specific importing or exporting situations and policy stances, there is a common concern to improve the functioning of markets at the national, regional and international levels. Measures that hamper efficient market functioning and create distortions should be avoided. Public-private partnerships in market organization and, possibly, price stabilization schemes can provide a middle way between State price controls, which tend to be inefficient and economically distorting, and complete price liberalization and volatility. Regional approaches to markets and trade should be promoted, as they facilitate dynamic adjustment to the market situation.

Improved market infrastructure and market information are prerequisites for the efficient functioning of markets. Most IAAs include proposals to this effect. Regarding infrastructure, transport, storage, processing and marketing facilities are always emphasized, particularly at the local level, to facilitate small farmers' connection to markets.

Several IAAs also emphasize better access to market information as a means of helping farmers to plan in advance and of increasing their market integration. Some IAAs give high priority to the development of local information services and the strengthening of extension services in the field of markets. Improved regional information exchanges would also provide a basis for regional market and trade cooperation.

The development of marketing infrastructure should receive as much attention as production itself. Market information services should be developed at all levels, particularly for small farmers, to facilitate their participation in markets and their use of new cost-efficient technologies. Extension and training in these fields need to be strengthened.

#### Cross-cutting issues

In addition to these specific measures and actions, a number of cross-cutting issues are referred to in most of the IAAs. Comprehensive global approaches are required to bring the various elements together coherently, at the national, regional and local levels.

Capacity building actions are mentioned in all the IAAs, particularly through training. However, these activities seem to focus more on production techniques than on marketing or processing, in spite of the increasing interrelationships within the agrofood system.

The need for an agro-food system approach should be more reflected in capacity building programmes, including not only production, but also processing and marketing.

Institution building is also mentioned in all the IAAs, with a particular emphasis on research and extension. Most countries underline the need to strengthen local organizations, particularly for small farmers, and some refer to "interprofessions", or multi-stakeholder organizations.

In addition to the necessary development of farmers' organizations, there is also need to increase efforts to identify and implement innovative institutional mechanisms, such as public-private partnerships, particularly for the upstream and downstream sectors.

Capacity and institution building for policy development and implementation are also required. Many countries underline the need for studies of both general issues, such as food security or needs identification, and specific topics, such as land tenure. Many also mention monitoring and surveillance of the implementation of measures and policies, particularly for food assistance, input programmes and nutrition. Particular attention should be given to budgetary processes and the identification of priorities and trade-offs in policy and budgetary decisions. Capacity building in policy implementation should be

directed to not only national and regional officials, but also NGOs and the private sector. The need to support an inter-ministerial approach to improving policy coherence is also often mentioned.

Capacity building in policy implementation that involves all the actors involved in the policy process should be a priority, and would also contribute to effective monitoring systems.

Many countries mentioned the need to develop **credit and finance** schemes, emphasizing finance for small farmers (including micro-credit). Many international agencies, such as IFAD, and private organizations are providing significant support in this area. Credit and finance actions are covered extensively in several fora, which explains why they are not referred to so frequently in the IAAs.

More attention should be given to the major contribution that improved rural finance can make to the overall development of the agrofood sector.

Although women's role is widely recognized as crucial, only a few IAAs include specific references to gender issues. Such references are usually linked to health and nutrition for mothers and children.

Specific programmes to assist women's fulfilment of their key functions in the agrofood sector and rural communities should be integrated into all strategies for coping with the food crisis.

#### The need for global approaches and policy coherence

As a result of their different methodologies and contents, some IAAs provide comprehensive action plans with a global, integrated approach, while others focus on specific aspects and concrete proposals for actions. Nevertheless, all the various elements discussed in the synthesis report need to be brought together within a coherent global framework. Most of the measures should be implemented as part of a package, although the best combination of measures differs from country to country. It is particularly important to find the right balance and complementarity between safety net and production measures. More generally, agriculture's contribution to economic growth and poverty reduction, improved nutrition and health, and other key socioeconomic parameters must be recognized in policy-making, national budgets and donors' programmes.

At the production level, even when the actions proposed focus on specific inputs such as seeds and fertilizers, it is necessary to adopt a global agricultural system approach that takes account of all physical and human factors, and provides the framework for increased public and private investments in agriculture. Frequently, the food crisis has clarified the strong interrelationships between crop and livestock production, and the need to diversify production. The management of natural resources, particularly land and water, is a priority issue in most of the IAAs, and is also a key component of the system approach.

Actions at the production level have to be complemented by actions at the upstream and downstream levels within an overall agrofood perspective encompassing the whole value chain. Many IAAs attach great importance to upstream and downstream actions regarding both infrastructure and socio-economic organization, sometimes referring to them as part of the food chain approach. In this context, strengthening farmers' organizations and facilitating farmers' access to markets are essential. Meeting nutritional and health targets are the ultimate objectives of the agrofood sector.

The global approach requires greater policy and institutional coherence, as a wide range of policies has impacts on the efficiency of the agrofood system. Policies and measures that could reduce poverty, particularly in the most vulnerable population groups, could be a major driver for development of the agrofood sector. Many IAAs insist on the need to improve coordination among ministries and to improve the institutional framework, particularly through better cooperation between the public and private sectors.

The global approach that is needed also has a regional or subregional dimension, as stressed in many IAAs, particularly in Africa. Many of the countries in a subregion face similar problems, which are best addressed by common actions in such fields as research, seed systems, water management, markets and trade. Many IAAs conclude that existing policies and institutions at the subregional level must be strengthened.

The need to monitor the implementation and impacts of policies, plans of action and measures proposed in response to the food crisis is also frequently highlighted. In fact, this need also applies to the IAAs themselves, as their "implementation status" is not always clear. The IAAs should be reviewed, adjusted and deepened as part of a dynamic process which would maintain the inter-agency character and cooperation with country and regional stakeholders, and public and private entities.

#### Introduction

The sharp increase in food prices during the first half of 2008 drew the world's attention to the fragility of the global food system and its vulnerability to shocks. The ensuing global food crisis increased the number of hungry people by at least 40 million, to reach a total of more than 960 million by the end of 2008 (FAO, 2008c). Concerned governments, UN agencies, the donor community, NGOs and other stakeholders responded to the crisis, with the main objective of mitigating its impact on the most vulnerable groups.

#### Responses to the food crisis

FAO's ISFP anticipated the widespread impact and grave nature of soaring food prices. In December 2007, the Director-General of FAO launched ISFP to assist member countries to put in place urgent measures for boosting the supply response during the following agricultural campaigns and to provide policy support to improve access to food in the most affected countries. ISFP focuses on activities that address the issue of soaring food prices, which FAO supports on request in coordination with partners in the UN system, Bretton Woods institutions, the New Partnership for Africa's Development (NEPAD), the Association of Southeast Asian Nations (ASEAN) and other regional organizations. ISFP follows a twin-track approach, combining the promotion of quick-response agricultural growth with medium- and longer-term programmes. In March 2009, its budget for approved projects stood at US\$107.4 million (US\$95.8 million received and US\$11.6 million to be received with agreements signed), of which US\$36.4 million was approved through FAO's Technical Cooperation Programme (TCP) (FAO, 2009a).

IFAD's immediate response was to make available up to US\$200 million from existing loans and grants to boost agricultural production in the developing world in the face of high food prices and low food stocks. IFAD also continued to press for rapid and urgent longer-term investments in agriculture, including for improved access to land, water, technology, financial services and markets to enable the 450 million smallholder farmers in developing countries to grow more food more productively, thereby increasing their own incomes and resilience and responding to the increasing global demand for food.<sup>2</sup>

WFP, which is a voluntarily funded operation, reached just over 102 million beneficiaries in 77 countries, with 3.9 million tonnes of food throughout 2008. WFP's total budget for 2008 stands at USD 5.6 billion, of which USD 5.1 billion has been received.

In response to the severity of the food price crisis in early 2008 and the need for prompt action, the World Bank set up a rapid financing facility under a new Global Food Price Crisis Response Programme, to provide policy and technical advice and up to US\$1.2 billion in Bank financing to affected countries, including US\$200 million in grants for the poorest and most vulnerable countries. The Bank has also mobilized US\$189 million from external funds for activities under the response programme. It is engaged in food crisis-related policy dialogue with more than 40 countries and is equally active at the regional level.

<sup>2</sup> IFAD website www.ifad.org

#### The High-Level Task Force on the Global Food Security Crisis

In response to the evolving global food crisis, the United Nation's System Chief Executives Board (CEB) established the inter-agency HLTF in April 2008, comprising UN specialized agencies, funds and programmes and the Bretton Woods institutions. HLTF is chaired by the UN Secretary-General, with FAO's Director-General as vice chair.

The primary purpose of HLTF is to agree to a Comprehensive Framework for Action (CFA), to promote a unified response from the UN system and other development partners to the challenges and opportunities of achieving global food security, including by facilitating the creation of a prioritized plan of action and coordinating its implementation. The CFA provides a framework for closer partnership among all relevant UN agencies and key international financial institutions supporting countries in the fight against food insecurity.

By adopting a twin-track approach, the CFA aims to bridge traditional divides between humanitarian and development assistance, and tackles all aspects of food security, including food aid and nutrition, smallholder farming and agriculture, local and regional food markets and global trade. The CFA does not seek to prescribe specific policies and activities, but rather provides a range of options from which governments and institutions can select the most appropriate.3 The main challenge is to combine rapid response with a coherent action plan that encompasses long-term sustainable actions in a coordinated way.

The CFA has presented two sets of actions for a comprehensive response to the global food crisis. Both require urgent attention. The first set focuses on meeting the immediate needs of vulnerable populations. The second builds resilience and contributes to global food and nutrition security. To support these two sets of actions, the CFA suggests strengthening coordination, assessments, monitoring and surveillance systems. In the context of the CFA, FAO has developed monitoring and evaluation tools, including an interactive database4 of staple food prices on national markets in 58 developing countries, from Afghanistan to Zimbabwe, and has used the Global Information and Early Warning System on Food and Agriculture (GIEWS) Workstation<sup>5</sup> to generate country briefs. These actions are neither exhaustive nor exclusive. They are intended to guide assessments and strategies developed at the country level and to support international coordination efforts.

HLTF aims to respond to the global food security crisis through supporting effective action in countries, advocating for the funds needed, promoting the broad engagement of multiple stakeholders, and ensuring accountability. HLTF builds on work already initiated in support of the EC's 1 billion euro Food Facility. In this context, it will work to encourage investor confidence by contributing to financial coordination mechanisms that galvanize additional private and public investments for agriculture and social protection (the CFA outcomes). In addition, HLTF will disseminate elements of the CFA and encourage wide-ranging debate on its contents, at the local, national and international levels (Nabarro, 2009).

<sup>3</sup> HLTF website www.un.org/issues/food/taskforce/index.shtml.

<sup>4</sup> Link to interactive database on national basic food prices www.fao.org/giews/pricetool/

<sup>5</sup> Link to GIEWS Workstation www.fao.org/giews/workstation/page.jspx.

#### Box 1: Inter-agency assessments (IAAs)

ISFP has been operating within the framework of the CFA. It has joined forces with AU's NEPAD to create a robust strategy for African countries to respond to the crisis of soaring food prices. The same approach has been replicated in the Latin America and the Caribbean and Asia regions, involving their respective regional institutions and ISFP stakeholders. The World Bank, IFAD and WFP are all committed to a coordinated response. In March 2008, the first IAA mission was undertaken in Burkina Faso. This has since been followed by more than two dozen other missions. The purpose of these assessments is to prepare action plans for implementation in the medium to long term to contribute to achieving sustainable agricultural development and food security.

Between February and November 2008, a series of full-fledged IAA missions and rapid appraisals conducted in the context of the EC Food Facility were undertaken in 58 countries: 34 in Africa, 14 in Asia, seven in Latin America and the Caribbean, and three in the Near and Middle East. The agencies or partners involved differed from one mission to another, but often included representatives of FAO, WFP, IFAD and the World Bank, which were joined by representatives of other stakeholders, including donors, the EC, the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), prominent NGOs and farmers' representatives, depending on their availability and interest. Bilateral and multilateral donors were also encouraged to participate in the missions.

These IAAs form the basis of this report.

Source: FAO, 2008a.

#### The High-Level Conference

From 3 to 5 June 2008, FAO convened the High-Level Conference on World Food Security: the Challenges of Climate Change and Bioenergy, in Rome. The conference, which was attended by 181 countries and the EC, renewed the commitment to increase support to agriculture and to strive to reach the Millennium Development Goals (MDGs) by 2015, in spite of the slow progress to date.

The conference culminated in a declaration stating:

We are convinced that the international community needs to take urgent and coordinated action to combat the negative impacts of soaring food prices on the world's most vulnerable countries and populations. We are further convinced that actions by national governments, with the support of the international community, are required in the short, medium and long term, to meet global and household food security needs. There is therefore an urgent need to help developing countries and countries in transition expand agriculture and food production, and to increase investment in agriculture, agribusiness and rural development, from both public and private sources.

During the conference and over the following months, donors announced US\$22 billion to address the food crisis, but since then only limited funds have been disbursed to countries, as either bilateral aid or pooled funding. Although it is not yet possible to set a robust estimate of the incremental financial requirements for global food and nutrition security, social protection, agricultural development and functioning food markets, recent preliminary studies and estimates range from US\$25 billion to US\$40 billion a year (HLTF, 2008). Much of this total will be needed in Africa, to allow that continent to produce for itself and even profit from agricultural exports.

The G8 Summit held in July 2008 also placed the food crisis high on its agenda. It stressed the importance of a comprehensive, integrated strategy to tackle this issue from the short to the medium and long terms. To enhance coordination and implementation, the summit recommended the formation of a global partnership on agriculture and food involving all relevant actors, including developing countries' governments, the private sector, civil society, donors and international institutions. This partnership would build on existing UN and other international institutions, and the UN should provide coordination.<sup>6</sup>

In December 2008, the European Parliament and the Council of Ministers of the European Union approved a regulation establishing a 1 billion euro facility for a rapid response to soaring food prices in developing countries. To support this facility, a close partnership was established among FAO, WFP, IFAD, the World Bank, UNDP, UNICEF and other UN agencies, which now operates under the HLTF umbrella. Proposals for an integrated and consolidated response in 37 countries were prepared (and have been used for this synthesis report).

The High-Level Meeting on Food Security for All, convened in Madrid (26 to 27 January 2009) by the Government of Spain and the UN, brought together a broad range of committed stakeholders from more than 126 countries. This meeting offered continuity to the UN CFA and the opportunity to design a road map to guarantee fulfilment of the objectives and commitments established during the Rome High-Level Conference in June 2008, including the establishment of a global partnership for agriculture, food security and nutrition,7 which was further developed during the G8 Experts Group meeting in Rome in March 2009 and is expected to be realized in 2009.

#### Purpose of the synthesis report

This synthesis report is based on the full-fledged IAA reports and the EC Food Facility rapid appraisals conducted in a total of 58 countries.8 This inter-agency work took place between early 2008 and early 2009, offering a unique opportunity to take stock, share and highlight commonalities - and differences - among beneficiary countries, while also drawing lessons from a year of ISFP experience. Based on this rich material, strategies and action plans have been summarised with the purpose to enhance accessibility of this material, and serve as a baseline for national and international policy-makers and project planners.

The synthesis report attempts to make a thematic, structured and selective presentation of the overall outcome of the IAA. It is important to note that the actions described in the following chapters should not be considered in isolation, but are elements of a package of responses; the best combination of measures depends on the context of the country concerned.

<sup>6</sup> Government of the United States, 8 July 2008. G8 Toyako Declaration on Global Food Security www.america.gov/st/texttrans-english

<sup>7</sup> High-Level Meeting website www.ransa2009.org/en/index.htm.

<sup>8</sup> In this synthesis report, the full-fledged IAAs and rapid appraisals are both referred to as IAAs. See Annex 1 for a list of the countries where they were conducted.

# Strengthening safety net programmes for vulnerable groups: medium-term implications<sup>9</sup>

2

Social and productive <sup>10</sup> safety nets are a central component of international and national responses to persistent food price volatility and food crisis, particularly in economically, socially and environmentally fragile contexts compounded by recurrent severe climatic shocks. Net food buyers such as landless labourers, smallholder farmers, pastoralists and urban poor people are the most affected by the food crisis and hunger. The first recommendation of the World Bank's policy note on high food prices is "ensuring household food security via targeted safety nets" (World Bank, 2008b: 3). Safety nets are a subset of broader social protection mechanisms. While social protection includes contributory pensions, labour-market insurance and an array of new risk management products (such as index-based weather insurance), most safety nets come in the form of non-contributory transfers. Safety nets include predictable and institutionalized measures for reducing poverty and vulnerability, and enhancing food and nutrition security. Such measures are mainly food or cash-based transfers, given either conditionally, as part of education, nutrition or public works programmes, or unconditionally, as hand-outs (World Bank, 2008a; WFP, 2004).

#### Tailoring safety nets to context

A properly designed safety net provides a predictable set of institutionalized mechanisms to help households in distress cope with shocks and meet their minimum consumption requirements (WFP, 2004). Safety nets are coordinated by governments and frequently implemented in partnership with international agencies, such as the World Bank, NGOs and UN organizations, as part of a country's poverty reduction strategy. Countries' capacities to provide social safety nets vary considerably.<sup>11</sup> The following are the four basic stages of development in safety net systems (WFP, 2008a).

Absence of safety net systems: This applies to very low-capacity, often post-conflict countries that do not have formal safety net systems in place (e.g. Afghanistan, Somalia and the Sudan). Safety nets are often provided by the international community, mostly in the form of recurrent emergency relief or temporary seasonal safety nets (e.g. nutrition interventions and school feeding during the lean season). These may lay the basis for a transition towards a more predictable safety net programme, but are not a permanent national safety net system as such.

Elements of social protection systems: This refers to low-capacity, highly vulnerable and poor contexts often prone to recurrent complex shocks (e.g. droughts). Elements of national safety net programmes are present, but they are often uncoordinated, short-term in nature, and limited in scale (e.g. Malawi and Kenya).

Emerging social protection systems: This refers to low- to medium-capacity countries that have started to formulate formal safety net policies and strategies and are seeking to institutionalize multi-year programmes to improve coverage, coordination and flexibility (e.g. Bangladesh and Ethiopia).

<sup>9</sup> Chapter 2 was drafted by WFP and reviewed together with FAO.

<sup>10</sup> Productive safety nets are targeted transfers aimed at increasing the productive assets or production capacity of beneficiary households.

<sup>11</sup> National capacities are here generally defined as a country's institutional, financial and technical ability to provide adequate assistance to people in need.

Consolidated social protection systems: This group includes medium- to highcapacity countries that have institutionalized national safety net systems (e.g. Ecuador, Nicaragua and Egypt). In these countries the challenges are mostly in filling gaps to make the system work more efficiently.

There are important factors to consider when deciding whether to expand existing programmes or introduce new ones. However, both short- and medium-term safety nets are needed in contexts where the transition to more sustainable livelihoods needs to cater to immediate needs while investing in the mechanisms for longer-term predictable and government-led/-owned safety nets.

#### **Proposed measures**

In the 58 IAAs, 42 countries (representing more than 70 percent) have proposed measures for targeted distributions of agricultural inputs, 24 proposed food-based safety net measures, 18 nutrition and health measures, and 17 cash-based safety net measures (Table 1).

#### Safety nets as investments and hunger solutions: recent experience

By providing immediate support in ways that spur countries' growth potential, safety nets can be effective and efficient in bridging short-term emergency measures with mediumand longer-term development investments. The following are examples of how safety nets can protect livelihoods and significantly reduce hunger while helping to maintain or foster growth.

Immediate short-term safety nets at times of shocks - protecting livelihood assets and filling gaps in national programmes: In 2008, WFP scaled up its direct response to high food prices, including through new projects, to support 23 million people in 24 countries. This included scaling up food assistance to fill gaps in existing social or other livelihood protection programmes, including nascent safety net programmes, where access to food is difficult or unaffordable and there is risk of persistent social disruption, such as in Haiti and Liberia. In Benin, Ghana, Kenya, Pakistan, Sierra Leone and Tajikistan, WFP rapidly scaled up school feeding programmes, which allowed children to stay in school, increased their food security during a critical period, and increased enrolments relatively quickly.

Social safety nets - protecting livelihoods while investing in human capital: A social safety net is a collection of services provided by the State, such as health care and subsidized food. Protective safety nets are therefore needed to support the most vulnerable households by countering food price volatility and maintaining households' livelihood assets. It is essential to include a nutrition component that ensures the most vulnerable populations (children, and pregnant and lactating women) are the first to benefit from such measures, to avert nutrition crises that would have a severe impact on health and development. Provision of nutritious foods coupled with simple but effective nutrition awareness programmes should be considered not only at times of crisis, but as a major safeguard of future livelihoods and development opportunities.

Managing risks for the vulnerable and investing in resilience to shocks: Poor households are often forced to adopt risk-avoiding strategies because of the significant supply-side variability, uncertainties and risks caused by erratic weather and limited access to inputs; their limited share of marketable produce beyond family needs; poor road and market infrastructure; and their limited access to basic services. By offsetting

Region	Food-based safety nets		Cash-based safety nets	Targeted agricultural input distribution			Health and Nutrition	
Africa (34 countries)	Burkina Faso Burundi Central African Republic Comoros Côte d'Ivoire Ethiopia Gambia	Ghana Guinea Lesotho Liberia Madagascar Malawi Mauritania Senegal	Burundi Ethiopia Lesotho Liberia Malawi Mauritania Senegal Uganda	Burkina Faso Burundi Cameroon Central African Republic Comoros Côte d'Ivoire Congo, Dem. Rep.	Ethiopia Gambia Ghana Guinea Guinea-Bissau Kenya Liberia Malawi Mozambique Niger	Rwanda Sao Tome and Principe Senegal Somalia Swaziland Tanzania, United Rep. Togo Zimbabwe	Burkina Faso Comoros Côte d'Ivoire Liberia Madagascar Malawi Mauritania Senegal Somalia Uganda	
		15	8		25		10	
Asia (14 countries)	Afghanistan Nepal Pakistan Uzbekistan		Afghanistan Lao PDR Myanmar Nepal Pakistan Sri Lanka	Afghanistan Bangladesh Cambodia Korea, Dem. People's Rep. Kyrgyz Republic	Mongolia Myanmar Nepal Pakistan Philippines Sri Lanka	Tajikistan Uzbekistan	Bangladesh Korea, Dem People's Rep Lao PDR Pakistan Uzbekistan	
		4	6		13		5	
Latin America and the Caribbean (7 countries)	the Guatemala		Haiti		Bolivia Haiti Jamaica		Guatemala Haiti	
	3		1	3		2		
Near and Middle east (3 countries)	Egypt Palestine/ West Bank and Gaza Strip		Egypt Palestine/ West Bank and Gaza Strip	Palestine/ West Bank and Gaza Strip			Egypt	
	2		2	1			1	
Total	24		17	42			18	

<sup>1</sup> In the case of Egypt the IAA mission recommended: (i) Strengthen existing safety nets and improve targeting mechanisms; (ii) Reform the current food subsidy system through improved quality and nutrient profile of the food subsidy programme; (iii) Expand ratios provided in school feeding programmes; and (iv) Increase the MOSS Social Assistance provided to vulnerable households through improvement and reinforcement of the cash transfer programme. It is worth mentioning that the Government of Egypt was largely able to respond to – and cope with – soaring food prices through a number of measures, mainly due to a good macroeconomic situation during 2007-08. However, in late 2008 and early 2009 the capacity of Government to respond to the needs of the poor and food insecure has become more difficult by a rapid deterioration of economic growth prospects and the external trade position as a consequence of the world financial crisis and economic slowdown. (For further details please refer to the Egypt fiche in Annex 2).

some of these risks, predictable safety nets can provide poor people with confidence and a sense of security, encouraging them to protect their livelihood assets and engage in productive activities. For example, Ethiopia's Productive Safety Net Programme protects the livelihoods of more than 8 million people, while contributing to community-based investments in resilience building and adaptation to climate change, such as flood protection for the former and conditional voucher schemes for the latter.

Addressing (some) market failures: In some cases, safety nets may reduce the transaction costs faced by farmers, for example, by creating infrastructure through food for work (FFW)/cash–for-work (CFW) programmes that improve access to markets and the flow of produce. Voucher programmes that provide people with access to food through the market (e.g. in Burkina Faso), and cash transfers to support work activities (e.g. in Nepal and Ghana) may also be useful. FFW programmes supporting the efforts of governments and FAO to increase agricultural production (e.g. in Senegal) or to build

farm-to-market roads and other community infrastructure (e.g. in Haiti, Liberia and Pakistan) have been expanded. Supplying small-scale food reserves that communities can draw on to help them cope with price changes or other shocks, combining efforts with FAO and governments to provide food together with seeds and tools, and support for building roads and market infrastructure have been implemented to help subsistence farmers (e.g. in Senegal). A road construction project in Nepal has improved accessibility, resulting in reduced walking time and transportation costs to the closest market for vulnerable populations in remote villages.

Productive safety nets – targeted input support – a quick response for agricultural growth: Small farmers who do not produce enough for their own consumption and are net food buyers are severely affected by increased food prices, which may reduce their capacity for agricultural production and force them to sell productive assets. In response to the food crisis, FAO has adopted a twin-track approach that it had already applied to hunger reduction and that combines the promotion of quick-response agricultural growth, led by small farmers, with targeted programmes to ensure the most vulnerable and food-insecure consumers have access to adequate supplies.

Targeted input distribution activities aim to boost food production immediately for small farmers' own consumption and sale of surplus on the market. The expected longer-term impacts are increased income for poor rural households and increased supply on domestic markets.

Inputs can be provided in a range of ways, including direct distribution to farmers, input trade fairs and voucher or credit schemes. They can also be provided together with food rations to help ensure that inputs are used for agricultural production. The use of existing mechanisms for supplying productive inputs to farmers and for the marketing of surplus production are integral elements of any productive safety net to support sustainability. The agricultural inputs provided vary according to country needs and local conditions, and include high-quality seeds, hand tools or farm machinery, vaccines and veterinary equipment, animal feed and fertilizers. When necessary, technical assistance is also provided to ensure that the inputs provided are used to maximum advantage.

Procurement and distribution are monitored to ensure that farmers obtain inputs that meet quality standards, and special attention is given to avoiding the disruption of commercial markets. Where warranted, attention is also given to alternative supply systems that are oriented more to the private sector.

Addressing the growing urban dimension of food insecurity: The poorest households in urban areas are net food buyers and often spend 60 percent or more of their incomes on food. These households cope with shocks and high prices by eating less, buying less nutritious food, cutting health care and education expenses, selling assets and incurring additional debt. In some countries, high prices have led to social unrest. Safety nets in urban areas should provide a cushion for the most vulnerable urban households at times of crisis, and enable the transition to recovery in prolonged hunger situations. For example, school feeding in slums and support to the development of peri-urban agriculture, combined with nutrition enhancement objectives, are important elements of socially and economically productive safety net schemes.

Partnerships are of strategic importance for all safety net interventions, as is underscored by the integration of such activities into national development plans and strategies. In Bolivia, for example, WFP's approach has been incorporated into the social protection network and the government's agricultural strategy for the Rural, Agrarian and Forestry Revolution. In the Philippines, UN partners and WFP are responding to a

government request for assistance in the design, piloting and implementation of a food policy. FAO and other partners also play crucial roles in the design and implementation of all productive safety nets, as WFP relies on FAO's technical expertise and complementary inputs. UNICEF and the World Bank are the main partners in Senegal's Nutrition Awareness Programme, and the Office for the Coordination of Humanitarian Affairs (OCHA) complements WFP's government capacity building in the Philippines. International and local NGOs are the backbone to implementation of all projects.

#### The way forward for safety nets

As the IAAs point out, the current extent of vulnerability requires that social protection systems and various forms of safety nets be consolidated and supported. Such efforts should focus on the following.

Consolidating and supporting social protection systems: Before economic opportunities can emerge and become sustainable, sufficient resilience has to be built. This calls for safety nets that include both protective and productive components. Government action plans to address the food crisis in Lesotho include the expansion of social protection systems through increasing old age pensions, redesigning public assistance grants, increasing the capacity and delivery of health services and food support, and exempting 635 mothers/care takers of malnourished children from hospital fees. Sri Lanka plans to establish a comprehensive social security programme benefiting more than 1 million people through support to the Agricultural and Agrarian Insurance Board in restructuring pension funds for farmers, and through district-level interventions and awareness programmes.

Scaling-up protective and productive safety nets with a strong set of nutrition, risk reduction, sustainable land management and climate change interventions should be a major thrust in social protection, risk reduction and adaptation to climate change proposals. A major coalition of UN agencies and donors is needed to support wider alliances for food security and sustainable hunger solutions through safety nets tailored to country-specific needs and opportunities. Nutrition interventions, school feeding and FFW/CFW programmes can provide the initial support for a variety of safety net schemes designed to protect existing assets and promote or enable economic opportunities for the most vulnerable. Production enhancement should be labour-intensive for the medium term, as the current financial crisis is forcing many migrants to return to their rural villages.

During 2008, several countries faced fiscal constraints to the scale-up of existing safety net programmes and the development of new ones. To support countries' needs, international development partners scaled up their ongoing programmes. For example, in Lao People's Democratic Republic (PDR), the World Bank proposes to supplement the existing portfolio with an extra US\$3 million for conditional cash transfer schemes for maternal and child health, and an extra US\$3 million for nutrition capacity building. In West Africa, WFP expanded its operations, to feed an additional 1.4 million people hit by high food prices in Guinea, Mauritania, Sierra Leone, Liberia, Burkina Faso and Senegal. WFP operations in West Africa increased by almost 60 percent between July 2007 and July 2008.

Promoting productive safety net components that support risk reduction and the rehabilitation of key productive assets at the community or household levels: Livelihood enhancement, such as through participatory forestry and agroforestry, land restoration, skills building and productivity enhancement measures, should become an integral part of productive safety net strategies in shock-prone countries with large degraded areas. For example, Guatemala's IAA identifies the use of incentives, such as

FFW and food for training (FFT), for soil and water conservation and reforestation as a priority. Other countries, such as Nepal, propose FFW/CFW activities for the rehabilitation of micro- and non-conventional irrigation. In Pakistan, FFW activities are directed to the rehabilitation/construction of irrigation channels, the construction of rainwater harvesting structures and the cultivation of fruit and forest plants in nurseries, complemented by quality agriculture inputs and capacity building.

Building on initiatives that work and can be upscaled, and that are relevant to the most vulnerable and food-insecure communities, should be a priority in strategic and programme formulation discussions and support. The need to scale up protective and productive safety nets is confirmed by IAA findings and recommendations and reflected in specific programmes contributing to nationally owned, predictable social protection and food security strategies. Safety net strategies often build on existing experience, particularly in Asia. Over recent decades, WFP and its UN partners have developed expertise in Bangladesh, Pakistan, Ethiopia and the Philippines (Box 2).

Investing in partnerships and joint country-level consultations and assessments: Opportunities linked to livelihood and social protection programmes have been highlighted in the Horn of Africa (HOA) Initiative on Food Security, undertaken in 2007 in six African countries - Kenya, Djibouti, Uganda, Eritrea, Somalia and Ethiopia - with support from FAO and WFP. Consolidated reports from the initiative were shared at a multi-country consultation meeting in Nairobi in June 2007, and a road map for action was developed. The road map resulted from an extensive consultation process focusing on risk management, safety nets, enhanced livelihood opportunities and environmental protection as central to both the causal aspects of food insecurity and the actions required to protect and enhance livelihoods, hence the need to increase access to economic opportunities through income generation and diversification. The HOA initiative is particularly aligned with the needs of marginal agricultural and pastoral populations, vulnerable women and children. The 2008 EC Food Facility response to high food prices supports short- to medium-term safety net proposals in such countries as Bangladesh, Sierra Leone and Pakistan.

#### Box 2: Safety net projects in the Philippines and Bangladesh

In the Philippines, WFP activities focus on restoring damaged infrastructure and livelihoods, to enhance resilience to shocks. The project includes FFW, FFT and capacity development, which target areas affected by conflict and high food prices. FFW activities are carried out in collaboration with the Department of Agriculture and FAO, and aim to increase farmers' ability to retain more of their crop for consumption and/or sale. Such activities include the creation of farm storage facilities, irrigation systems, roads, solar crop dryers and stores. Literacy and alternative livelihood skills are the focus of FFT activities.

In Bangladesh, WFP's safety net project aims to raise agricultural productivity and selfsufficiency and mitigate future vulnerabilities, through cash and food transfers (in 50:50 ratios) and distribution of micronutrient powder. The main activities are employment generation, training in on-farm activities, and the transfer of grants for obtaining assets for incomegenerating activities. Employment-generating activities include developing/rehabilitating drainage and irrigation infrastructure, and constructing embankments, rural roads and raised seedbeds. Training focuses on small-scale, agro-based activities, group farming, diversified crop production, poultry, cow/goat rearing and other income-generating activities based on participants' capacities. Skills training will be followed by the transfer of rolling asset grants, which can be used for further income-generating activities on repayment. As well as government counterparts, WFP coordinates the project with FAO and other agencies, which provide technical support and complementary inputs.

Source: WFP internal reports.

Building on opportunities provided through special funding allocations: As part of the EC Food Facility, a variety of safety net responses have been developed to protect against transitory shortages and mitigate future economic shocks. These focus mainly on setting up or expanding existing productive and, in some cases, social safety nets. Emphasis is given to activities that enhance and rehabilitate agricultural productivity, mainly through investments in the development of agricultural workers' human capital, improved agricultural infrastructure, asset creation, and temporary employment opportunities.

Approaching short- and longer-term interventions at the same time: In countries such as Haiti, which is affected by recurrent hurricanes and is highly susceptible to major floods, infrastructure destruction, fluctuating food prices and social disruption, it is essential to have a social protection and risk reduction framework and an investment plan for food security and adaptation to climate change that focus on the environment and provide an opportunity for partnerships, such as with the International Labour Organization (ILO), UNDP, IFAD, WFP, the World Bank and FAO. The IAAs of Haiti and other countries underline these needs, for both short- and longer-term interventions. Many other countries require a similar mix of short- and longer-term protective and productive interventions aimed at reversing negative coping strategies and adapting to climate change. For example, Bangladesh could use CFW/FFW to scale up flood protection measures while increasing women's access to grants for income-generating activities. Madagascar needs a more deliberate focus on integrating the environmental restoration and preservation of its fast depleting biodiversity into existing prolonged safety net programmes supported by the government and stakeholders, such as the World Bank-funded safety net programme to rehabilitate and reconstruct the damage wrought by cyclones through CFW in food-insecure areas.

Considering the urban dimension in social protection programming: Safety nets in urban settings should include the possibility of scaling up short-term or temporary interventions to support governments' and partners' efforts to stabilize urban food insecurity. In 2008, the Government of Ethiopia drew on the Ethiopian Food Strategic Reserve to subsidize food consumption in specific urban areas, providing targeted transfers to the most vulnerable households. This effort may need to continue under a more articulated and market-oriented system, for example, through more robust ruralurban linkages using warehouse receipt systems that feed into food reserves, which could be linked to conditional voucher systems and other social protection programmes. Medium- to longer-term safety nets in urban areas will become increasingly important, particularly targeted interventions using food, cash, vouchers or a combination of these to address the food and nutrition needs of specific categories of ultra-poor and highly vulnerable marginalized populations. Some IAAs indicate specific needs and opportunities for social safety nets, such as a transition from general food distributions to CFW/FFW for post-disaster rehabilitation, school feeding, nutrition and support to HIV/AIDS-affected people in Haiti; FFW for employment creation and improved agricultural production in urban and peri-urban areas, especially for unemployed urban youth, in Sierra Leone; and a school feeding programme, nutrition support, supplementary feeding and local purchase initiatives in Liberia.

Contextualizing resource transfer modalities: Objectives need to be well defined and should clearly define the types of livelihood assets the specific safety net intervention aims to protect and/or enhance. It is also essential to define the intended outcomes (education, nutrition, improved coping strategies, risk reduction and environmental protection, etc.), along with the best mechanisms (unconditional or conditional cash, food,

vouchers) for meeting these outcomes, at the programme choice and design stages. When markets are functioning, vouchers and cash transfers, complemented by investment in rural infrastructure can provide beneficiaries with the purchasing power for access to food commodities, hence allowing them to participate as consumers and express their choices in existing markets.12

Adequate and accessible financial partner institutions and appropriate monitoring, reporting and control systems are essential for effective and efficient voucher and cash transfer programmes. Such conditions are not always present in the most food-insecure, unstable or marginalized contexts. Voucher and cash transfers are generally more costefficient than food transfers when markets work well and adequate implementation capacities have been developed. However, beneficiaries' preference for cash, vouchers or food transfers vary by location, season and gender. Households living far from markets tend to prefer food transfers, while those living closer prefer vouchers and cash. There are indications that people prefer food transfers during the lean season, owing to higher food prices, while cash is often preferred around the harvest period. Gender also matters, as women often prefer food, which they are more likely to control, while men may prefer cash transfers.

Taken together, these considerations entail that the appropriateness of a given transfer or combination of transfers - cannot be predetermined, but is rather shaped by contextspecific factors that need to be carefully analysed and monitored.

<sup>12</sup> However, the concept of functioning markets should be used with caution. Sometimes, even when food is available and markets are working, traders may deliberately enact speculative practices to gain extra profits, such as through strategic storage or delayed food deliveries.

# Measures, activities and policies to boost production in the medium term

3

Countries have proposed a broad range of measures, policies and activities for developing agricultural production systems and increasing production and productivity. This chapter describes some of these proposals, focusing on those that support inputs and related services for enhancing agricultural production. Some measures and issues are cross-cutting; it is important to examine these as they can help ensure the successful implementation of measures to tackle the food price crisis. It must be recognized that measures can be interlinked and can often not be implemented in isolation. Reference is made to improved soil and water management for rainfed and irrigated agriculture, more adaptable new crop varieties, improved access to seeds and fertilizers, environmentally sustainable integrated pest management (IPM) practices, reduced post-harvest losses, and improved rural infrastructure, especially roads and communication infrastructure. These will need to be bolstered by an enabling policy environment that facilitates growth and development and helps transform smallholder agriculture. Although some elements of production systems are discussed in isolation, it is recognized that a global agrosystems approach is required to address the constraints and opportunities in an interdisciplinary manner.

#### Programmes for inputs and related crop production services

Limited use of productive technology is often perceived as a major factor behind the slow increase or stagnation of food production in many poor countries. In many cases, the seed industry is underdeveloped, and most small farmers have little or no access to high-yielding varieties. Private sector participation in seed multiplication and distribution is minimal, and the policy and legislation framework does not provide adequate incentives and conditions to foster development of the seed sector. Public investments in key areas of the seed sector, such as variety development and release, early generation seed multiplication and quality assurance have declined over recent decades. The value of farmers' seed systems has been underestimated and undersupported. Access to commercial fertilizer is also constrained by factors that include high costs, lack of commercial supply and distribution outlets, and inadequate participation from the private sector. For both seeds and fertilizer, insufficient credit facilities and a lack of integration between farm inputs and outputs are major limitations. In many African countries, irrigation received little attention in agricultural development strategies, and water is becoming scarcer in Asia. Poor farmers living in marginal areas have limited access to improved cultivation practices for reversing land degradation, and depend on farm implements that are often outdated, which hamper labour productivity improvements. Table 2 lists the various categories of measures proposed for increasing crop production (p. 34).

A majority (80 percent) of the countries under consideration have proposed new programmes or the enhancement of existing ones for improving farmers' access to production inputs. Such programmes often include input market development, input subsidies, soil fertility and land management, and support for farm equipment and structures. Thirty-eight countries propose developing their input markets, and 22 intend to support mechanization and farm equipment, including the construction

of greenhouses. Improvement of soil fertility and land management is among the proposed support measures for 24 countries, and 12 intend to maintain or introduce input subsidies.

Investment in irrigation rehabilitation and development is a medium- and long-term priority for increasing production in most of the countries under consideration. Only a few envisage water harvesting initiatives.

In the vast majority of the proposed country action plans, input support activities are only one component of a broader comprehensive and integrated production support programme that considers the agricultural system as a whole. Programmes to increase agricultural production include activities for reinforcing the overall system, from input support and natural resources management to post-harvest and marketing activities.

Africa (34 countries)	Support to inputs for crop production				Support to fertility	Water resources development		
	Input subsidies	Input market development		Mechanization and farm equipment		Irrigation rehabilitation and development		Water harvesting
	Burkina Faso Cameroon Ethiopia Gambia Madagascar Malawi Mauritania Niger Tanzania, United Rep.	Benin Burkina Faso Burundi Cameroon Central African Republic Congo, Dem. Rep. Côte d'Ivoire Djibouti Ethiopia Gambia Ghana Guinea	Lesotho Liberia Madagascar Mali Mauritania Mozambique Niger Rwanda Senegal Sierra Leone Tanzania, United Rep. Togo Uganda Zimbabwe	Gambia Ghana Madagascar Mali Mauritania Niger Senegal Sierra Leone Togo Zambia Zimbabwe	Burundi Central African Republic Cambodia Djibouti Ethiopia Ghana Liberia Madagascar Malawi Mauritania Niger Senegal Zimbabwe	Benin Burkina Faso Burundi Comoros Côte d'Ivoire Djibouti Ethiopia Gambia Ghana Liberia Madagascar Malawi	Mali Mauritania Niger Sao Tome and Principe Senegal Somalia Swaziland Tanzania, United Rep. Zambia Zimbabwe	Burundi Djibouti Ethiopia Ghana Malawi Uganda
	9	2	26	11	13	22		6
Asia (14 countries)	Pakistan	Bangladesh Cambodia Lao People's Dem. Rep.	Mongolia Nepal Tajikistan Uzbekistan	Bangladesh Korea, Dem. People's Rep. Kyrgyz Republic Lao People's Dem Rep. Mongolia Myanmar Philippines Sri Lanka	Afghanistan Kyrgyz Republic Mongolia Myanmar Nepal Sri Lanka	Afghanistan Cambodia Korea, Dem. People's Rep. Kyrgyz Republic Mongolia	Myanmar Nepal Philippines Sri Lanka Tajikistan Uzbekistan	Tajikistan Uzbekistan
	1		7	8	6	1	1	2
Latin America and the Caribbean (7 countries)	Haiti	Bolivia Dominican Republic	Guatemala Nicaragua	Dominican Republic Guatemala Jamaica	Dominican Republic Guatemala Honduras Jamaica	Dominican Republic Guatemala	Haiti Jamaica	
	1		4	3	4	4		0
Near and Middle East (3 countries)	Egypt	Palestine/ West Bank and Gaza Strip			Egypt	Egypt		Palestine/ West Bank and Gaza Strip
	1		1	0	1	1		1
Total	12		88	22	24	38	0	9

#### Seed programmes

The availability of high-quality seed is considered one of the most critical elements in boosting production, and many countries have proposed the development of programmes to strengthen their national seed industries through various activities such as early generation seed multiplication, community seed production, strengthened seed distribution and strengthened quality assurance systems.

For example, the Government of **Nepal** is seeking to implement a three-year seed programme that will: i) improve source seed production and management; ii) strengthen the District Seed Self-Sufficiency Programme and corresponding private sector seed breeding; iii) build and maintain appropriate seed buffer stocks; iv) develop seed quality control and marketing systems; v) build technical and institutional capacity in the seed sector; and vi) support private sector development of the seed sector.

The **Philippines**, a country prone to natural disasters, has developed the Rapid Seed Supply Financing Project, which – as well as the procurement and distribution of seeds – envisages the establishment of a seed buffer stock in the medium and long terms. A buffer stock would serve two main purposes: it would collect the quality seeds that are currently milled into rice because of overproduction, which decreases seed growers' income and discourages them from growing seeds in the following season; and it would ensure quality seeds for replanting when crops are destroyed by typhoons. This project covers a one-year emergency phase (2009), and will be followed by the Irrigated Rice Production Enhancement Programme for a six-year development phase. The total cost of the two programmes is US\$44.9 million.

Other countries, including Lao PDR, Bangladesh, Lesotho, the United Republic of Tanzania, Uganda and Haiti, focus on strengthening the capacity of farmers' organizations to undertake village-based seed multiplication. Farmer-based seed multiplication programmes are thought to facilitate the adoption of improved and locally adapted seed varieties, reduce transaction and transportation costs, reach more farmers and empower small farmers.

Special measures for making seed distribution more appropriate to smallholders have been proposed. For instance, Lesotho and Uganda promote seed fairs aimed at providing small farmers with the opportunity to obtain seeds of their own choice. Mozambique, Kenya, the United Republic of Tanzania and Uganda will promote agroinput dealers. The Uganda National Agro-Input Dealer Association (UNADA, 2005) intends to foster the growth of an efficient and cost-effective input distribution network that reaches all the farmers in Uganda. In Tanzania, the National Microfinance Bank and the Financial Services Deepening Trust will provide credit guarantees to agrodealers seeking to expand their businesses.

#### Regional seed initiatives

Regional initiatives generally contribute to sustainable economic and social progress through increased cooperation and integration in all fields of development, particularly trade, customs and monetary affairs, technology, industry and energy, agriculture, environment and natural resources. In the agriculture sector, regional seed initiatives have emerged to promote seed trade, lobby for better seed regulations and facilitate the regional harmonization of regulations that promote economies of scale in seed supply and trade.

In Latin America, two proposals have been developed to reinvigorate and strengthen the regional seed systems for basic grains and tubers in the Andean and Central

American regions. A main objective is the establishment of organized seed production chains in the different countries, operating under a regional seed policy and harmonized seed regulations (Box 3).

The Southern Africa Development Community (SADC) has launched the SADC Seed Security Network to help improve food security throughout the region by supporting intraregional seed trade. A network made up of the Economic Community of West African State (ECOWAS), the West African Economic and Monetary Union (UEMOA) and the Permanent Interstate Committee on Drought Control in the Sahel (CILSS) has developed and adopted harmonized seed regulations. Such harmonization promotes economies of scale in seed supply by encouraging more regionalized seed production and sales. The network's overall goal is to contribute to improved food security in the region by supporting and promoting policy harmonization and the intraregional availability of critical agricultural inputs for small farmers, such as improved seeds.

## Box 3: Regional seed initiatives in Latin America

In Latin America, two proposals to boost and strengthen regional seed systems were developed in response to a request to FAO from the Andean Community (CA) and the Central American Agricultural Council (CAC). In both regions, the cultivation of maize, potato, quinoa and beans is important because these are staple foods and sources of income. Both regions face similar problems, such as poor access to quality seeds for increasing smallholder productivity and lack of knowledge and technical management skills for growing improved varieties. It is important to strengthen production systems for quality seeds and improve their availability to farmers at affordable prices. Strengthened seed multiplication systems are also required to modernize the agriculture sector and make it sustainable.

 Programme to support family agriculture in rural areas of the high Andes of Peru, Bolivia and Ecuador: increasing the availability and accessibility of quality seeds to improve farmers' food security

The programme's overall objective is to improve the food security of smallholder farmers in rural areas of the high Andes of Peru, Bolivia and Ecuador through increasing access to and use of improved seeds of basic grains and tubers, expanding the area cultivated and improving market conditions. An important component of this programme is the improvement of quality seed collection and selection through the development of an organized seed production chain in the three countries, operating under a modern legal framework with the participation of a wide range of public and private actors.

The programme aims to develop the capacity of government and research institutions in Peru, Bolivia and Ecuador. It is also expected to reinforce CA's skills and capacities for developing seed standards and regulations, and to strengthen knowledge exchange on seed production systems within the region. The national (Peru, Bolivia and Ecuador) and regional components require total estimated financing of US\$4 804 759 for three years.

2. Programme to strengthen seed production policies in CAC member countries: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama

This regional programme aims to develop sound seed production policies to improve the food security of farmers in CAC member countries, by increasing the availability of certified seed and therefore increasing the farmers' production of basic grains. The programme entails the organization and operation of a basic grain seed production chain, with the participation of all actors based on self-managing organizations coordinated by government technical support services. An important output is the development of a guiding framework of policies and management mechanisms to facilitate the sustainable supply of quality seeds in the region. As part of the Central American integration process and its Central American Agricultural Policy, a regional seed policy will be elaborated, involving a review of countries' phytosanitary regulations and the integration of different national seed policies into a regional framework. The programme requires a total budget of US\$11 934 935 for three years.

Sources: FAO 2008f; 2008d.

Other objectives include the promotion of regulated and collaborative regional seed trade, the collection and dissemination of information on seed issues in the region, and the improvement of national and regional disaster preparedness.

The Alliance for a Green Revolution in Africa's (AGRA's) major seed system programme – the Programme for Africa's Seed Systems (PASS) – is investing US\$150 million over five years (2007 to 2011) in across-the-board efforts to improve the availability and variety of seeds for higher and more stable yields in the often harsh conditions of sub-Saharan Africa. PASS consists of four sub-programmes focusing on different elements of the input supply value chain: i) Education for African Crop Improvement provides training for the new generation of crop breeders and agricultural scientists; ii) the Fund for the Improvement and Adoption of African Crops funds crop breeding; iii) the Seed Production for Africa Initiative supports the production and distribution of improved crop varieties through private and public channels; and iv) the Agro-Dealer Development Programme (ADP) provides training, capital and credit to establish certified agrodealers as a primary channel for supplying smallholder farmers with seeds, fertilizers and knowledge to increase their productivity.

In most African countries, the poor availability of seed creates a bottleneck for the revival of agricultural production, and is a major constraint for all producers. Interventions should include actions to: i) enhance the collection, conservation, utilization and exchange of plant genetic resources, seed and planting materials; ii) strengthen variety improvement programmes; iii) promote effective seed production systems involving the public, private, formal and informal sectors; iv) enhance quality assurance systems; v) promote seed marketing and distribution; and vi) develop improved disaster preparedness and response to seed insecurity. This will require providing countries with technical assistance for the development and implementation of adequate strategies, policies, programmes and legislation, the capacity building of institutions and communities, and adequate financial support.

A variety of initiatives in Africa aim to develop the seed sector, but coordination and collaboration among actors are very limited. In an attempt to improve this coordination, in January 2007 the AU adopted the African Seed and Biotechnology Programme as a strategic framework for seed sector development in the region. The programme's institutional arrangements and implementation strategy are currently being developed.

In collaboration with the Africa Rice Center (WARDA), FAO has formulated a regional initiative to boost rice production in West Africa, with a strong component to support seed systems (Box 4, p. 38).

# Programmes for fertilizers and soil fertility management

Fertilizer and soil fertility interventions have focused on providing fertilizer subsidies, training agricultural extension staff on the appropriate application of both mineral and organic fertilizers, monitoring the sustainability of soil fertility, and developing site-specific fertilizer recommendations that emphasize integrated plant nutrient systems.

Sustainable intensification of crop production means obtaining higher crop yields from the same area of land while respecting environmental and social issues, and results in food security and social and economic development. To achieve this target, it is often necessary to make changes in the crop production system. Small farmers should be encouraged to use the organic fertilizers available in their regions, when these do not cost more at the farm-gate level than mineral fertilizers of the same nutrient value. Mineral fertilizers are used to ensure that crop nutrient demands are satisfied, thus optimizing crop production in the most economical way for the farmer and the environment.

# Box 4: A regional initiative in 12 pilot countries in sub-Saharan Africa: Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Liberia, Mali, Mauritania, the Niger, Nigeria, Senegal, Sierra Leone and Togo

Food, fuel and fertilizer prices soared in 2008, putting food security at risk, especially in sub-Saharan Africa. The Emergency Rice Initiative was jointly launched by WARDA, the International Fertilizer Development Center (IFDC), FAO and Catholic Relief Services (CRS), within the framework of FAO's ISFP. IFAD, the African Development Bank (AfDB) and the West African Development Bank (BOAD) also participated in the project formulation workshop.

#### Needs

Although West Africa remains the hub of rice production in Saharan Africa, 40 to 50 percent of the rice consumed needs to be imported. Global rice stocks are at their lowest level since 1983/1984, and African countries can no longer rely on Asian imports to feed their growing populations. Food, fuel and fertilizer prices have soared over the last few months, and riots protesting the vastly increased costs of living have been reported in several of Africa's major cities. Rice is one of the two main crops (with wheat) that show a huge deficit between local supply and demand. Urgent action is needed to ensure that African countries have enough rice to feed their rural and urban populations.

It is necessary to scale up public spending and private investment immediately. This will be critical in creating a conducive policy, institutional and physical environment for private sector involvement and investments, to ensure the longer-term recovery of agriculture as a viable sector of countries' economies.

### Objectives

- To improve farmers' access to rice seed and mineral fertilizer.
- To expand and enhance farmers' knowledge on best-bet rice technologies, IPM, soil fertility management, post-harvest and marketing.
- To reduce post-harvest losses and improve processing techniques.
- To improve farmers' access to markets.
- To improve food security and reduce vulnerability in the region.
- To establish or strengthen input dealer networks.

#### Beneficiaries

The initiative targets 120 873 ha, of which 36 773 ha are areas of expansion (30.42 percent). It will benefit 151 327 vulnerable farmers with a total estimated production of between 362 620 and 604 367 tonnes.

# Expected results

During its initial phase, the initiative will enhance the rice production of participating farmers in target countries by 20 to 30 percent compared with 2006 production levels. Farmer training on improved integrated rice management practices, rural radio and video messages will bring lasting effects to farmers' productivity and the quality of the environment, especially in lowland rice systems.

## Budget

The project will cost an average of US\$1 167 000 per country, with a total estimated cost of US\$19 379 500.

Source: WARDA et al., 2008

Subsidies are considered a major instrument for addressing high fertilizer costs in several countries (Box 5). The countrywide subsidy programme in Malawi, for example, will be sustained in the medium term, despite its high fiscal cost. The programme has enabled the country to become a net exporter of grain to the region. Countries such as Mali and the United Republic of Tanzania have developed programmes to support agrodealers (in collaboration with AGRA) as part of a strategy to improve availability at the village level and to expand input usage, mainly of fertilizer, among smallholders. However, the experience of Zambia clearly demonstrates the complexity of fertilizer usage in Africa, including the need for improved research, extension and infrastructure (Box 6).

#### Box 5: Government strategies for dealing with high fertilizer costs: the case of Jamaica

Between January 2007 and July 2008, the ex-factory prices for various fertilizer blends increased by between 183 and 391 percent.

In response to this, in January 2008, the Government of Jamaica launched a US\$1 million fertilizer subsidy programme, which was designed to last for two months and aimed to reduce fertilizer prices for producers by 10 percent. However, a month after the launch of the programme, these prices had increased by an average of 40 percent, nullifying the impact of the subsidy.

The government then changed its strategy, and started to import fertilizers directly through the reactivated Jamaica Commodity Trading Company, an agency of the Ministry of Industry, Investment and Commerce, which imported 2 270 tonnes of fertilizer from the United States. The bulk of this was distributed through fertilizer distributors and farmers' organizations at outlets across the country. A few private sector retailers participated in the programme, increasing its penetration in the deeper rural areas that fell outside the network. By agreement with the distribution network, retail margins were kept to a minimum of 5 percent to enable farmers to obtain fertilizers at the lowest possible price. For the future, the Jamaican government is considering the establishment of a voucher system to improve the targeting of beneficiaries.

Source: FAO Representation in Jamaica.

### Box 6: A closer look at Zambia: the complexity of fertilizer usage in a nutshell1

In Zambia, only 20 percent of small farmers use fertilizer. Increasing fertilizer use may be one way of achieving appreciable income growth and sustained poverty reduction, but fertilizer promotion must be considered holistically. It is not simply a technical or logistics problem of delivering large amounts of fertilizer to small farmers and expecting sustainable solutions. Growth in fertilizer consumption is only sustainable if farmers' effective demand for fertilizer is built, by making its use profitable and by developing output markets and regional trade patterns that can absorb the increased production that higher levels of fertilizer will bring. This involves private sector and government commitment to supporting agricultural development through:

- well-functioning crop science and extension programmes to improve crop productivity for small farmers, particularly for staple food crops;
- extension programmes that recognize different categories, are tailored to their different needs, and focus on taking advantage of the higher marginal rates of return at the lower ends of the production function;
- investment in rural infrastructure and rehabilitation of the region's rail and port facilities to reduce the costs of input and output marketing.

Greater investment in road and rail infrastructure is likely to be necessary to reduce the farm-gate price of inputs such as fertilizer to levels at which their use is profitable to smallholder farmers. Once this is achieved, Zambian agriculture will be on a much more competitive and productive footing in the region and internationally.

Achieving sustainable smallholder-led agricultural growth will also require a supportive policy environment that attracts local and foreign direct investment in building the fertilizer, credit, seed and crop output markets.

1 The financial requirements of this initiative are not available.

Source: Full-fledged IAA in Zambia.

In contrast, the Government of the **Philippines** decided to stop its fertilizer subsidy programme for paddy rice farmers in 2009, as part of efforts to encourage farmers to use organic fertilizers. The balanced fertilization approach, which is based on the use of a combination of chemical and organic fertilizers, has been adopted, and small farmers will be given hands-on training on recycling palay husks and other wastes as organic fertilizer. The government is also promoting the System of Rice Intensification. This was developed in Madagascar to enable small farmers to increase their yields significantly while reducing their use of chemical fertilizer and other external inputs by changing the

ways in which they manage plants, soil, water and nutrients on their fields. Madagascar plans to expand adoption of the system. A related initiative is AGRA's Soil Health Programme, which will foster widespread adoption of integrated soil fertility management (ISFM).<sup>13</sup> A number of countries have been exploring ways of utilizing existing raw material reserves (gas, rock phosphate, etc.) in local production. For example, in 2008, the Government of Mozambique awarded India's Rashtriya Chemicals and Fertilizers a contract to set up a US\$1.9 billion fertilizer plant (African Agriculture, 2008).

# Water resource development

According to FAO, 20 of the 33 countries that required external food assistance in December 2008 were affected by drought or flood (FAO, 2008b). However, most countries have avoided large-scale irrigation and water resource projects and focused on rehabilitating or promoting small-scale irrigation schemes. Countries such as Mali, Madagascar, Swaziland, Nepal and Jamaica propose investments in small-scale irrigation. In Nepal, farmers are encouraged to invest in micro-irrigation, comprising low-cost drip systems, rainwater harvesting tanks, treadle pumps, rower pumps and dug wells, which irrigate up to 0.5 ha of land. These systems suit small and marginal farmers, whose productivity and cropping intensity can be doubled with assured irrigation. The Jamaica Small-Scale On-Farm Irrigation Project provides loans at favourable rates with long repayment periods to help farmers buy irrigation equipment. Senegal has plans to develop drip irrigation through the provision of appropriate kits. In countries such as Burkina Faso, the United Republic of Tanzania, the Gambia and the Philippines, governments intend to invest in developing and rehabilitating irrigation infrastructure.

Some countries have a comprehensive irrigation policy and strategy to guide their actions in the medium and long terms. For example, with the support of FAO, Zambia has developed a strategy with four major components: i) creating an enabling environment for individual producers and water user associations; ii) supporting informal irrigation, especially water harvesting and the use of dambos (seasonal wetlands); iii) rehabilitating and upgrading existing infrastructure; and iv) developing demand-driven, publicly and privately funded irrigation schemes. For the medium term, Zambia seeks to foster public and private investment in bulk water storage and related electricity generation, and to expand loan packages for purchasing pumps through the irrigation development fund and micro-finance schemes.

For some countries, such as Uganda, Kenya and Ethiopia, water resources are transboundary and shared with neighbours. The regional Nile Basin Initiative (NBI) has been developed as a partnership among the nine riparian States of the Nile River: Egypt, Ethiopia, the Sudan, Burundi, the Democratic Republic of the Congo, Kenya, Rwanda, the United Republic of Tanzania and Uganda. The initiative aims to develop the river in a cooperative manner, promoting regional peace and security. Among its major objectives is establishing a forum to assist stakeholders at the regional, national and community levels in addressing issues related to the efficient use of water for agricultural production in the Nile Basin. Desired outcomes include the establishment of regional dialogue and the dissemination of best practices; the enhancement of awareness and national capacity for water harvesting, community-managed irrigation and public- and private-managed irrigation; and the provision of national support for agricultural and irrigation policy development. Integrated water resource management strategies are also pursued along both the Senegal and Niger River basins.

<sup>13</sup> ISFM involves assessing local soil and water resources and considering how organic matter, fertilizers, and farmers' cropping systems and knowledge can work together to create highly productive and environmentally sustainable approaches to soil revitalization.

#### Mechanization and farm equipment

Support to mechanization inputs and farm equipment supplies is expected to take various forms, including the provision of animal traction implements in Ghana and the delivery of farm equipment to selected areas in Sri Lanka. Jamaica proposes to support farmers' acquisition of farm equipment, hand tools, small irrigation pumps and other implements. In some countries (e.g. the Kyrgyz Republic and Senegal) access to farm equipment is provided through credit and support to farmers' organizations.

When mechanization inputs and equipment are provided to countries, it is important to establish policy dialogue and advice on mechanization issues right from the outset. Particular attention should be given to the public sector's role and the opportunities for private sector involvement in mechanization support. Generally, emphasis should be put on equipment supply chains driven by the private sector. Countries concerned should work out a mechanization strategy that is demand-driven, meets farmers' as well as suppliers' aspirations, and takes local stakeholders into account. It should also be made clear that the viability of mechanization inputs depends on continued backup and support infrastructure for equipment servicing, spare parts, maintenance, operator training and agribusiness training and support. Guidelines for managing the group ownership of equipment and establishing equipment hire services will have to be developed.

#### Support measures for sustainable resource management

Rising food prices, ecosystem damage, floods, water scarcities and increasing numbers of undernourished people (reaching 900 million in 2008) are significant challenges for the world agriculture system. Climate change is increasing pressure on the fragile agricultural systems that form the basis of rural livelihoods in many developing countries. Poor economic, social and environmental performances have led to conflicts, some of which were sparked by soaring food prices while others are linked to chronic poverty and hunger. Pressures on fragile ecosystems and rural livelihood systems have increased pressures on the rural poor (OECD and FAO, 2008).

It is generally acknowledged that increases in food production have often been achieved by making unsustainable demands on natural resources, with negative environmental and social consequences. International support to agriculture and rural development in developing countries has changed over the years. In the 1950 to 1970 period, the focus was on modernizing the sector, with special attention going to research, technical support for irrigation and the development of improved seeds and fertilizers. The successes of Asia's green revolution resulted partly from this approach.

However, the many attempts to transfer this "technology fix" to African countries have had relatively little impact because of a broad range of constraints, including lack of infrastructure, complex farming systems, and lack of knowledge and enabling environments. As a response to this, new approaches emerged in the 1970s and 1980s, such as integrated rural development, farming systems research and development, conservation agriculture, IPM, and sustainable agriculture.

Jordan, Haiti, Madagascar, Mauritania, Guatemala and other countries highlight the fundamental importance of natural resources (soil, water, biodiversity), climate and ecosystem services for food production and the maintenance of agricultural systems and livelihoods. In some countries, conflicts and competition over access to and use of these resources are likely to increase, owing to soaring demands for food, fibre and energy, and the loss and degradation of productive land, which increases pressure on rural livelihoods. Conflicts will be exacerbated by changing conditions for farming, increased water scarcity, loss of biodiversity, extreme weather events and other effects

Region	General support to NRM (reforestation, etc.)	Diversification/ High value/ Ho		Conservation agriculture	IPM	Homestead gardens/ Periurban
Africa (34 countries)	Burkina Faso Djibouti Malawi Uganda	Burundi Central African Republic Djibouti Ghana Kenya Lesotho Liberia	Madagascar Malawi Niger Sao Tome and Principe Swaziland Uganda	Central African Republic Lesotho Malawi Mozambique Swaziland Zambia Zimbabwe	Uganda	Gambia Madagascar Zambia Zimbabwe
	4	1	13	7	1	4
Asia (14 countries)	Cambodia Korea, Dem. People's Rep. Lao People's Dem. Rep. Tajikistan	Mya	anistan Inmar Ekistan	Korea, Dem. People's Rep. Lao People's Dem. Rep. Mongolia	Afghanistan Cambodia Korea, Dem. People's Rep. Tajikistan Uzbekistan	Bangladesh Tajikistan
	4		3	3	5	2
Latin America and the Caribbean (7 countries)	Bolivia Dominican Republic Guatemala Honduras Jamaica	Dominican Republic				Dominican Republic Haiti Jamaica
	5		1	0	0	3
Near and Middle east (3 countries)	Jordan					
	1		0	0	0	0
Total	14	1	17	10	6	9

of climate change. The sustainable management of natural resources for the benefit of present and future generations therefore requires the involvement of many disciplines, to address key aspects of natural resources and their governance, and multidisciplinary approaches to address trade-offs.

For example, the Government of Jordan has called for an integrated approach to natural resource management, addressing such issues as water containment and watershed management, water harvesting, spring rehabilitation, water-use efficiency, afforestation, land-use planning and highland rehabilitation. Interventions will be carried out according to area-based planning, in consultation with target groups and local and central stakeholders, including the Ministries of Agriculture and Environment.

Strategies aimed at boosting production should therefore include actions that protect natural resources. The ISFM approach combines the use of both inorganic and organic fertilizers, such as composts, manures and nitrogen-fixing plants, to increase yields, rebuild depleted soils, improve moisture retention and protect the natural resource base (Evans, 2009). Another example is IPM, which attempts to control pests through the influence of their natural predators and parasites, thereby reducing the need for pesticides (Box 7). Water productivity can be increased substantially through the use of overhead sprinkler irrigation, which can reduce water use by 30 percent compared with flood-or-furrow systems, or drip irrigation, which typically halves water use (Evans, 2009).

Two other priority areas identified in the IAAs are the promotion of diversification and homestead gardens (Box 8). Several countries have recognized the importance of

#### Box 7: IPM for crops, fruits and vegetables in Afghanistan

Under their ongoing activities in Afghanistan, WFP and FAO will jointly implement a medium-term strategy to improve agricultural development in food-insecure areas where the population has been affected by high food prices and drought. IPM is an important component of this strategy, accounting for US\$1.75 million of the programme's US\$20.4 million budget for agricultural activities. An additional US\$35 million is to provide social safety nets for two years

In Afghanistan, a few endemic pests, including locusts, Colorado beetle and melon fly, and diseases such as rust, can drastically reduce production. Post-harvest losses can amount to 30 percent. The need to reduce routine applications of insecticide has recently been recognized. The Ministry of Agriculture, Irrigation and Livestock (MAIL) and FAO have commenced an IPM programme for tree crops, as part of a strategy for integrated production in which insecticide usage is much reduced and pesticides are recommended for only specific pests and diseases of economic importance.

As an emergency response, FAO has been helping farmers to control melon fly and Colorado beetle in northern Afghanistan, but this is just a starting point, and more needs to be done to enhance MAIL's capacity to implement a national policy for reducing pesticide usage and adopting IPM and integrated crop production. This policy requires pesticide regulation to control the import and sale of insecticides, and plant quarantine legislation regarding pesticide residues and the import and export of plant products.

Source: EC rapid appraisal in Afghanistan.

## Box 8: School garden-based learning in the Dominican Republic

Since 2006, in close collaboration with the private sector and NGOs, the Government of the Dominican Republic has been implementing a programme to improve health and nutrition in 26 primary schools. The project has three main components.

## 1. Developing a nutrition and food security curriculum and building local capacity

To increase awareness about the importance of nutrition and food security, the programme promotes educational processes and a curriculum that addresses food, nutrition and health issues. School gardens will be used as examples (learning tool) of how best to produce vegetables and other food crops. To build local political support for nutrition education, the project will also involve the wider local community by training 480 parents and 50 decision-makers from three municipalities, including community leaders, school principals and government employees.

# 2. Installing school garden-based learning

The project's main tool for nutrition education is school garden-based learning. The project has promoted the establishment of 26 plots/gardens, one at each school, and will form a school garden committee for establishing, operating and managing each garden. Each committee will have an action plan determining the garden's use, including teaching about how plants grow and their nutritional values, healthy diets and personal nutrition, healthy food preparation, and "soft" skills such as teamwork and communication.

# 3. Sustainability: involving the community and parents

One of the most important elements of the future success of the project is its sustainability strategy to ensure the continuation of gardening and teaching activities through the involvement and investment of four province's populations in the project's objectives.

Source: FAO Representation in the Dominican Republic.

diversifying production systems through the introduction of value-added crops that allow maximum efficiency and income from the utilization of local resources, while minimizing environmental and economic risks. A total of 17 countries have plans to promote horticultural and other high value-added crops, and eight intend to promote homestead

gardens. Homestead food production helps communities establish technically improved local food production systems by creating gardens for growing micronutrient-rich fruits and vegetables year-round, and producing poultry and livestock on small farms. Homestead food production also provides families with income from the sale of surplus goods, empowers women, and increases the technical knowledge and capacity of local NGOs.

# Programmes for animal production and fisheries inputs

Access to animal feed has generally become more difficult owing to high prices. For example, some countries report that poultry farmers may be forced to reduce their flocks because of the high price of feed (*Business Daily Africa*, 2009). Some farmers appear to have opted out of commercial poultry farming owing to the low returns from bird sales after spending so much to rear them. The Kenyan Feed Association reports that high prices for feed have led to reduced numbers of birds being reared, which may trigger a shortage or a price increase for poultry products in the market. A sudden rise in dairy prices also took the market by surprise: in late 2006 and throughout 2007, prices for dairy products rose more rapidly than those for any other agricultural commodity group, reaching a plateau in late 2007 and abating only in early 2008. In 2009, however, world dairy prices fell by 50 percent compared with those in August 2008, significantly reducing the potential to increase production.

#### **Proposed measures**

A total of 27 countries suggested increasing support to the livestock sector. Regarding inputs to enhance animal production, 14 countries opted to support development of the feed market, even though such interventions are relatively expensive; 15 to provide veterinary services and medicines; and 17 to provide markets, technical assistance and overall support to enhance the breeding stock (Table 4). In several African countries, interventions have tended to focus on animal health and production support through fairs, market strengthening, and community and private sector-based health and drug provision systems. In **Kenya**, for example, three key elements of enhancing the livestock sector were identified:

- control of livestock diseases through expanded vaccination against major livestock diseases affecting the dairy herd in the highlands – foot-and-mouth disease (FMD), contagious bovine pleuropneumonia (CBPP) and contagious caprine pleuropneumonia (CCPP);
- establishment of fodder banks, feed bulking and production of alternative feed ingredients – sorghum, cassava and millet – to reduce animal feed costs;
- other livestock interventions such as expansion of apiculture, indigenous poultry and rehabilitation of selected livestock marketing infrastructure.

In the Niger, a comprehensive and integrated approach has been proposed for developing the dairy sector (Box 9).

In Tajikistan, home-based livestock husbandry, including poultry, sheep and goats, has been emphasized. The programme aims to improve the livelihoods, food security and nutrition of some of the most vulnerable and food-insecure households in rural areas, through the distribution of improved laying hens coupled with training on better poultry management, veterinary services and the rehabilitation of sheep and goat stocks through improved management and husbandry practices.

Region		Support to				
	Support to feed market		pport to ing stock		ipport to nary services	aquaculture/ fisheries
Africa (34 countries)	Cameroon Côte d'Ivoire Djibouti Ethiopia Kenya Mauritania Niger Senegal Somalia Togo	Cameroon Comoros Côte d'Ivoire Gambia Ghana Kenya	Lesotho Liberia Mauritania Senegal Togo Uganda	Benin Cameroon Djibouti Ghana Kenya Liberia	Madagascar Niger Senegal Togo Uganda	Cameroon Comoros Côte d'Ivoire Djibouti Gambia Ghana Liberia Mozambique Togo Uganda
	10		12		11	10
Asia (14 countries)	Afghanistan Bangladesh Kyrgyz Republic Uzbekistan	Bangladesh Cambodia Sri Lanka Tajikistan		Kyrg <sup>,</sup> N	ngladesh yz Republic Iyanmar bekistan	Bangladesh Cambodia Myanmar Sri Lanka
	4		4		4	3
Latin America and the Caribbean (7 countries)		Ja	maica			Haiti
	0		1		0	1
Total	13		17		15	15

# Box 9: Revisiting milk powder imports in the Niger

Approximately 78 percent of rural households in the Niger are engaged in both livestock and crop production (FAO, 2008e). Livestock provides substantial shares of calories and protein consumption at the household level. Dairy production is also of great importance for income generation through sales of dairy products. However, as the Niger is not self-sufficient in dairy production, imports of milk products, especially milk powder, have increased significantly, from 20 million kg of milk equivalent in 2000 to 80 million kg in 2006. More than 90 percent of these imports consist of milk powder.

During the last two years, the international market for dairy products has been under pressure and prices have increased significantly. For example, skimmed milk powder more than doubled from US\$2 300 per tonne in July 2006 to US\$5 000 in July 2007 (no data for 2008 are yet available). This relatively sudden increase in international market prices in 2007 led to a renewed debate about the Niger's dependence on milk powder imports versus increasing national production of dairy products to contribute to national food security and self-sufficiency.

During the period of high prices in 2007/2008, the government saw a priority need for the Niger to increase livestock production, particularly of milk, milk derivatives and poultry, to achieve self-sufficiency and hence become less dependent on imports. The activities it proposes are in line with the objectives of the Rural Development Strategy and, more specifically, the priority programme for pastoral management and strengthening pastoral systems. This programme generally aims to develop pastoral systems through an integrated approach and activities that:

- increase institutional and organizational capacity through training of farmers and other stakeholders;
- improve animal health, including the control of mastitis;
- preserve local breeds through a new breeding programme to attain genetic improvement and increase the variety of bovine breeds;
- improve the quality of animal feed, to increase production;
- · develop the dairy food chain through improved product quality, storage, processing, marketing, etc.;
- enhance research and extension.

Source: Full-fledged IAA in the Niger.

#### Box 10: Scaling up the Sofala Bank Artisanal Fisheries Project in Mozambique

Since 2002, IFAD has been supporting the Sofala Bank Artisanal Fisheries Project. The overall aim is to attain sustained improvements in the social and economic conditions of artisanal fishing communities in coastal areas. The project will need to be scaled up. The programme operates in 290 coastal fishing communities in Nampula, Sofala and Zambezia provinces. These are among the poorest provinces in the country, and are isolated and largely cut off from the nation's overall economy. These areas lack communications and social infrastructure, such as clean water supplies, health facilities and schools. Fishers face several constraints in their efforts to generate income, including a lack of fishing equipment and finance to purchase it, non-optimal fishing techniques, competition (sometimes illegal) over resources from the semi-industrial fleet, poor fish processing techniques, and a lack of access to markets. Fishers in these areas also lack the knowledge, skills and organization necessary to manage their social and economic activities effectively and dynamically. The project helps fishers to diversify their fishing techniques to increase production and generate better income by: i) encouraging them to reduce post-catch losses and add value to their produce through improved processing techniques; ii) improving cooperation with input suppliers and produce markets; iii) making financial services available; iv) empowering communities to take control of the planning, implementation and management of their own development activities; and v) providing health care and activities to rehabilitate and maintain access roads. Women are expected to benefit from support for savings and credit groups, community health services and the provision of improved domestic water. The project has also been supporting the development of a policy framework better suited to the challenges currently facing artisanal fishers.

Source: IFAD, Mozambigue: Sofala Bank Artisanal Fisheries Project.

# **Fisheries**

Millions of people around the world depend on fisheries and aquaculture, directly or indirectly, for their livelihoods. During the past three decades, the number of fishers and aquaculturists has grown faster than the world's population, and employment in the fisheries sector has grown faster than employment in traditional agriculture. The Organisation for Economic Co-operation and Development (OECD)-FAO Agricultural Outlook for 2008 to 2017 forecasts continued growth in aquaculture production, although the growth rate is slowing down. Aquaculture will soon overtake capture fisheries in the supply of fish for human consumption, and eventually also in absolute production and supply. Prices for wild species from capture fisheries are moving upwards, but price increases for farmed species are expected to be more moderate (FAO, 2009b).

Several direct and indirect factors have contributed to the increase in feed prices. Among the most important direct factors are the rising cost of fishmeal production, the limited supply of fishmeal, the rising cost of grain production and increased use of fossil energy in feed preparation.

### Measures and activities

Fifteen countries have proposed activities/actions to strengthen the fish/aquaculture sector. The following are some the most relevant of these.

In Bangladesh, the government will increase support to the fisheries subsector in vulnerable and disadvantaged areas through the formation of new union-level producer and marketing organizations and the strengthening of existing ones. It will also make available improved boats and fishing gear for landless fishers, improved aguaculture packages for marginal and small fish farmers, and improved processing and marketing practices. In Sri Lanka, the plan is to train 51 500 farming families in modern farming

techniques, including animal husbandry and aquaculture. Local communities will be encouraged to engage in aquaculture enterprises, and a credit programme or revolving fund will be established to enhance investment in the sector. **Myanmar** envisages the rehabilitation of the fisheries sector through restoration of the fishing fleet. Training in improved boat building techniques, technical fishing and aquaculture best practices, safety at sea, pond reconstruction, distribution and storage centres for fishing gear and fisheries literature resources will also be supported.

Côte d'Ivoire proposes to develop sustainable aquaculture through the creation and rehabilitation of breeding stations and training centres, and training for aquaculturists. Diversification of production includes shrimps, lobsters, and crabs. In Cameroon, support will be provided to establish fish ponds around major urban centres, while in Liberia aquaculture restocking and the development of artisanal coastal fishing will be supported. These countries also emphasize the need to enhance government staff's capacity and to train fishers. In Djibouti, boosting production will involve improving the processing, packaging and marketing of seafood products. Greater attention will also be given to improving traditional marketing systems and increasing the poor's access to fish products through augmenting the number of sales outlets.

# Support to reducing post-harvest losses and improving downstream activities

To cope with increasing food demand, governments have traditionally emphasized increasing food production. Reducing the food losses during and after harvest and improving downstream activities have not been adequately addressed, and require more attention. It could cost less to generate the same increase in food availability from improved post-harvest and downstream facilities than from boosted farm production. Such improvements could also allow production increases to be achieved more rapidly with no additional natural resources such as land and water. Policymakers need to understand the extent of the losses and the huge gains to be made. Significant proportions of fresh produce such as vegetables and fruits, livestock products and fisheries, and of cereals such as maize and rice are lost to spoilage and infestation on their journey to the consumer. Total fish losses to discards, post-harvest loss and spoilage may reach 40 percent of landings in some cases. FAO studies have shown that in Kenya, each year about 95 million litres of milk, worth about US\$22.4 million, are lost. Cumulative losses in the United Republic of Tanzania amount to about 59.5 million litres a year, more than 16 percent of total dairy production for the dry season and 25 percent in the wet season. In Uganda, approximately 27 percent of all the milk produced is lost, equivalent to US\$23 million per year (FAO, 2004). (Nellemann et al., 2009).

In poor countries, downstream activities have vast potential to increase rural income and employment, reduce food prices in urban areas and improve food safety. Processing of agricultural and fish products can contribute to food security, by making foods available outside their usual seasons, and help stabilize prices and supplies. Population growth in developing countries is becoming a predominantly urban phenomenon, increasing the role of processing in mediating between food production and final consumption. Government policies and strategies need to focus on the value chain, which involves a complex network of assemblers, brokers, wholesalers, processors, retailers, and exporters, all working within an environment of limited access to infrastructure and capital and imperfect information in many poor countries.

### **Proposed measures**

A total of 39 countries have identified downstream activities as measures for increasing the supply of food. The majority of these countries (36) propose investments in storage and collection centres to reduce post-harvest losses. Twenty countries identify processing as a priority downstream activity (Table 5).

#### Storage facilities

Storage facilities are being built at the farm, community and national levels. The Government of **Nepal** considers the lack of appropriate storage structures or technology at the household level a major problem and intends to build extension workers' capacity to transfer technologies to farmers and assist their adoption. The Government of **Uganda** recognizes that many farmers, especially returning internally displaced people (IDPs), do not have adequate post-harvest capacity, and plans to provide training on post-harvest handling and value addition using Farmer Field Schools (FFS) and farmers' associations. In Asia, FAO<sup>14</sup> is promoting small metallic silos for small- and medium-scale rice farmers.

A few countries give particular attention to community storage facilities. In **Burkina Faso**, proposed actions for reducing post-harvest losses involve installing
150 community stores through cost-sharing with communities. **Burundi**'s action plan includes constructing community storage sheds, rehabilitating the tracks connecting main highways to warehouses, and providing technical assistance on storage management and marketing for agricultural products. Burundi plans to build/rehabilitate 75 community stores and 750 km of tracks. Each community store is expected to benefit 40 households. Rehabilitation of storage facilities in the **Gambia** includes village seed stores and grain stores, 15 which will be used to store grain procured at harvest time for resale during lean periods.

Some countries with State-owned food or marketing companies will invest in improving storage facilities at the national level. The **Philippines** has emphasized the upgrading of post-harvest and marketing facilities for the State-owned National Food Authority (NFA), and is also promoting collective on-farm marketing and the construction of solar dryers (Box 11). **Comoros** intends to increase the storage capacity of the National Office for Importation and Marketing of Rice.

Support to private sector investment in warehouses, refrigerated trucks and coldstorage facilities for perishables has not received a great deal of attention. In **Kenya**, a privately owned grain storage facility has recently been established with a loan from the World Bank's International Finance Corporation. The facility provides cleaning, drying and storage services for maize, wheat and barley producers in Kenya, and handling and storage facilities for grain imported into Kenya by local millers and for grain in transit to Uganda.<sup>16</sup>

<sup>14</sup> ISFP has funded the distribution of small metallic silos in Bhutan and Timor-Leste under its productive safety net response.

<sup>15</sup> The seed stores will also act as district-level training sites on the maintenance of quality seeds.

<sup>16</sup> International Finance Corporation wetsite www.ifc.org/ifcext/eastasia.nsf

Region	Storage facilities	and reduction of	post-harvest losses	Processing ar	nd value addition
Africa (34 countries)	Burkina Faso Burundi Central African Republic Comoros Congo, Dem. Rep. Côte d'Ivoire Gambia	Guinea Lesotho Liberia Madagascar Malawi Mali Mauritania Niger	Rwanda Senegal Sierra Leone Somalia Tanzania, United Rep. Togo Uganda	Côte d'Ivoire Djibouti Gambia Ghana Lesotho Liberia	Mali Mauritania Niger Sao Tome and Principe Somalia
		22			11
Asia (14 countries)	Bangladesh Cambodia Myanmar	Nepal Philippines	Pakistan Uzbekistan	Cambodia Pakistan	Philippines Uzbekistan
		7			4
Latin America and the Caribbean (7 countries)	Bolivia Dominican Republic	Guatemala Haiti	Jamaica	Guatemala Haiti	Jamaica
		5			3
Near and Middle East (3 countries)		Egypt Jordan			gypt ordan
		2			2
Total		36			20

# Box 11: Upgrading of post-harvest and marketing facilities for the Philippines National Food Authority

NFA intends to upgrade and repair existing post-harvest facilities (warehouses, dyers, mills) to increase storage capacity, performance and output. A post-harvest training programme will also be put in place. Additional programmes, proposed to benefit agricultural producers selling to NFA, include the **Grains Inventory Financing Technique Programme**, which will allow farmers to deposit their harvests into NFA warehouses as collateral for loans. Farmers will receive NFA certificates of custodianship. Under the **Farmers' Grains Exchange Programme**, farmers who deposit their harvests in designated NFA warehouses will be able to withdraw rice equivalents at any time throughout the year.

# Promotion of a collective marketing system

Improved marketing systems for farm inputs and outputs in the Philippines need a strong private sector, backed by appropriate policy frameworks and effective government services, including the provision of market infrastructure, market information and agriculture extension services. Training in all levels of marketing, and the establishment of financing arrangements and innovative marketing links among agribusinesses, large retailers and farmers also require further development. The promotion of collective on-farm marketing strategies could also be considered, as individual farmers lack the capacity to bargain for higher prices, and collective marketing could strengthen their bargaining position.

# Construction of solar dryers (drying slabs)

Drying of the paddy harvest is a serious challenge in the Philippines; the necessary low moisture content cannot be maintained in humid climates, affecting the quality of the paddy. Solar dryers would be a valuable asset, especially in areas with a long and heavy rainy season. The majority of farmers still use concrete roads for drying their paddy, and the absence of solar dryers has forced farmers in the provinces to sell their produce at lower prices to private entities who take advantage of the situation.

Source: Full-fledged IAA in the Philippines.

# Processing and value addition

Processing activities in Côte d'Ivoire will focus on improving access to rice processing equipment. Burkina Faso is offering lines of credit for the development of 150 modern agricultural processing units. The Government of Liberia intends to promote agroprocessing through support to the local manufacture of processing equipment, support to fish processing and marketing in coastal areas, and training and technology transfer in such areas as fruit and vegetable dehydration, production of jams, juices, sweets, cakes, biscuits and ready-made recipes, and dairy product processing. Liberia's draft Food and Agriculture Sector Strategy offers tax incentives for agro-industrial investments and promotes partnerships between agribusinesses and smallholder farmers and their organizations.

Jamaica proposes to support the expansion of agroprocessing activities currently operated by individuals and groups/clusters as micro, small or medium enterprises, including through loans or grants for the construction and equipping of processing facilities. The Agri-Business Incubator Project will facilitate the start-up of new micro, small and medium agroprocessing operations by entrepreneurs entering the market. The project will provide accommodation, training, marketing assistance, branding, secretarial services, utilities, equipment and other facilities for approximately two years. As well as employment and income benefits, project participants, particularly women, will acquire new skills that they can use at home to improve their families' food security and nutritional intake and to save money by replacing higher-priced products, such as pasta, tomato paste, dried onions and bakery goods, with their own production.

Pakistan intends to launch a comprehensive value chain development programme to foster partnerships between resource-poor smallholders and the private sector in agribusinesses, agro-industries and food-related enterprises. To ensure integrated development, the programme will support: i) production system diversification projects (crops, livestock, fisheries) oriented to agrobusiness; ii) outgrower schemes and contract farming projects (cotton, sugar cane, vegetables, rice, organic farming); iii) marketoriented infrastructure development projects (storage, processing, packaging); and iv) quality and safety management capacity building projects (quality monitoring and tracking systems following the United States' Animal and Plant Health Inspection Service [APHIS], the Global Partnership for Good Agricultural Practice [GLOBALGAP], etc.).

# Proposals in the area of markets, prices and trade

4

Poorly functioning markets have been a major challenge to ensuring food security and increasing food production in many developing countries. State-owned marketing corporations in several African countries have failed to deliver inputs at the right time and to provide small farmers with reliable market services. Conversely, liberalization of agricultural markets has sometimes been one of the factors contributing to volatile prices. Small-scale farmers are faced with not only volatile prices, but also with the difficult task of meeting the quality and safety standards set by food processors, large retailers, wholesale buyers and exporters, which have become more important during the last decade or so. Key institutional and infrastructural problems, including inappropriate policy and legislative frameworks, poor market infrastructure, and ineffective market information, have hindered the emergence of a competitive and reliable food market.

Fluctuations and distortions have undermined the potential of international trade to contribute to achieving food security in poor countries. Historically, international food markets have been unstable, and thin for some crops such as rice or beans. Following the sharp increase in international food prices of 2008, some have viewed significant dependence on international food markets as too risky, especially in the event of inadequate supply or scarcity. Many governments have established measures aimed at protecting their farmers and consumers from fluctuating world prices.

# Non-trade-based price stabilization and market improvement measures

Greater stability of food prices contributes to faster growth of food and agricultural production by lengthening the investment horizon, protecting consumers from abnormally high prices and ensuring political stability. Price stability reduces the vulnerability of the poor and promotes equity, which stimulates investment in human capital, especially in rural areas. Of the 58 countries surveyed, 11 have developed proposals in the area of price and market stabilization, while market improvement measures in the form of investment in infrastructure and market information have been proposed by 23 and 15 countries, respectively (Table 6, p. 52). Other market development interventions such as reducing post-harvest losses and improving value-added are discussed in Chapter 3.

# Regulating prices and supply

Only six out of 34 African countries – Burkina Faso, Comoros, Côte d'Ivoire, Madagascar, Mauritania and Sierra Leone – have proposals for direct price regulation. Marketing systems are predominantly in the hands of the private sector, but because of the sharp increase in food prices a few governments plan to lower prices through administrative measures, tax reductions or subsidy programmes. For example, the Government of **Comoros** is promoting a policy of applying the same retail prices throughout the entire national territory. The action plan also includes: i) establishing a consultation body among the departments of the union and the islands to approve and control retail prices; and ii) consulting traders, loaders/unloaders and importers to monitor compliance with legislation and to overcome tax fraud. **Madagascar** proposes

Region	Price and market stabilizate measures (including stock pand responses to price volate		Market information		Market infrastructure development (bridges, roads, rivers, trains, market places)	
Africa (34 countries)	Comoros Mala Congo, Dem. Mau	ritania ra Leone	Burkina Faso Comoros Congo, Dem. Rep. Côte d'Ivoire Gambia	Lesotho Madagascar Mauritania Sierra Leone Swaziland Uganda	Central African Republic Congo, Dem. Rep. Côte d'Ivoire Djibouti Ethiopia Gambia Ghana	Lesotho Liberia Mali Mauritania Sao Tome and Principe Somalia Uganda Zambia
	9			11	15	5
Asia (14 countries)	Pakistan				Lao People Ne	anistan 's Dem. Rep. epal ekistan
	1		0		4	
Latin America and the Caribbean (7 countries)	Nicaragua 1		Bolivia Dominican Republic Haiti		Dominican Republic Guatemala Nicaragua	
(, , , , , , , , , , , , , , , , , , ,				3	3	
Near and Middle East (3 countries)			Е	gypt	Joi	rdan
	0			1	1	
Total	11			15	23	3

a policy to establish a floor price for paddy, and providing selective subsidies on basic food items. **Malawi** is enacting regulatory mechanisms to reduce excessive speculation, particularly in maize and rice. There are concerns that direct price control schemes could result in high operational costs, encourage rent-seeking behaviour and create disincentives for producers and traders.

Other countries have pursued a policy of partnering with the private sector. The Government of Burkina Faso, for instance, has chosen to negotiate with importers and wholesalers to establish indicative prices for some basic staple foods such as sugar, oil and rice. Sierra Leone has also opted to negotiate with importers to minimize the pass-through of food prices to consumers. Other countries such as Mauritania have subsidized wheatflour and reduced tax on rice. Kenya and Ethiopia have removed value-added tax (VAT) on basic food items.

# **Building grain/food reserves**

Proposals to strengthen or introduce grain reserves are part of the stabilization strategy in Burkina Faso, Comoros, the Democratic Republic of the Congo, Madagascar, Malawi, Zambia, Pakistan and Nicaragua. A decline in global grain stocks was one of the main causes of soaring prices in 2008, and interest in holding grain reserves at the local, national and regional levels appears to be growing. Some African countries, including Burkina Faso, Burundi and the Gambia, have focused on building village-level grain reserves to ensure food security at the community level. As a land-locked country with only one short rainy season, **Burkina Faso** has been promoting community grain banks, which have become popular throughout the country, providing a village-based solution to critical food shortages. The **Gambia** has put in place an integrated development approach aimed at transforming local communities into agro-ecological

villages that are responsible for developing self-reliant, integrated and ecological food and energy systems. There is no doubt that communities must be empowered to manage community stores effectively (Box 12).

Malawi, a land-locked country, has proposed improving, expanding and restocking its national strategic grain reserves. Zambia, also land-locked, plans to ensure that the Food Reserve Agency follows the predictable, transparent and rational market behaviour stipulated in the Agricultural Marketing Act.<sup>17</sup> The agency's goal is to contribute to the stabilization of national food security and the market prices of designated crops through establishing and maintaining a sizeable and diverse national strategic food reserve in Zambia by 2010. The Democratic Republic of the Congo aims to establish strategic stocks at provincial offices, for quick response to emergencies. Comoros is seeking food aid to build a strategic reserve of six months' supply of rice, milk powder, oils and canned fish. Asian countries, including Bangladesh, Sri Lanka, Nepal and the Philippines, have traditionally maintained public grain stocks to stabilize grain prices. The approach of having governments maintain national-level food stocks with adequate oversight can stabilize prices, but problems of management, storage losses and corruption have reduced effectiveness. There is also concern that producers could be negatively affected by the actions of grain reserve agencies.

# Box 12: The Ateli grain bank in Burkina Faso

Ateli is a village of 1 000 people. The men of the village set up a group in 1982, during a time of famine. One of their objectives was to unite in the struggle for food self-sufficiency. The community grain bank project was begun in 1986 to improve food security. The group asked for help from the *Office de Développement des Eglises Evangéliques* (ODE), which agreed to provide the necessary credit to begin work. A well-built community grain store was constructed with the full participation of villagers.

#### Operation

A committee was selected to manage the grain bank. Ateli chose well, forming a dynamic committee. ODE trained committee members in grain storage and marketing, and provided credit to enable the purchase of grain at the end of the harvest season, when prices are low. To reduce risks in the first year, the credit was divided into two instalments over two successive years. Ateli purchased 5 tonnes of grain in the first year and 5 tonnes in the second.

Since 1988, Ateli has stored several types of grain in its grain bank. Grain prices are fixed by the village group to provide a balance between the low prices at the end of harvest and the high prices charged by traders later in the year. When food is in short supply, grain is sold to villagers. Ateli has been able to pay back the loan in just four years.

## Impact of the project

The villagers of Ateli welcome the grain bank and understand the advantage of safeguarding their grain. Thanks to the grain bank, households survive the period of shortage during the three-month rainy season.

#### Some challenges

- One difficulty has been bookkeeping in this rural environment, where most people are illiterate. Management of the grain bank requires good record keeping.
- When grain is given on credit to help people during the most difficult periods, problems of recovering debts arise, demanding much patience from the committee.
- Since the loan has been repaid, the bank has had to operate with only the small profit it made during the five years of credit. This makes it difficult to buy enough grain in advance for all village households.

Source: Yameogo, 1997.

<sup>17</sup> The act establishes an agricultural marketing council, provides for improved market information, and encourages the use of public storage by private agricultural investors, among others.

Regional economic communities have shown renewed interest in grain reserves. SADC has revived plans to launch a strategic grain reserve to help bail out Southern African countries experiencing food shortages, as part of a pre-emptive strategy to minimize the impact of natural disasters on food security (Box 13). In Asia, ASEAN has renewed its plan to establish the emergency rice reserve, which was originally established as part of implementation of the ASEAN Food Security Reserve Agreement (AFSR) in 1979, but has never been operational. Countries in Latin America are working on integrated national plans, such as the Costa Rican National Food Plan, and groups of countries are signing regional agreements, such as Bolivia, Cuba, Nicaragua and Venezuela, which have agreed on a US\$100 million fund to finance multilateral cooperation on food sovereignty.

# Improving market infrastructure and information

Poor infrastructure and inadequate market information have resulted in high food marketing costs, and thus high food prices. As indicated, 23 countries have plans to develop market infrastructure, while 15 have proposals for market information. The majority of these countries are in Africa, reflecting the poor state of hard and soft infrastructure in several parts of that continent. As well as national governments, regional organizations have also shown keen interest in developing market infrastructure and information.

#### Market infrastructure

A number of African countries have been affected by conflict destroying much of their infrastructure. In Liberia, for instance, lacking or poor road networks, high transportation costs, lack of commercial transport, and spoilage of perishable goods due to inadequate storage and processing facilities have severely constrained marketing. The government intends to rehabilitate roads and bridges with the objective of increasing the access of farmers and produce to markets (Box 14). Support to the rehabilitation and improvement of transport infrastructure (roads, lakes, rivers, rail, airports) is also a priority for the Democratic Republic of the Congo, Somalia and Côte d'Ivoire. Afghanistan, where 58 percent of villages have limited or no access to roads, has plans to rehabilitate 4 000 km of roads.

Nicaragua plans to build 240 km of new rural roads and repair another 640 km, to help produce more food and reduce imports. However, major road construction projects have not yet been included in the action plans of many countries.<sup>18</sup>

Several countries have paid particular attention to marketing facilities. In Uganda, there are plans to construct market collection points at strategically selected locations close to small farmer groups. This would allow small farmers to bulk their produce (and clean, dry and grade it), making it easier to sell to medium- and large-scale buyers. Feeder roads would be constructed to connect the collection points to farming communities and major trading centres. These activities would boost market connectivity for farmers, traders, processed food producers and buyers. Djibouti is promoting safe livestock marketing through the creation of parks and hygienic market places. Lesotho's market infrastructure construction programme includes piggery and poultry slaughter plants, and processing technology for fruits and vegetables.

<sup>18</sup> According to the Nepal IAA, the Rural Infrastructure Development Strategic Action Plan for 2007 aims to improve the condition of the existing 12 000 km of rural roads, and construct another 9 000 km between 2008/2009 and 2010/2011. To optimize benefits from the roads, rural communities will be directly involved in their improvement and construction. The plan estimates that NR 44 030 million (US\$657.1 million) will be required to meet the target, but the total budget available is NR 13 610 million (US\$203.1 million), leaving a shortfall of NR 30 420 million (US\$454 million).

# Box 13: SADC keen to establish a regional food reserve facility

SADC has announced plans to set up a regional grain reserve, and urges its member States not to impose export restrictions on maize as the region grapples with high food prices. "The recently held Integrated Committee of Ministers Meeting in Swaziland urged member States to remove restrictions. In fact, we have urged countries with surplus maize to sell their produce within the region," said Margaret Nyirenda, head of SADC's Food, Agriculture and Natural Resources Directorate. "But at the end of the day it is a commercial decision – we can only advise member States to prioritize the region."

In reviving plans to launch a strategic grain reserve, SADC aims to help bail out countries experiencing food shortages, as part of a pre-emptive strategy to minimize the impact of natural disasters on food security. Various models for the proposed facility are being negotiated.

The Southern African model includes a 500 000-tonne facility, and envisages a cash component for countries that do not have any surplus to contribute. About 75 percent of the reserve will be food, with the remaining 25 percent in the form of cash. "The reserve, which will include a combination of cereals, will be kept in several selected countries to provide easy access around the region," said Nyirenda. The reserve is to be run by a board, and officials hope to get the facility operational by mid-2009.

Source: IRIN, 2009.

# Box 14: Liberia needs a comprehensive approach to get its markets running

Prior to the war in Liberia, the State engaged in agricultural marketing in both input and output markets. Parastatal organizations, including the Liberia Produce Marketing Corporation and the Cooperative Development Authority, were mandated as the monopoly marketing agencies for coordinating the output market. These institutions became dysfunctional during the civil crisis.

Today, small operators and individuals dominate the food crop marketing system. In 2007, the Liberia Market Review identified 205 marketplaces operating in Liberia's 15 counties, approximately one-third of them daily and two-thirds weekly. More than a third of these markets are located in Liberia's central belt, which runs from Montserrado to Nimba county. With the exception of imported rice, fish, dried beans, groundnuts and pepper, domestic production dominates, and most produce is marketed close to its producing areas, suggesting weekly integrated markets. Marketplaces are in poor physical condition, and are characterized by few storage facilities and low hygiene standards. The Liberia Market Association, a semiautonomous government institution, has been established to manage markets, but it has often failed to meet its obligations, despite extracting fees from traders.

According to the Liberia Market Review (2007), major constraints for marketing include a lack of or bad road networks, high transportation costs, lack of commercial transport, limited demand for agricultural produce in some regions, due to small population size and limited purchasing power, and spoilage of perishable goods, due to inadequate storage and processing facilities.

To improve the marketing system in Liberia, the comprehensive assessment of the agriculture sector in Liberia (2007) recommends that efforts should focus on creating effective markets through encouraging private sector participation by improving physical access to markets, with investment in infrastructure and improved access to market information and credit markets for traders and producers, and helping to link small producers to established markets, with the involvement of agricultural extension services, NGOs and farmers' associations.

Source: EC rapid appraisal in Liberia.

Improving rural infrastructure and trade-related capacities for market access is one of the four pillars of NEPAD/AU's Comprehensive Africa Agriculture Development Programme. The programme has been advocating for investments in the improvement of roads, storage, markets, packaging and handling systems and input supply networks, to stimulate production and trade of food and agricultural products. The launching of the SADC Corridor Development Strategy also demonstrates a renewed commitment to regional infrastructure development, and there is already more cross-border collaboration involving two or more member States (Box 15).

#### Market information

Market information helps farmers to make profitable decisions on when and where to market and on what to produce. It also plays a vital role in the functioning of the whole market. When traders and farmers have access to market information and food and agricultural commodities are transported directly to where they are demanded, transport costs are likely to decline. More importantly, improved market information systems can reduce agricultural marketing margins and price volatility, and increase farm prices and marketed volumes. Farmers in **Uganda** achieved reported estimated increases of 5 to 15 percent in farm-gate prices, thanks to access to improved market information (von Braun *et al.*, 2008).

Various approaches have been taken to the development and strengthening of market information systems. Burkina Faso, for instance, proposes to improve the flow of information on food prices in national and regional markets to producers. The strategy is to systematize data collection and distribute information to as many farmers as possible. Côte d'Ivoire intends to improve cooperatives' access to market information through enhancing the services of its Market Information System and Cyber-seed. The Market Information System brings sellers and buyers closer to each other, thereby reducing the number of intermediaries. Cyber-seed provides information on seeds, agricultural products and producer seeds. Uganda envisages the development of a localized market information service that meets the marketing needs of the farming and trading community at the district level. Market extension officers would be hired to collect, analyse and feed back to the community timely market news, via radio, newspapers and meetings. Bolivia's plan is to use information technology and institutional consolidation to strengthen existing market information systems that support forecasts, warning signals, decision-making and the preparation of policies, plans and programmes. A more comprehensive approach has been developed in the United Republic of Tanzania, covering food and export crops, livestock and inputs, and involving the government, the private sector and cooperatives (Box 15).

Mobile phones and FM radios have become increasingly popular among small farmers, who use them for checking market and price information. In **Madagascar**, mobile phone messaging services and rural radios will be expanded to facilitate access to price information. With a mobile handset in the vicinity, poor rural women and men have no reason to walk kilometres to obtain market and price information.

Some countries have given serious attention to reducing price volatility through strengthening commodity exchanges, regulating speculation and ensuring stability in exchange rates. **Zambia** intends to promote and utilize the Zambia Agricultural Commodity Exchange, and rehabilitate rural feeder road networks as part of its market development programme. Agricultural commodity exchanges appear to have brought more formality to trading methods, enhanced market transparency, and increased the quantity and quality of commodities traded.

# Box 15: Agricultural market information in the United Republic of Tanzania

Tanzania's agricultural marketing information system is divided into four components: the Marketing Information System for Food Crops, the Marketing Information System for Export Crops, Livestock Marketing Information Services, and Agricultural Inputs Marketing Information Services.

Information collected includes wholesale and retail prices of food crops, livestock and livestock products; agricultural input prices; and free-on-board and farm-gate prices of export crops. This information is intended to help farmers and traders to make informed production and marketing decisions, especially now that the marketing of agricultural and livestock commodities and inputs has been liberalized.

Private companies and cooperatives participate at different levels. The Ministry of Industry, Trade and Marketing monitors prices of the main food crops in the country (maize, rice, beans, wheat, sorghum, finger millet, brush millet and round potatoes) by collecting wholesale prices three times a week (on Monday, Wednesday and Friday), processing this information and disseminating it to stakeholders through radio, newspapers and e-mails.

Various reports are prepared and disseminated to stakeholders, including daily, weekly, monthly and quarterly wholesale price reports.

Source: Ministry of Industry, Trade and Marketing www.mitm.go.tz/marketing.php?cat=14&subcat=33.

The most important regional market information initiative is the Common Market for Eastern and Southern Africa's (COMESA's) Food and Agricultural Marketing Information System. This is an electronic web-based system featuring key information on major agricultural commodities, trade and investment opportunities in the region. It aims to improve agricultural marketing through the dissemination of information on markets, policy changes and impacts to enhance decision-making by all stakeholders, thereby improving policy implementation in member States.

In the fishery sector, FAO has initiated the FISH INFONetwork (FIN), a regional network of institutions providing price and marketing information to fish producers, processors and exporters. Originally set up as FAO projects, FIN now consists of seven independent intergovernmental organizations providing services to private industry and governments. It is widely known for its range of publications and periodicals, and for organizing international conferences, workshops and training seminars. Execution of multilateral and bilateral projects is one of FIN's major activities.

In Asia, FAO assisted the establishment of the Agricultural and Food Marketing Association for Asia and the Pacific (AFMA), a voluntary association of food marketing institutions that collects subnational-level market information and intelligence and conducts food situation analysis. AFMA is working to establish the systematic interchange of information and experiences regarding various aspects of food marketing activities.

# Trade-based price stabilization measures

Import and export trade measures, including regional trade policies, are reported by only ten countries: Burkina Faso, Comoros, the Gambia, Madagascar, Sierra Leone, Togo, Zambia, Pakistan, Haiti and Egypt. These measures are related mainly to import facilitation, export restrictions and improved regional trade.

# Import facilitation

Many food importing countries used trade policies following the high food prices of 2008. In particular, tariff reductions were applied to offset price increases by not only lowering prices but also increasing supplies. Among the countries that reduced tariffs

on food imports in 2008 were Bangladesh, Egypt, Mali, Morocco, Pakistan, the Philippines and Senegal. Burkina Faso, the Gambia, Egypt and Haiti have continued to apply lower duties on basic food items (FAO ISFP, 2009), but it is not clear whether they will still continue to do so when international prices are low.

As part of its short-term measures for price stabilization of imported foodstuffs, **Comoros** plans to create a structure that enables importers to place group orders for most basic food products. It will also strengthen the import chain through an improved flow of goods, and will negotiate with the United Nations Conference on Trade and Development (UNCTAD) and other organizations for access to a database on suppliers' prices. Improving the regional road network (Douala-Bangui axis) is expected to reduce the costs of food imports for the **Central African Republic**.

High food prices have prompted the removal of import restrictions. Tariffs on food imports were reduced or eliminated in many low-income, food-deficit countries (LIFDCs). When such measures are maintained for long periods, there is a risk that they reinforce the import surges that started in the mid-1990s, with negative consequences on long-term domestic food production. Recognizing this problem, Madagascar has proposed a flexible tariff policy, which will apply a threshold world price for rice for removing or applying duties.<sup>19</sup>

A few countries, including the **Philippines** and **Senegal**, have declared food self-sufficiency as their strategic objective. The increase and volatility of international food prices, aggravated by the export restrictions taken by major grain exporters in the wake of the food price inflation, have generally led to loss of confidence in markets. The weakness of the market as a reliable source of food supplies has renewed the focus on food self-sufficiency as a means of achieving food security in some countries.

## **Export restrictions**

As none of the countries under consideration are major food exporters, export policies do not seem to be high on their agendas. However, export policies are as important as import policies for most LIFDCs. Malawi and Ethiopia banned or discouraged grain exports in 2008, based on fears of exacerbating supply shortages and high prices. When export prices are high, traders are likely to export the food they purchase at the expense of poor local consumers. On the other hand, in years of favourable weather, surplus maize or rice has to be exported to avoid price collapse. Malawi therefore lifted its ban to export surplus maize to its neighbour, Zimbabwe, in 2008. Egypt also banned rice exports, but later lifted the restriction. Exports have the potential to enhance food security by increasing a country's ability to import food items that it cannot produce in sufficient quantity. Governments may also resort to export taxes, rather than bans, to keep domestic prices down while generating revenue for themselves. These and related issues need to be analysed before policy decisions are made. Zambia proposes to assess the policy options before putting in place predictable export policies to stimulate production and private sector investment. Sierra Leone has recognized the need to design a consistent and effective government policy on food export trade, including cross-border trade.

<sup>19</sup> It has been decided to remove tariffs when prices are about US\$550/tonne of Thai rice, and to impose duties when they are about US\$450/tonne. This is similar to the system of ensuring price bands that Chile applied successfully to protect producers and consumers from world market fluctuations.

## Regional trade

Sudden swings in the international prices and trading conditions of food, and doubts about the feasibility of national self-sufficiency have favoured regional cooperation. In Africa, COMESA has developed agricultural programmes for sustainable regional food security and enhanced regional integration. COMESA has been advocating for the principle of moving from a national to a regional approach, to deal with regional food security issues through establishing the freer flow of agricultural trade, ensuring that commodities move as needed from surplus to deficit areas in the region (Box 16). In Asia, the South Asian Association for Regional Cooperation (SAARC) envisages making "South Asia once again the granary of the world" and operationalizing a food bank. However, regional markets may not always enhance food security in very poor countries.<sup>20</sup>

# Box 16: COMESA agricultural programmes

In-line with the overall African vision for the sector, COMESA agricultural programmes are tools for attaining two major objectives: sustainable regional food security and enhanced regional integration. COMESA has endorsed the principle of moving from a national to a regional approach in dealing with regional food security issues, based on two major strategies. The first is to open up the region to allow a freer flow of agricultural trade by removing all barriers to such trade, to ensure that commodities move as needed from surplus to deficit areas in the region, driven primarily by demand and market forces. This policy shift is enshrined in the Declaration of the Second Meeting of the Ministers of Agriculture, held in Nairobi from 15 to 16 October 2008, on Expanding Opportunities for Agricultural Production, Enhanced Regional Food Security, Increased Regional Trade and Expanded Agro-Exports through Research, Value Addition and Trade Facilitation.

The other strategic approach is to establish harmonized policies, systems, regulations and procedures across the region, to create a conducive, transparent and facilitative environment for regional agricultural trade, with forward and backward linkages across the region from the farmer to the market. COMESA's agricultural approach also aims to position the region as a reliable supplier of primary and processed agricultural goods for global markets, where producers respond effectively and competitively to opportunities in all external markets.

Source: COMESA

 $http://programmes.comesa.int/index.php?option=com\_content \&view=article \&id=23 \&itemid=16 \& lang=en.$ 

<sup>20</sup> For example, regional trade integration among the 16 member countries of ECOWAS is reported to have done little to enhance food security in the poorest Sahelian countries. Food produced in the Niger is exported to countries with higher purchasing power (e.g. Nigeria), while high transport costs and widespread poverty discourage traders from importing food back into the country (Devereux, 2009).

# **Cross-cutting issues and regional cooperation** to address the food crisis

Countries have proposed a wide variety of safety net, agricultural production and market and trade measures to address the food price crisis and its adverse effects on their populations. There are also a number of cross-cutting issues that can help to ensure the successful implementation of such measures. This chapter examines the main crosscutting issues identified from the 58 countries' proposals: i) capacity building and institutional development; ii) policy development and implementation; iii) credit and finance; iv) gender; and v) regional cooperation.

# Capacity building and institutional development

Soaring food prices have partly been a product of several decades of disinvestment in agriculture and rural development. Many developing countries are suffering from institutional weaknesses and are unable to develop and deliver the public goods and/or commercial services needed for sustainable agricultural growth, rural development and food security. In many cases, deterioration in public sector service provision has created serious gaps, which have been only partially filled by the private sector and NGOs. To facilitate the supply response to rising food needs, institutions urgently require strengthening and new institutional arrangements. For this, it will be essential to learn from past mistakes, to minimize the corruption and inefficiencies that have sometimes characterized national public and private institutions and to ensure that they are responsive to the needs of producers, both men and women, and particularly poor ones. Effective capacity building of national institutions requires action at the individual, institutional, and policy levels, including:

- 1) clear mandates in the context of a national policy vision;
- 2) clear distinctions among the functions of public, shared and private institutions, and among their roles/comparative advantages in providing related goods/services;
- an institutional policy, effective organizational structures/processes, human resource development, appropriate infrastructure/equipment and sustainable financial provisions for each institution (Crowley, 2009).

# **Proposed actions**

The large majority of countries have included a capacity building component in their strategies for boosting agricultural production. Most of the strategies in all regions include the provision of training in agricultural production techniques. Training for enterprise management and/or marketing of goods is also quite common in all regions, while direct training in agricultural processing techniques is less frequent (Table 7).

For institution building, a two-prong strategy can be seen. The majority of countries propose measures for strengthening existing research and extension institutions to deliver better services to farmers.21 Many countries also propose measures to strengthen local organizations' capacities in planning and management, and to strengthen their advocacy abilities. Overall, less attention has been paid to the development of measures to encourage private-public partnerships or improve coordination among national institutions responsible for agriculture and rural development (Table 8).

Table 7: Types of training programme  Region					
Activity	Africa	Asia	Latin America and the Caribbean	Near and Middle East	Total
Training in production techniques	25	10	7	3	45
Training in processing	8	4	3	1	16
Training for enterprise management and marketing of goods	17	8	6	2	33

Table 8: Institutional building measures					
	Region				
Measures	Africa	Asia	Latin America and the Caribbean	Near and Middle East	Total
Improvement of national research and extension services	21	8	5	1	35
Strengthening local organizations' capacities (e.g. in advocacy, participatory planning/decision-making, management)	15	6	3		24
Adjustment of institutional framework (e.g. public-private partnerships, improved coordination among national institutions)	9	4	3	2	18

In Sierra Leone, the IAA identified a variety of gaps in the government's response to the food price crisis and recommended many capacity building and institutional development measures. The utilization of research and approved technologies was found to be low, and the overall extension delivery system weak. There is need for greater investment to disseminate research findings and strengthen extension services within the Ministry of Agriculture, Forestry and Food Security (MAFFS) through the development of a clear implementation strategy that ensures effective research/extension and farmer linkages for increased productivity and production.

The lack of a unified organizational structure for farmers in Sierra Leone was also seen as problematic. The expansion and strengthening of an existing programme linking Agriculture Business Units (ABUs) and Farmer Field Schools (FFS) (Box 17, p. 62) has been proposed, so that it covers all smallholder farmers. Another proposal recommends integrating the ABU concept and activities into overall district plans, budgets and processes, and supporting the formation of an all-inclusive national association of producers, processors and marketers. The linking of ABUs to community banks is also felt to be important in addressing the absence of appropriate credit opportunities for smallholder farmers.

**Burkina Faso** has noted the importance of bringing together private and public actors in the cereal sector to improve the efficiency of the value chain, particularly for cereals produced locally and marketed at the subregional level. Its IAA identifies the following key areas where the cereal sector could benefit:

 Better flow of information to producers on prices at markets in the country and in subregions, to improve the marketing of their grain: Some associations, such as Afrique vert (Green Africa), already collect information in some markets, but this needs to be systematized, made in real time and more broadly disseminated.

<sup>21</sup> It is also important to create space for stakeholder oversight/direction and the empowerment of civil society organizations (CSOs) in research and extension institutions.

### Box 17: Linking ABUs and FFS in Sierra Leone

In Sierra Leone, a joint UNDP/FAO/government initiative combines the ABU structure with FFS to establish a seamless and sustainable value chain from food production to marketing, aimed at reducing poverty in selected communities and preventing the vicious circle of food insecurity in Sierra Leone.

FFS are an agricultural extension tool that emphasizes adult learning based on an innovative, participatory and interactive approach involving farming groups in trials and investigations to identify the most profitable and appropriate cultivation methods for increasing yields. In collaboration with FAO, MAFFS and NGOs are using the FFS as an extension approach, through which farmers can be mobilized to acquire new production and marketing skills and knowledge through field participation and experimentation. Programme activities are based on the commodity value chain approach, which links production, marketing and consumption to open the way for increased productivity and better living standards.

ABUs are an initiative to help jump-start the institutional process of devolution and create early opportunities for citizen involvement in local governance. In 2005, the most comprehensive activity in this area was support to MAFFS for the decentralization of agricultural services. Through this activity, farmers have been trained to farm as a business, farm in groups, increase the areas they cultivate, and pay community contributions to local councils.

Combining the ABU and FFS structures can improve farmers' capacities, with FFS dealing with the production, processing and marketing aspects, while ABUs build financial and managerial skills. Such a merger would help move farming groups from subsistence production to commercial farming, securing better living standards in rural communities. Currently, there are about 3 000 FFS graduates and 700 from ABUs, who are developing self-governing and selffinanced network organizations, focusing on marketing, in all districts of the country.

Source: Full-fledged IAA in Sierra Leone; FAO/UNDP/MAFFS 2007.

- The management of public stocks could be improved by integrating them into a subregional management system and increasing their volumes, thus increasing the capacity to intervene in the case of a crisis.
- Organization of "interprofessions" (multistakeholder organizations) would facilitate transactions and exchanges among different actors in the value chain.
- Coordination of trade policies that respond to soaring prices, within the framework of existing subregional organizations (particularly ECOWAS and UEMOA): Although the agreements within UEMOA provide common external tariffs, Burkina Faso took national-level emergency measures to abolish import taxes on rice, salt, milk and other staples to mitigate the impact of high prices on consumers. Consultation is needed, especially in the longer term, to restore rates that consolidate national and subregional products, such as rice or milk, with potential in the country.
- Support to private sector input distribution could increase its effectiveness: Owing to weak demand for inputs (particularly for food production) and competition with other government distribution systems (Sofitex, KR2), private sector input importers and wholesalers are insufficiently established in rural areas, where they operate through networks of stores that supply their goods. In addition to grants, efforts to develop the inputs industry could include support for the establishment of deposits in rural areas, and assistance to interprofessions to improve capacities for group imports, which would reduce costs.

# Policy development and implementation

When confronted with a situation such as the food price crisis, a government needs to react quickly to develop and implement coherent policies that help resolve the

problem. This requires capacities in analysing situations, arbitrating among conflicting interests and putting together coherent sets of responses to address the problem that has arisen. Policies to address the food crisis need to revolve around four strongly interrelated components: i) maintenance of the food security of vulnerable populations; ii) regulation of the market, ensuring the competitiveness of local production versus imports; iii) boosting of production, supporting the value chain and smallholder farming so that it can contribute to food supplies for own consumption and the market; and iv) prioritizing and facilitating the reallocation of funding to different policies (support to agriculture, livestock, food distribution, subsidies, etc.) according to the economic situation. The budgetary decision-making process needs to consider priorities and the trade-offs among alternative expenditures, as well as the implications for decentralized budget decision-making, which can often be distorted by donor programmes.<sup>22</sup>

Key technical capacities and requirements for effective policy development and implementation include:

- good baseline data that can be used to analyse an existing situation;
- technical capacities and methodological skills to analyse key challenges and their underlying causes, the actual or potential short- and long-term impacts of approaches to dealing with them, and corresponding policy and institutional frameworks;
- technical capacities and methodological skills for designing or amending legislation so that it reflects and supports policy;<sup>23</sup>
- effective policy management systems that clearly define the roles and
  responsibilities of key participants in policy development and implementation
  processes, as well as ensuring convergence, complementarity, coherence and
  coordination among the policy frameworks existing in the country, to ensure that
  policies are mutually supportive;
- a good monitoring system to ensure accountability and transparency (FAO, 2007).

#### **Proposed actions**

In the actions proposed by governments, two major areas of intervention for improved development and implementation of policies can be identified: i) conducting assessments and studies of food and agriculture policies and safety nets; and ii) building capacities for policy development and implementation (Table 9).

	Conducting assessn reviews and stud			for policy development plementation
Bangladesh	Niger	Nepal	Burundi	Niger
Benin	Sierra Leone	Tajikistan	Congo, Dem. Rep.	Sierra Leone
Congo, Dem. Rep.	Swaziland <sup>1</sup>	Dominican Republic	Ethiopia	Bangladesh
Côte d'Ivoire <sup>1</sup>	Togo	Guatemala	Liberia	Cambodia
Ethiopia	Bangladesh	Honduras <sup>1</sup>	Malawi	Philippines
Madagascar	Cambodia	Nicaragua	Mali	Palestine/West Bank
Malawi				and Gaza Strip

<sup>1</sup> Countries that have proposed measures for dealing with land tenure issues.

<sup>22</sup> Unpublished note from Jacques Strebelle of FAO's Western and Central Africa Service (TCIW) based on full-fledged IAA.

<sup>23</sup> Quality legislation not only facilitates the mustering of political support, but is also the key mechanism for ensuring the implementation of policies.

#### Conducting assessments, reviews and studies

Of 24 countries proposing actions to improve policy development and implementation, 19 have given importance to carrying out assessments, reviews and studies dealing with the development of strategies for food policy, agriculture sector programme development, and safety nets. Such studies are important for gathering information specific to the food price crisis and can assist the development of appropriate responses.

Examples of assessments and studies proposed by countries are outlined in Table 10.

The issue of land tenure is raised in the Côte d'Ivoire, Swaziland and Honduras. In Swaziland, a proposal has been made to review the land tenure system to enable farmers to use their land as collateral and to encourage them to invest in their land. Honduras emphasizes the importance of supporting land tenure legalization processes. In Côte d'Ivoire, a component addressing land tenure issues has been included in the Emergency Programme for Food Production (Box 18).

Table 10: Propos	Table 10: Proposed policy studies and assessments				
Country	Type of study				
Bangladesh	Review of current agriculture and food security policies				
	Development of food policies and strategies to improve the coverage of food security and safety net programmes				
Benin	National study to identify vulnerable groups and their needs, and elaborate an institutional development plan for the <i>Office National d'Appui à la Securite Alimentaire</i> (National Food Security Support Office)				
Cambodia	Development of a clearer social/food safety net strategy in the Food Security Support Programme				
Madagascar	Consolidation and finalization of the Agriculture Sector Programme 2008 to 2012				
Togo	Development of policies and programmes for an emergency rice initiative				

Sources: Full-fledged IAAs and EC rapid appraisals.

## Box 18: Securing land parcels for Côte d'Ivoire's Emergency Programme for Food **Production**

Land as a factor of production is increasingly subject to occupation and transactions that degenerate into conflict. The situation is particularly serious in forest areas of Côte d'Ivoire's south and southwest and in the savannah area to the north. Failure to secure rights of ownership and occupancy of rural land results in: i) instable agricultural holdings; ii) low investment in agriculture; iii) low level of farm modernization; iv) lack of access to investment credit; v) increased conflicts over land; and vi) non-market valuation of the land.

## Objective

The intervention aims to establish a framework for securing the land parcels involved in the Emergency Programme for Food Production.

# Expected results

- Information and awareness raising campaigns on securing rural land and contracting land in food producing areas.
- Local land management committees established and operational in major production areas.
- · Assured management of local contracts for the rental of agricultural cropland.

# Activities (CFAF552 167 980)

- 1) Information and awareness raising in production zones (CFAF147 167 980): i) development of an emergency land tenure procedure; ii) design of a standard form for leasing plots; iii) establishment of emergency local land management committees; and iv) awareness and outreach campaign.
- 2) Management and monitoring of contracts (CFAF305 000 000): i) monitoring of contracts; and ii) settlement of disputes.

Source: Full-fledged IAA in Côte d'Ivoire.

#### Box 19: Malawi's proposal for strengthening capacities for information analysis

Malawi proposes strengthening the government's capacity for improved assessments, information and forecasting systems for planning by focusing on:

- the Ministry of Agriculture and Food Security's capacity to carry out timely and accurate national vulnerability assessments and detailed studies on the impacts of increasing food and oil prices on vulnerable people;
- existing training institutions' provision of capacity for needs assessments, enhanced monitoring and evaluation, and management of early warning systems for climate change mitigation and adaptation;
- policy research and dialogue regarding trade, practical research and outreach systems, welltargeted subsidies, land and water management, social protection, and measures to stimulate investment through the private sector and public-private partnerships;
- 4) strengthened public-private partnerships (including NGOs) to stimulate investments.

Source: EC rapid appraisal in Malawi.

# Capacity building for policy development and implementation

Twelve countries propose some form of capacity building for policy development and implementation. Some, such as **Burundi**, mention the need for overall strengthening of the capacities of government officers at the centralized and decentralized levels and of private sector stakeholders to diagnose problems, develop solutions, and implement, monitor and evaluate policies.

The importance of involving government and non-governmental stakeholders in policy processes is also recognized in **Bangladesh**, which proposes support to strengthen the capacities of government ministries, NGOs and the private sector to implement the National Food Policy Plan of Action.

Other countries, such as **Malawi**, have focused on developing capacities for analysing information in a timely manner, to facilitate better planning (Box 19).

In Liberia, the proposed interventions are linked to existing national and UN programmes, and focus on the government priorities outlined in the Poverty Reduction Strategy and the government/UN Joint Programme on Food Security and Nutrition, giving priority to activities that directly benefit women and youth. However, partner ministries lack the infrastructure and human capacity to implement and sustain the programmes, so there is need for training and capacity building of government staff and institutions, and endeavours to undertake joint implementation to build capacity and ownership.

Sierra Leone cites the need to improve coherence and complementarity among policies. For example, there are varying opinions on the actual benefits of the existing policy of reduced tariffs for imported rice versus the provision of subsidies for the poor. The development of an interministerial approach to subsidies and taxation was seen as a priority issue. Policy on the cross-border trade of food commodities is also unclear, and a consistent and effective government policy on food export trade is urgently needed.

# Monitoring and surveillance

Monitoring and surveillance mechanisms are important ways of gathering information to improve understanding of the situation on the ground and of evaluating the effectiveness and impacts of various policies, programmes and projects. Development of early warning systems can also help governments to anticipate problems and facilitate a rapid reaction (Table 11, p. 66).

of food assis	and evaluation stance and input n programmes	of agricultu informat	nt/improvement ural production ion systems Iture statistics)	of info security	relopment/improvormation systems ormation systems of and the nutrition ulnerable popular	for food n status of
Congo, Dem.	Zimbabwe	Comoros	Togo	Benin	Madagascar	Nepal
Rep.	Bangladesh	Congo, Dem.	Bangladesh	Burundi	Malawi	Guatemala
Ethiopia	Myanmar	Rep.	Pakistan	Comoros	Sierra Leone	Palestine/
Guinea	Philippines	Ghana	Bolivia	Congo, Dem.	Swaziland	West Bank
Kenya	Tajikistan	Côte d'Ivoire	Guatemala	Rep.	Uganda	and Gaza Strip
Mauritania	Bolivia	Madagascar		Gambia	Bangladesh	
Somalia		Sierra Leone		Lesotho	9	

As the provision of food assistance and agricultural inputs is an integral part of government responses to the food crisis, some countries have proposed a specific monitoring and evaluation component for their food assistance and/or input distribution programmes. In Bangladesh, for example, the need for better information management and mapping for food assistance programmes is cited; the strengthening of monitoring and evaluation systems for food security and the nutrition status of vulnerable populations is seen as an integral component of this.

All governments need databases and information systems containing basic statistics on agricultural production and information on the food security and nutrition status of their populations, so that they can assess the food and poverty situations in their countries and develop appropriate policy responses. Lack of quality, up-to-date data can be a major impediment to the development of suitable policies. Of the countries noting a need to implement policy studies or build capacities for policy development and implementation, nine - Benin, Burundi, the Democratic Republic of the Congo, Malawi, Sierra Leone, Bangladesh, Nepal, Palestine/West Bank and Gaza Strip, and Togo - also propose the development or improvement of databases and information systems.

Burundi, for example, cites the need to build capacity for the diagnosis of problems, the development of solutions, and the implementation, monitoring and evaluation of policies. As part of its strategy for achieving this, Burundi has proposed the bolstering of existing mechanisms for monitoring the food security situation in the country.

In Sierra Leone, it is recognized that there is very low capacity for monitoring, evaluation and early warning on food price fluctuations. This is in part owing to a lack of accurate and comprehensive data on food and fuel price trends, food imports and incountry stocks, and to weak capacity in disseminating information in a timely manner. Sierra Leone's proposal recommends the establishment of national- and district-level database systems containing information on market intelligence and agriculture sector investment, an early warning system, and strengthening of the existing food security monitoring system. The re-establishment of annual crop and food supply assessments is also recommended, and the development of capacities for information dissemination and monitoring activities is considered particularly important for district councils.

Mauritania proposes a monitoring system with four interrelated modules: i) food availability and accessibility; ii) vulnerability level; iii) national production and the incomes of different types of farms, to assess the profitability of local markets compared with imported products; and iv) the budget balance and foreign exchange reserves, where large fluctuations in international prices have important effects on spending.

#### Box 20: Crop monitoring/forecasting and marketing information system in Pakistan

Through its Space and Upper Atmosphere Research Commission, and with FAO assistance, the Government of Pakistan has launched a satellite technology-based crop monitoring system.

The objective is to provide improved forecasting information on the availability of food supplies by developing reliable and timely crop area and production estimates through remote sensing-based area data (ground-validated) integrated with crop yield statistical data (based on crop cut trials). The project is currently limited to one major producing province – Punjab. An investment project will be needed to extend the system to the whole country, to cover all the provinces with poor crop monitoring/forecasting systems. There is also need to increase the number of crops monitored and to integrate the database with a marketing information system, which could be based on current information on food and non-food crop prices.

Eventually, the system will evolve into an early warning and information system for food and agriculture that enables the determination of food surpluses/deficits and nutrition status, and provides information for market trend forecasts. The system will also help improve the capacity to analyse crop zoning/cropping patterns, thereby providing comparative advantages to support effective and informed policy- and strategy making by the Ministry of Food, Agriculture and Livestock and the Government of Pakistan.

Source: Full-fledged IAA in Pakistan.

**Pakistan** identifies four key areas that require regular monitoring regarding food prices and their impacts on populations:

- i) food prices in rural markets, and for cross-border wheat trade;
- ii) household income, expenditure (food and non-food) and food consumption, and any adverse impacts on health (treatment seeking behaviour) and education (school retention);
- iii) health/nutrition and education indicators in affected areas;
- iv) the transparency and targeting efficacy of interventions.

Pakistan also provides an interesting example of an early warning information system for food and agriculture, which could improve analysis and inform the development of policy responses (Box 20).

## Credit and finance

Economic reform of credit and finance has attempted to address the failures of government-sponsored credit programmes, which mainly benefited large-scale farmers and involved high budgetary costs and large-scale default. Major components of reform in many developing countries have included the liberalization of interest rates and entrusting the private sector to provide agricultural credit. In many countries, the private sector has failed to deliver effective credit services to small farmers owing to market failure, because it is costly to screen credit applicants and institutions for contract enforcement are weak. The current agricultural credit system in many poor countries is characterized by a variety of rural finance providers, including microfinance institutions (MFIs), credit unions, savings and credit groups, farmer cooperatives and small rural banks. In spite of several innovative approaches, the investment credit demands of small farmers remain insufficiently met.

The provision of rural financial services is important in enabling farmers to increase their agricultural productivity and invest in value-adding activities that can improve their overall income and food security. The liquidity constraints of small farmers and

to	Development of/support microfinance/ microinsurance programmes	(credit unions, farmers' as	to rural financial institutions sociations, savings and credit credit systems, etc.)
Bangladesh	Niger¹	Central African Republic	Kenya
Comoros	Senegal	Côte d'Ivoire	, Mali
Ethiopia	Mongolia	Ethiopia	Mozambique
Gambia	Egypt	Gambia	Honduras
Ghana	Haiti¹	Jordan	Egypt
Madagascar			

<sup>1</sup> Proposal is for the development of a national strategy on microfinance.

Table 13: Activities targe	eted for credit		
	mers to markets/ e development	Credit for agricultural infrastructure/technology to boost production	Credit to promote the input/ cereal industry
Gambia	Dominican Republic	Zambia	Benin
Kenya	Egypt	Uzbekistan	Burkina Faso
Lao People's Dem. Rep. Jamaica	Jordan	Nicaragua	

vulnerable groups often prevent them from intensifying their production systems. The timely provision of credit and other financial services can play a significant role in enabling small farmers and vulnerable groups to break out of the vicious cycle of low income - low savings - low investment - low productivity - low income.

# **Proposed measures**

Of the countries proposing measures to deal with credit and financial issues, the majority have placed emphasis on supporting or scaling-up microfinance programmes aimed at small farmers and other vulnerable groups, and strengthening existing rural financial institutions, such as farmers' associations and credit unions (Table 12).

Regarding the areas to which loans are directed (Table 13), activities that can increase farmers' participation in the value chain received much attention. Far less mention is made of developing or supporting credit programmes to improve agricultural infrastructure or develop the agricultural input industry. However, the provision of credit for such activities is important.

One innovative model for rural financial institutions is the inventory credit system (Coulter and Shepard, 1995), better known as the warehouse receipt system, whereby farmers (or producer organizations) deposit a portion of their harvests in warehouses, as collateral for a cash loan. Farmers can use the loans to meet immediate family needs, participate in collective purchases of fertilizers and other inputs, and/or carry out other income-generating activities. The stored products are sold several months after the harvest, when prices are higher, enabling farmers to pay back the loan with interest. FAO has combined fertilizer microdosing with the inventory credit or warrantage approach in countries such as the Niger. The Central African Republic has a proposal for introducing such a system to mobilize working capital and encourage investment.

Another interesting way of using credit and finance activities to boost agricultural production and include vulnerable farmers is the World Bank proposal for Kenya (Box 21). This uses market-oriented measures to enhance food production, while using voucher schemes and capacity building activities to allow the most vulnerable farmers to participate.

# Box 21: Upscaling a commercial credit programme to boost agricultural production and support private-public partnerships in Kenya

The World Bank proposal focuses on upscaling an existing commercial credit programme modelled on the Kilimo Biashara Programme. The Bank aims to use the National Accelerated Agriculture Inputs Programme to support public-private partnerships along the agricultural value chain, addressing the constraints that inhibit productivity and access to markets. It draws lessons from the Kilimo Biashara Programme for disbursing productivity loans. The warehouse receipt programme will also be expanded. The loan scheme will provide more farmers with access to credit for enhancing food production, while the seed and input voucher scheme will target the more vulnerable groups who have no access to credit.

Programme activities include the following:

- a) Upscaling existing agricultural credit programmes according to the Kilimo Biashara model:
   Other qualified banks, including rural savings and credit cooperative societies, will be
   involved in partnerships to leverage more credit and disburse loans to farmers.
- b) Organizing agro-input and seed fairs (voucher schemes): This component aims to reach vulnerable farmers who lack access to the credit scheme, providing them with access to seeds and farm inputs. It incorporates extension services and strengthening of community mechanisms of accountability in the selection of beneficiaries.
- c) Support to orphan crops development.
- d) Warehouse receipting, to enhance marketing and provide short-term financing to meet cash needs immediately after the harvest.

Source: EC rapid appraisal in Kenya.

In Bangladesh, IFAD is supporting five projects to deliver credit via NGOs/MFIs: four based on the Grameen Bank model and one on the self-help group approach. For example, the Microfinance for Marginal and Small Farmers Project delivers financial services to the poorest farmers, and has expanded its outreach for microfinance from the functionally landless (owning less than 0.2 ha of land) to marginal and small farmers, who were previously not effectively served by either MFIs or the banking sector. To reduce the vulnerability of people who are already vulnerable to emergencies, the project has established a disaster reserve fund to provide loans when natural disasters or family emergencies occur. If found to be viable, the project plans to support the provision of crop and livestock insurance. The project includes a scheme to ensure better prices for crops, by allowing farmers to store their newly harvested crops in a special storage facility and sell them later, when prices are higher.<sup>24</sup>

### Gender

FAO studies demonstrate that although in most developing countries women are the mainstay of agricultural sectors, the farm labour force and food systems (and day-to-day family subsistence), they have been the last to benefit from – and in some cases have been negatively affected by – economic growth and development processes. Gender bias and gender blindness persist: policy-makers, development planners and agricultural service deliverers still tend to perceive farmers as being male. Women therefore find it more difficult than men to gain access to valuable resources such as land, credit, agricultural inputs, technology, extension, training and services that would enhance their production capacity.<sup>25</sup>

In most developing countries, both women and men farmers lack access to adequate resources, but women's access is further constrained by cultural, traditional and sociological factors. Accurate information about men's and women's relative access to, and control over, resources is crucial to the development of effective food security strategies. Access to land, credit, agricultural inputs, extension and training, education, technology, rural organizations and services are considered important areas for action to improve gender equity in agriculture.26

# **Proposed measures**

Only 12 of the 58 countries covered in this report make explicit mention of gender issues in their proposed actions (Table 14).

## Gender considerations in safety net measures

Gender considerations are more prevalent in the safety net measures proposed by countries. In particular, women are mentioned as targets for health and nutrition programmes. In Uganda, for example, the stabilization and reduction of malnutrition rates is a component of the proposed safety net measures. Activities for this component include the establishment of community-based supplementary feeding centres, community-based mother-and-child health and nutrition programmes, and direct cash transfers to extremely vulnerable individuals. Health and nutrition programmes aim to provide food or cash to pregnant and lactating women and their children when they attend ante- and post-natal health clinics with a strong nutrition and food security education component. For agropastoralist populations in Karamoja, the programme can be tailored to run through mobile health clinics.

Lao People's Democratic Republic proposes to provide conditional cash transfers for improved mother-and-child health, whereby poor households receive a cash transfer conditional on their making use of specific services. In this programme, pregnant women and mothers of young children would be eligible to receive cash payments if they attend periodic check-ups and information sessions and if their children participate in growth monitoring and vaccination programmes.

Uzbekistan has proposed safety net measures to support the nutrition status and health of the most vulnerable groups through the provision of school lunches to children from poor families, assistance to the poor through local communities, health services to mothers and children, day-care centres for children of working mothers in rural areas and other interventions. Simple measures such as the distribution of hens are also being considered as a quick way to provide protein to the most vulnerable. Improvements in essential social infrastructure, such as schools and medical points, may prove effective in improving delivery of this assistance.

Table 14: Activit	ties with gender considerations		
	Gender considerations in safety nets		Gender considerations in agricultural development activities
Comoros	Uganda	Gambia	Somalia
Madagascar	Korea, Dem. People's Rep.	Lesotho	Bangladesh
Senegal Somalia	Lao People's Dem. Rep. Uzbekistan	Senegal	Bolivia

<sup>26</sup> FAO, Areas for Action: Gender and Food Security: Agriculture www.fao.org/gender/en/agrib3-e.htm.

#### Gender considerations in agricultural development activities

Six countries explicitly consider gender issues in their proposed actions to boost agricultural production. Most of the proposed interventions concentrate on improving women's access to agricultural services, including inputs and training. Somalia's proposal seeks to integrate nutrition and gender concerns into interventions aimed at improving crop and livestock production. Senegal's proposal consists of five components, one of which assists women's groups in the purchase and management of cereal stocks (Box 22). The Gambia's proposal seeks to promote gender equity in agricultural services delivery.

In general, countries have paid little attention to gender issues in their proposed interventions to address the food price crisis. Only 12 make explicit mention of gender in their proposed interventions. Even if one were to include actions for microfinance and homestead/peri-urban gardening, which often include women as a target group, there are a total of 21 countries that have some kind of gender considerations in their responses. Issues such as women's access to land and empowerment in decision- and policy-making processes are rarely mentioned in the interventions proposed. These areas should be considered in the future.

# Box 22: Gender component of an initiative to address the food crisis in Senegal

Given the lack of food reserves in Senegal, the intervention aims to provide women's groups in targeted areas with the cash flow needed to buy 10 000 tonnes of cereals to bridge the food deficit between harvests and to generate income. The operation will be implemented through the National Federation of Women's Groups and its branches at the regional, departmental, inter-village and village levels, which have good management capacity for purchases of 5 to 15 tonnes per group. The Senegalese Association for the Promotion of Small Development Projects (ASPRODEB), which has experience of organizing producer services in the field, will oversee financial procedures and controls. Activities will target women's groups, whose members are responsible for feeding their households through generating income for purchasing food.

#### Results

An estimated 40 percent of the women's groups in Diourbel, Fatick, Kaolack and Tambacounda regions

(950 groups, each with 30 to 50 members) are expected to store a total of 10 000 tonnes of cereals (millet, maize) and cowpeas.

### Activities

- (i) Empowerment of 950 women's groups and their management committees.
- (ii) Setting of purchase prices, with support from the Confederation of Trade Unions (CSA).
- (iii) Technical support from CSA (inspecting stores and rehabilitating/refurbishing 50 percent of them), ASPRODEB and the Ministry of Family, National Solidarity, Women's Entrepreneurship and Micro-Finance (training).
- (iv) Financial monitoring of the operation by ASPRODEB.
- (v) Supervision from the Ministry of Family, National Solidarity, Women's Entrepreneurship and Micro-Finance and FAO.

Source: Full-fledged IAA and EC rapid appraisal in Senegal.

## Regional cooperation to address the food crisis<sup>27</sup>

This synthesis report has shown that countries propose a wide variety of interrelated measures for addressing the food crisis, and these have to be carefully coordinated to ensure an effective response. The measures require substantial investment of government revenue, and strong arguments can be made for promoting cooperation among the countries within a region or subregion. This is particularly true of countries that share similar problems and propose similar types of response, as it can create economies of scale and allow more effective measures than those conducted at only the national level. West Africa provides an interesting example of countries proposing similar measures to address the food crisis, and could benefit from close collaboration.<sup>28</sup> The role of regional or subregional organizations such as NEPAD, UEMOA and ECOWAS would be essential in facilitating such collaboration.

A common emergency measure undertaken in West African countries was the lowering or elimination of import taxes on staple foods, such as rice, wheat and certain processed foods. Such measures should be implemented with caution, however, because they put financial strain on the government, making it difficult to balance the budget, and require interregional coordination among countries, taking into consideration existing agreements, or negotiation within regional organizations (e.g. ECOWAS or UEMOA). Market and trade measures that stabilize markets and strengthen security stocks to reduce the risk of food shortages or sudden price surges are also important components of responses to the food crisis. Close regional or subregional collaboration on market and trade measures is vitally important to ensure their effectiveness.

To reduce reliance on international markets, all the West African countries have proposed measures to boost local production. A number of countries propose ambitious rice programmes, including measures for the development of irrigation infrastructures, dissemination of improved seed varieties, improved organization of the value chain, provision of inputs (at least for the first year of production), animal traction, and the development of processing units for rice paddy. Most countries also propose measures to boost production of traditional cereal crops (millet, sorghum), and in some cases legumes (cowpeas) and tubers, through the use of improved seeds and chemical fertilizers. In the short term, inputs will be distributed freely or through subsidies, but the relevance, impact and long-term sustainability of such measures can be called into question.29

However, to ensure food security, it is not necessary that every country is selfsufficient in all crop production. Coordination among countries to ensure the adequate production of staple crops within a region would be a better guarantee of food security for countries. The establishment of subregional food stocks would also be beneficial in responding to local shortages that hit different areas and countries in different years.

<sup>27</sup> This section is based on an unpublished note by Benoist Veillerette of FAO's Europe, Near East, North Africa and Central Asia Service (TCIE), based on the full-fledged IAAs in West Africa: Benin, Burkina Faso, Côte d'Ivoire, Gambia, Mauritania, the Niger, Senegal and Sierra Leone,

<sup>28</sup> The potential for regional collaboration also exists among Southern Africa's land-locked countries (Zimbabwe, Zambia and Malawi), where the possibility of reducing fertilizer import costs through joint procurement is being debated (Morris et al. 2007)

<sup>29</sup> The current use of improved seeds is very low (3 to 4 percent of the total), and it is unlikely that this rate could reach 100 percent within a few years. Mineral fertilizers are used mainly for cotton, rice, maize and vegetable crops. Their widespread use on traditional crops seems unlikely, and perhaps undesirable, given their high cost, limited impact in the absence of complementary measures, and negative effects on the environment.

Alternative measures for increasing productivity in the longer term include: i) the gradual restructuring of the seed sector, involving the identification of varieties adapted to local environments and producers' multiplication of such seeds under contract; ii) better organization of input supply, by strengthening the private sector to facilitate producers' access, such as through the development of boutiques d'intrants; and iii) systems of long-term subsidies. These interventions can be complemented by measures to increase integration between crops and livestock to improve soil fertility (e.g. Burkina Faso's compostières). Cooperation among countries could be beneficial, particularly for the restructuring of the seed sector. The pooling of efforts would allow for more efficient breeding of varieties adapted to the ecosystems of the region, through exchanges among countries. A system of quality control and certification at the subregional level would also be less costly and more effective than at the national level.

All the countries have proposed measures to reinvest in infrastructures and services that support agriculture. The most important of these are irrigation schemes, particularly small and medium-sized ones. The sharing of experiences would allow a comparative analysis of actions, their impacts, challenges and conditions for success, and would be particularly useful for experiments in irrigation and the development of inland valleys.

Other areas of collaboration could be in the development of early warning and market information systems, which would be more effective if they were coordinated throughout a region or subregion. The agricultural research/research development of countries within a region would also benefit from economies of scale, as no single country could afford research centres covering all the necessary areas. The development of joint proposals by several countries in a region can give the proposals more weight and facilitate the mobilization of funding or support from the international community.

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## Annex 1:

## List of inter-agency assessments (IAAs)30

# Full-fledged inter-agency assessment missions (26 countries)

Bangladesh\* Ethiopia Pakistan Benin Gambia Philippines Bolivia\* Haiti Senegal\* Burkina Faso Lesotho Sierra Leone Cambodia Madagascar Somalia Côte d'Ivoire Mauritania Swaziland Democratic People's Myanmar Tajikistan Republic of Korea Nepal Zambia Egypt Niger\* Zimbabwe\*

# Rapid appraisals conducted in the context of the EC Food Facility (37 countries)

Guinea Bissau Niger\* Afghanistan Bangladesh\* Honduras Rwanda Bolivia\* Jamaica Sao Tome Burundi Senegal\* Jordan Cameroon Kenya Sri Lanka Central African Republic Kyrgyz Republic Togo Comoros Lao People's Democratic Uganda

Democratic Republic of Republic United Republic of

the Congo Liberia Tanzania Djibouti Malawi Uzbekistan

Dominican Republic Mali West Bank Gaza Strip

Zimbabwe\*

Ghana Mongolia Guatemala Mozambique Guinea Nicaragua

<sup>30</sup> In countries marked with an asterisk (Bangladesh, Bolivia, the Niger, Senegal and Zimbabwe), both full-fledged IAA missions and EC rapid appraisals were conducted.

## Annex 2:

## **Country Fiches**

This annex contains country fiches that outline the major measures governments have taken and the main elements of measures they propose to address the food crisis. In order to limit the length of the synthesis report, country fiches have been prepared for only a selected number of countries.

The fiches are based solely on information contained in IAA reports conducted between early 2008 and early 2009. Whenever available, the financial requirements of the proposed measures have been indicated. It is important to note that the information in the country fiches is only indicative, as some of the strategies and financial requirements may have been adjusted since the writing of the IAA reports. The date of the IAA report for each country is indicated at the top of each fiche.

# Bangladesh

(EC rapid appraisal, November 2008)31

## Government's response

### Fiscal and budgetary measures

- Reduction of import tariffs on all essential items, with special emphasis on agricultural commodities.
- Establishing a subsidy on diesel for irrigation (the first in the history of Bangladesh) and maintaining the 20 percent subsidy on electricity for irrigation.
- Temporary ban on exports of rice, effective from June 2008, and maize, from July 2008.
- Relaxed requirements for fertilizer imports by the private sector. In November 2008, the duty on fertilizer imports was zero.
- Increase of the public procurement price for winter rice in 2008 (to include a 40 percent profit for farmers).

## Support to agricultural production

- Increase input supply, including free distribution of fertilizers and seeds for the most vulnerable population.
- Input subsidies, especially on fertilizers, including rationalization through cash transfers.

- Increase land under rice cultivation, especially hybrid rice (an additional 1 million ha).
- Transfer about US\$50 million of public funds to award grants for agricultural research to both the public and private sectors.
- Improve the supply of quality seeds (through contracts with national and international producers).
- Strengthen the domestic production and supply of urea.
- · Strengthen agricultural extension systems.
- Rehabilitate water-related structures (such as dams/gates).

#### Social safety measures

- Expansion of social safety nets (food- and cash-based) and introduction of a 100-day. guaranteed employment programme.
- Increase in the public food grain stock, from 0.9 to 1.5 million tonnes.



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<sup>31</sup> Complemented by additional information provided by the FAO Representative in Bangladesh.

## Action plan/intervention strategy

The proposed intervention, developed in the framework of the EC Food Facility, focuses on the following.

- I. Support to capacity strengthening: Assist the Government of Bangladesh in strengthening the capacity of stakeholders to implement key areas of the National Food Policy Plan of Action (2008 to 2015). Capacity building interventions would include:
- 1) development of relevant strategies;
- training of staff from key stakeholder institutions in new and improved production technologies, participatory research and extension approaches, and group and community-based approaches to production, processing and marketing;
- provision of equipment and materials for developing strategies and training key stakeholders;
- investment in basic infrastructure, machinery, equipment and materials for demonstrating the new and improved technologies.

II. Improved coverage of food security and safety net programmes: Assist the Government of Bangladesh in demonstrating and extending key interventions to vulnerable and disadvantaged people and areas through demand-driven, community-based, pro-poor and participatory extension approaches. Interventions would improve the availability of and access to water through irrigation, agricultural machinery, quality seeds, fertilizers, credit and knowledge of improved production technologies for the ultra-poor, women and landless, marginal and small farmers, fishers, fish farmers and livestock rearers. Interventions would be delivered through existing and new producer groups, which would be strengthened in the process.

The budget for the proposed intervention is estimated at **US\$9.8 million**, for a period of two years.

## Bolivia

(EC rapid appraisal, November 2008)

## Government's response

#### **Policy measures**

- Budgetary: The government modified disbursement of the Direct Tax on Hydrocarbons (Impuesto Directo a los Hidrocarburos) to pay two bonuses: one to the elderly, and one to children attending public elementary schools.
- Fiscal: Public expenditure was increased by 70 percent. Regarding monetary policy, the Central Bank (Banco Central de Bolivia) made open market operations to control liquidity excess. Between 2006 and 2007 the exchange rate appreciated, with the Bolivian currency gaining against the United States dollar.

#### Measures related to foreign trade

- Zero import tariffs, extending until 2009, on rice, sugar, maize, soybean oil, wheat, live animals, meat and most by-products.
- Banning of soybean and sunflower oil (raw and refined) exports.
- Competition regulation, consumer protection and control of speculation.

Setting the right prices for the internal market prior to allowing exports – the right price for each product should be within the price ranges established by the Production, Supply and Markets Information and Monitoring System, considering quality and price in terms of minimum and maximum levels, and should be updated periodically.

## Action plan/intervention strategy

In response to the serious effects of soaring prices, the government launched a Food Security and Sovereignty Policy, which is the foundation of this proposal. The proposal contains three reinforcing components, which will benefit the most vulnerable population (poor households in rural areas and shantytowns) and reinforce the productive capacity of the affected producers.

Component I. Support to smallholder family and community production of wheat, maize, potatoes and vegetables (tomatoes, onions, carrots, broad beans and peas) for household consumption and supply to local, regional and national markets. This component will aim to improve production and productivity as well as increasing the supply from community organizations, to contribute to food security and sovereignty.

Component II. Strengthening the Food Production and Market Prices Information and Follow Up System (SISPAM) by the Ministry of Rural Development, Agriculture and Environment (MDRAYMA). The purpose of this component is to generate timely and reliable information on production and prices, to support forecasts, early warning, decision-making and the preparation of policies, plans and programmes.

Component III. Generation of local capacities for the sustainability of the School Feeding Programme. This successful ongoing programme should be enlarged to cover a greater number of municipalities. The objective will be to extend the coverage of the programme to areas affected by natural disasters caused by the climatic phenomena El Niño and La Niña during the last three years, thus benefiting children and their families in vulnerable municipalities.

Further developments of this strategy should contribute to the cross-sectoral Zero Malnutrition 2010 Programme. The total cost of the plan amounts to **10 million euro** (80 percent for components I and II and 20 percent for component III).

## Burkina Faso

(Full-fledged IAA, May 2008)

## Government's response

From February to March 2008, the government adopted a series of measures for immediate implementation designed to curb consumer price increases:

- Suspension of customs duty on certain food imports, such as rice, salt, dairy-based products and baby foods, which had risen sharply in price or were consumed by vulnerable groups.
- Suspension of VAT on durum wheat, baby foods, soap and edible oils.
- Negotiations with importers and wholesalers to limit the repercussions on consumers of increased import prices. This involved establishing recommended prices for sugar, oil and rice.
- Placing about 10 000 tonnes of local cereals on the market, to lower prices by drawing on intervention reserves.

## Action plan/intervention strategy

## **Urgent measures requiring** additional financing

- 1) Social safety nets:
  - a) food distribution to the most vulnerable urban and rural households, moderately malnourished vulnerable groups, and school canteens;
  - b) food assistance for severely malnourished children;
  - c) subsidized food coupons for poor urban and rural households;
  - d) FFW to benefit poor urban and rural households.
- 2) Production safety nets and increased supply:
  - a) operation for increasing the rice supply;
  - b) off-season seed production;
  - c) rehabilitation of dilapidated areas.



#### 3) Policy and marketing measures:

- a) reducing import duties on certain food products:
- b) negotiating (margins) with importers and traders;
- c) reducing import duties (on fertilizers);
- d) subsidizing fertilizers and phytosanitary products included in the rice operation;
- e) negotiating a minimum guaranteed price (for rice).

#### Medium-term action plan

#### **COMPONENT I:**

#### Policy and marketing measures

- 1) Reducing import duties on inputs.
- 2) Long-term purchase coupon system.
- 3) Negotiating and setting minimum guaranteed prices for certain products.
- 4) Improving the efficiency of the cereals sector.
- 5) Disseminating pricing information to producers.
- 6) Managing public stocks.
- 7) Organizing *interprofessions* (multistakeholder organizations).
- 8) Subregional free trade area and common external tariff.
- Support for the private input distribution sector
- 10) Access to rural finance.
- 11) Reviving public investment in agriculture.

#### COMPONENT II:

#### Improving product supplies

- Action on seed and seed supplies (seed sector survey, seed production, improved oversight services).
- Action on fertilizer and sustainable fertility management (improved manure pits, economic feasibility study of the use of Burkina Phosphate, seed purchase coupons).
- Action on hydro-agricultural schemes and water management (lowland development, management/rehabilitation of assets and large irrigated areas, mini-drilling).
- 4) Action on product storage and processing (community stores, processing units).
- 5) Strengthening producer capacities and training.
- 6) Action in the livestock sector (facilitating exports, developing fodder crops and residue use, developing low cerealconsuming systems, developing competitiveness in the dairy sector).

## COMPONENT III: Social safety nets

- Food assistance for moderately malnourished vulnerable groups.
- 2) Food distribution.
- 3) Subsidized coupons.
- 4) FFW.

The estimated financial requirement is US\$123.2 million for the short-term actions, and US\$198.8 million for the medium-term actions (bearing in mind that the costs of certain activities are still to be evaluated).

## Cambodia

(Full-fledged IAA, May 2008)

## Government's response

To reduce the effects of high rice prices and their impact on national food security the Royal Government of Cambodia introduced, in 2008, various policy and fiscal measures with immediate effect, to mitigate the effects of inflation and reduce the impact of speculation in the rice market:

- Banning the export of paddy and rice for two months, and instructing Green Trade and the Cambodian Rice Millers' Association to sell rice from stocks. The export ban was relaxed in key border provinces to allow the export of paddy that could not be stored.
- Reducing import duties on some food items and lifting import restrictions on others, such as pork, which had previously been banned owing to food safety and health concerns.
- Increasing the financing to Green Trade, by the equivalent of US\$4 million, and to the Rice Millers' Association, by US\$6 million, to store rice for food security and market stabilization
- Providing special financing (working capital), through the Rural Development Bank, to private rice millers to stock rice for domestic supply. In 2008, this financing was increased to US\$10 million compared with US\$6 million in 2007.
- Increasing the basic salaries, dependent and functional allowances of civil servants, the armed forces and retirees.
- Subsidizing oil imports.
- Suspending some business taxes (e.g. garments) to allow companies to increase employees' salaries.

## Action plan/intervention strategy

For the agriculture sector in the long term, the government is considering various policies and programmes to:

- increase agricultural/rice production, through productivity gains, focusing on – inter alia – improved research and extension and increased public investment in land and water, particularly irrigation for the second rice crop;
- increase value-added in the rice production, marketing and export chain, focusing on – inter alia –supporting farm communities, improving rice storage at various levels and enhancing rice milling efficiency through greater public-private partnership;
- 3) improve food security and nutrition, focusing on crop diversification;
- enhance energy security by developing biofuel crops in marginal and non-rice areas, focusing on cassava;
- 5) introduce measures to combat the effects of climate change.

To operationalize the medium-term National Socio-Economic Development Plan, the government has adopted a flexible programmatic approach to harmonize sector investments. The overall programme, being developed to operationalize the Strategy for Agriculture and Water, includes five sub-programmes:

- Institutional Capacity Building and Reform for Ministry of Agriculture, Forestry and Fisheries (MAFF) – Ministry of Water Resources and Meteorology (MOWRAM).
- 2) Food Security Support.
- 3) Agriculture and Agribusiness Development.
- 4) Land, Water Resources and Irrigation Development and Management.
- 5) Agriculture and Water Research, Education and Extension.

The programme will be for the period of the current five-year plan/Strategy for Agriculture and Water, for which the indicative budget is **US\$350 million**.

# Côte d'Ivoire

(Full-fledged IAA, August 2008)

## Government's response

The Government of Côte d'Ivoire has adopted a series of **fiscal measures** to cushion the effects of the crisis:

- tax relief for certain staples (rice, refined oils, fish, etc.);
- measures to abolish implicit administrative costs, particularly red tape, and to guarantee the smooth flow of domestic food supplies;
- specific measures for monitoring prices and abolishing monopoly costs, the implicit costs of market malfunctioning, etc., mainly by introducing reference price fixing and price control mechanisms;
- instituting an interdepartmental committee to examine the structural measures required to guarantee improved control of long-term price trends.

It has also designed **emergency operations** to cover food needs:

- The rice emergency programme: CFAF 17.9 billion.
- The food crop emergency programme: CFAF 19.7 billion.
- The livestock resource emergency programme: CFAF 8.8 billion.
- A proposal for a medium-term programme.

## Medium-term action plan

The medium-term programme will consolidate the results of the emergency programme for the period 2009 to 2011, at an estimated cost of CFAF 532.91 billion. It comprises the following.

- 1) Food production:
  - a) infrastructure facilities;
  - raising productivity and improving competitiveness, with special focus on soil fertility management, access to quality seed, primary and secondary processing, promoting new products and marketing;
  - c) organizational support for producers.
- 2) Livestock production:
  - a) developing small ruminant raising;
  - b) developing the dairy sector by setting up dairy farms;
  - c) aquaculture in ponds, water bodies and dams.

# Democratic Republic of the Congo

(EC rapid appraisal, November 2008)

## Government's response

On 5 May 2008, the Council of Ministers instituted the following measures:<sup>32</sup>

- Reduced import duties and parafiscal measures for staples, such as rice, maize, wheat flour, sugar, vegetable oil, powdered milk, mackerel, poultry, beef, agricultural and industrial inputs and cement, and on equipment for production purposes.
- Regulation of the tariffs charged by shipping and transport agents.
- Setting up an economic regulation fund to guarantee the prices of staples, particularly by establishing and regulating strategic reserves and providing incentives for production.
- Implementing a Special Agricultural Recovery Programme to increase food production and contribute to food self-sufficiency; this hinges on three components: i) urgent disposal of unsold agricultural products and rehabilitation of infrastructure; ii) food production; and iii) livestock production.
- Rehabilitating agricultural service roads and building storage facilities for agricultural staples.
- Dredging the maritime channel to permit the passage of large-tonnage ships and hasten the decongestion of Matadi harbour.

## Action plan/intervention strategy

The government's Special Programme for Agricultural Recovery targets the people affected by soaring food prices, focusing on 3 575 ha for seed production and 857 262 ha for food production.

The agricultural support measures consist of:

- putting in place effective mechanisms for providing material, technical and financial support to agricultural producers;
- identifying and localizing stocks of unsold products;
- 3) selecting highly productive agricultural sites;
- 4) selecting farmers, fishers and professional herders organized into associations;
- 5) involving the Ministry of Agriculture and Rural Development, all other ministries directly or indirectly concerned with development of the agriculture sector, and other traditional partners of the Ministry, particularly FAO, WFP, faith organizations and the Trade Union Confederation of the Democratic Republic of the Congo, in supervising producers.

The programme will cost **US\$2.1 billion**: i) US\$238.67 million for the urgent removal of unsold products on farms; ii) US\$233.26 million for managing agricultural service roads, rehabilitating storage infrastructures and freshwater supply over five years; iii) US\$1.19 billion for food production; and iv) US\$450 million for livestock production over five years.

US\$267 million will come from the government, and US\$1.85 billion will have to be raised from donors, with FAO support.

<sup>32</sup> The Food Crisis in Central Africa, ECCAS/CEEAC Ministerial Workshop in Kinshasa, July 2008, published in Etat des lieux de l'évolution des prix à la consommation des produits alimentaires en RDC by Omer Lunzanga.

# Egypt<sup>33</sup>

(Full-fledged IAA, draft for discussion, February 2009)34

## Government's response

#### Expansion of the food subsidy system

The Government of Egypt expanded its long-standing food subsidy programme to include an additional 15 million people, bringing the total number of beneficiaries to 63 million (80 percent of the population). The total cost of food subsidies rose from LE9.4 in 2006/2007 to LE16.5 billion (US\$3 billion), or 1.8 percent of gross domestic product (GDP) in 2007/2008.

## Increased quotas of already subsidized food items

The government increased the overall food subsidy by raising the quantities of food items that were already subsidized for beneficiaries.

## Public sector basic wages raised by 30 percent and pensions by 20 percent

The cost of these measures, estimated at LE14.4 billion (US\$2.6 billion), was covered from a range of price and tax increases.

Reduced import tariffs on food items during 2008 (by 6.5 percent), while also imposing an export duty on rice, before entirely banning rice exports in April 2008. In early February 2009, the general ban on rice exports was extended until further notice, although some conditional rice exports were to be allowed later in 2009. The ban resulted in a drastic decrease in rice exports for 2008, in addition to the intended reduction in domestic consumer prices.



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33 The Egypt IAA mission report is comprehensive and highly relevant to many of the aspects covered by the synthesis report, but it was not possible to incorporate its findings into the main body of the synthesis report (with the exception of the country tables) because the document's final approval by the government was still awaited while the synthesis report was being completed. It is worth mentioning that the Government of Egypt was largely able to respond to – and cope with – soaring food prices through a number of measures, mainly owing to a good macroeconomic situation during 2007/2008. However, in late 2008 and early 2009 the government's capacity to respond to the needs of the poor and food-insecure was challenged by rapid deterioration of economic growth prospects and the external trade position, resulting from the world financial crisis and economic slowdown.

34 Complemented by additional information provided by the FAO Representative in Egypt and Mark Smulders (FAO).

## Action plan/intervention strategy recommended by the IAA mission

### I. Improve immediate access to food and nutrition

Under this heading, the IAA mission recommended the following:

- a) Strengthen existing safety nets and improve targeting mechanisms.
- b) Reform the current food subsidy programme through an improved quality and nutrient
- c) Expand rations provided in school feeding programmes;
- d) Increase the Ministry of Social Security (MOSS) assistance provided to vulnerable households, by improving and reinforcing the cash transfer programme.

## II. Increase agriculture sector productivity and strengthen livelihoods

#### 1. Policy measures:

- a) a consistent and transparent pricing policy for key staples;
- b) new legislation for the establishment of agricultural cooperatives;
- c) support to fish farming/aquaculture;
- d) mitigating the risk of future price increases with financial instruments.

### 2. Boost smallholder farmers' production in the short term:

- a) support smallholders with access to certified seeds and microcredit;
- b) increase smallholders' access to fertilizers:
- c) establish measures for preventing outbreaks of avian influenza, while rebuilding livelihoods and improving diets.

## 3. Strengthen agriculture sector productivity in the medium to long term:

- a) rebuild herds, especially small ones, through improved access to credit (microcredit) for landless and smallholder farmers;
- b) strengthen value chains and promote agro-industries for food security;
- c) establish measures for reducing losses and inefficiencies in the entire food supply chain, including post-harvest losses;

- d) strengthen marketing infrastructure for the poultry sector;
- e) provide loans for milk collection centres:
- f) rehabilitate rural roads and market infrastructure:
- g) encourage private-public partnerships in agroprocessing and strengthening of market infrastructure;
- h) increase access to agricultural and technical extension services.

### 4. Investment in improved irrigation water use efficiency:

- a) reduce land degradation and increase water-use efficiency;
- b) increase irrigation water-use efficiency.

## III. Comprehensive intersectoral support programme for Upper Egypt

- a) Develop a comprehensive social protection strategy.
- b) Increase slaughterhouse capacity for poultry.
- c) Ensure risk management for protection against future shocks.

#### IV. Cross-sectoral actions

- a) Better coordination of information and analysis on food security, nutrition and vulnerability.
- b) Development of market information and early warning systems.
- c) Climate risk assessment for rural communities in the Nile Delta.

The IAA mission recommends a public-private investment programme of US\$770 million to \$830 million to address mainly short- and medium-term challenges to poverty, food insecurity and malnutrition reduction. About onethird of this amount should be invested immediately in strengthening smallholder production capacity and revising the food subsidy programme. The remainder should be invested in medium-term programmes in support of strengthened agriculture sector production and marketing efficiency and for the implementation of a better targeted food subsidy programme.

## The Gambia

(Full-fledged IAA, November 2008)

## Government's response

For immediate needs, the government undertook the following measures:

- Sought several million tonnes of seeds and fertilizers from various regional and bilateral development partners.
- Purchased fertilizer, pesticides, groundnut, rice, seeds and other cereals, which were distributed to farmers on credit.
- Entered into an understanding with traders on a price ceiling of not more than D 1 000 until end of September 2008.
- Reduced the sales tax on rice from 15 to 5 percent, subsequently reducing it further to zero percent in June, to contain dramatic price rises.
- Published a President's Advocacy message asking the public to go "back to the land" for farming.
- Planned a substantial increase of the area identified for rice cultivation in the long term, and assistance to the provision of a loan facility to enable farmers to purchase tractors.
- In May 2008, established a National Task Force on Food Security, comprising a technical working group of government and other key stakeholders from the private sector and NGOs, as well as key UN agencies (WFP, FAO, UNDP), to address: i) the causes and impacts of the food crises – particularly concerning the main food staple, rice; ii) the increasing national food deficits exacerbated by the approaching hungry season; and iii) the challenge of meeting national food security and adequate nutrition levels.

However, the government cannot cover the long-term costs of providing subsidies to the agriculture sector, nor of reducing sales taxes (e.g. from 15 to zero percent); these are only short-term measures and longer-term solutions are needed.

## Action plan/intervention strategy

The national task force on the food crisis approved an immediate country action plan. The plan's overall objective is to provide social safety nets by increasing the productive activities of vulnerable groups to minimize the impact of soaring food prices (reaching about 50 percent of vulnerable households in the country).

The country action plan comprises three major themes for the short and medium/long terms:

- 1) support to agricultural production;
- social safety nets and support to food security;
- 3) an enabling environment for promoting policy measures and market access.

The country action plan of immediate measures has a total estimated budget of US\$44.22 million.

## Guatemala

(EC rapid appraisal, November 2008)

## Government's response

In response to the soaring food crisis, the government implemented an array of measures directed towards strengthening production, amplifying social protection and controlling the market.

#### Social protection measures

Extension and expansion of food aid programmes, mostly related to school feeding or conditional money transfer programmes.

#### Market interventions

Suppression of import tariffs on eight staple foods (including eggs, chicken, white and yellow maize and wheat flour), fertilizers and agrochemicals.

#### Support to agricultural production

The Ministry of Agriculture launched a programme to increase the production of basic grains, focusing on:

- increasing the number of beneficiary families from 28 000 to 120 000;
- improving the quality of maize seed, to generate a 50 percent increase in yields;
- construction of new storage facilities at the village level, including warehouses;
- massively increasing the production of seeds;
- providing technical assistance to producers;
- implementing agricultural extension systems to promote small-scale farmer productivity.

## Action plan/intervention strategy

The proposed response strategy has been formulated in the context of the EC Food Facility, in line with the National Policy for Food and Nutrition Security. It consists of the following components:

- Strengthening ongoing initiatives on food and nutrition:
- a) support food assistance and emergency nutrition interventions;
- b) strengthen vulnerability information and monitoring systems.
- 2. Improving access to production inputs:
- a) promote the collective purchase of agriculture inputs;
- b) promote the use of organic fertilizers, general agricultural inputs and improved seeds;
- c) enhance support to local seed production systems.

- Technological improvements and agricultural techniques:
- a) validate and transfer improved agronomic practices;
- b) introduce soil fertility programmes;
- step up extension on available technologies for maize and beans;
- d) provide technical assistance and training to farmers.
- 4. Supporting post-harvest management:
- a) provide training on quality norms for maize and beans;
- b) develop technologies for grain drying;
- c) improve access to mobile laboratories;
- d) support the development of cleaning, drying and grain storage methods;
- e) provide technical assistance and training to farmers and extension workers.
- 5. Supporting the marketing of surplus harvest:
- a) encourage the establishment of agreements and negotiations among producer, trader and entrepreneur organizations;
- b) strengthen producer organizations;
- c) carry out preliminary studies to assess the necessary investments and logistics for setting up warehouses and processing centres for maize;
- d) improve market information systems.
- Supporting the organization of smallscale producers by strengthening their technical, administrative, financial and commercial capacities.
- Incentive programmes for soil and water conservations and reforestation: (FFW, FFT).
- 8. Agricultural diversification:
- a) establish interest groups;
- b) promote appropriate and effective technological alternatives that can be implemented through small producer organizations;
- c) provide technical training (hands-on approach);
- d) establish entrepreneurial groups (marketing associations).

The estimated budget for this proposal is **15 million euro**, for a period of 24 months.

## Haiti

(Full-fledged IAA, September 2008)

## Government's response

Medium-term initiatives and immediate responses to soaring food prices have already been adopted as an emergency measure by the government (for which four different plans have been prepared), the international community and the UN system. The ISFP mission recommended that the government should gather together the different plans for responding to the food crisis, which it prepared in a single document, extending the duration of actions for two to three years. The government then submitted a draft version of the National Food Security and Rural Development Plan (PNSADR).<sup>35</sup>

# Medium-term action plan (covering two to three years)

The medium-term action plan within the framework of the ISFP was drawn up, taking into consideration ongoing national planning exercises, particularly the National Growth and Poverty Reduction Strategy Document, the provisional version of the policy to revive the agriculture sector and the draft PNSADR.

#### I. Policy measures

- Agricultural input subsidies (particularly for fertilizer access): This will focus on the distribution of purchase coupons for targeted producer groups. The rationale is that if international prices were to return to their precrisis levels, import duties and taxes on rice should be increased to an appropriate level to support national production.
- 2) Energy policy measures, to discourage charcoal production, which is a major source of environmental degradation, by encouraging fuelwood saving and the use of other energy sources for cooking, and restricting the subsidization of fuel prices to public transporters only (by issuing purchase coupons), to lower transport costs for the population and the costs of transporting agricultural products from rural markets to towns.

#### II. Agricultural recovery measures

(cost estimated at **US\$180 million** over two to three years)

- Strengthening the institutional capacities of the agriculture sector, mainly by reforming, restructuring and galvanizing the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR).
- Fostering sustainable agriculture and improved land management: watershed management and local development, and guaranteed land tenure, particularly in areas with high agricultural potential.
- Reviving agricultural production: subsidizing fertilizer access, supplying agricultural implements to vulnerable farms, providing access to quality seed, reviving animal husbandry, developing poultry farming and supporting animal health measures.
- 4) Modernizing rural infrastructure: developing hydro-agricultural schemes and irrigation, rehabilitating and maintaining rural roads and tracks, equipping rural markets and developing fisheries and aquaculture.
- 5) Supporting the development of agro-industrial sectors: developing milk processing and promoting the export of tropical products and fruit.
- 6) Fostering a new strategy for marketing agricultural products.
- 7) Strengthening structures and services to support agricultural production: setting up a network of multiservice agricultural centres, and providing access to rural financial services.

# III. Food and nutrition security and social safety nets

- Providing food aid for vulnerable groups, including through school canteens and nutrition assistance.
- 2) Food/cash for high-intensity labour (HIMO).
- 3) Increasing the purchase of local food products.
- 4) Processing and fortifying food products.
- 5) Supporting the creation and management of strategic food stocks.
- 6) Supporting the development of the capacities of the Ministry of Public Health and Population, and the Food Security National Coordinator.

WFP has estimated that the provisional requirements for 2009 alone will be US\$100 million.

<sup>35</sup> The new government, in place since September 2008, has not formally endorsed the IAA mission report, and has not yet finalized the PNSADR (presented at the Madrid Conference in July 2008).

# Madagascar

(Full-fledged IAA, October 2008)<sup>26</sup>

## Government's response

Measures adopted by the Government of Madagascar to cushion the impact of soaring fuel and food prices on the population (Budget Adjustment Law of July 2008):

- Temporary VAT exemption on rice and kerosene for household use (loss of revenue of about 0.3 percent of GDP); this tax relief was expanded to include agricultural equipment and implements, including those used in dairy production.
- Pegging electricity prices until October, which will require supplementary budgetary transfers (0.2 percent of GDP) to the electricity utility company.
- Targeted transfers to the poorest people, such as through FFW and school feeding programmes (0.1 percent of GDP).
- Subsidizing a second rice harvest and urban transport (0.2 percent of GDP).

The government has also launched an off-season crop operation, using FMG 15 billion from the Ministry of Agriculture and Environment budget, US\$10 million provided by the World Bank, and US\$15 million to be raised in the short term. These funds will be used to subsidize agriculture by up to 80 percent by the government (fertilizer, short-cycle seed, etc) in regions where agro-ecological conditions make it possible to have two harvests a year.

## Action plan/intervention strategy

The menu of complementary short- and mediumterm actions, supplementing the government's existing budgets and ongoing programmes and projects, is as follows:

	Short-term: meeting immediate needs, particularly of the most vulnerable population	Medium-term: building up medium-term resilience and contributing to food and nutrition security
Objective	To improve the food availability and access and nutritional conditions of the most vulnerable population	To consolidate food and nutrition security (availability, access and stability), by addressing the factors that piloted the food crisis
Results	<ol> <li>Availability: promoting small farmer off-season food production</li> <li>Stability: improving the efficiency of the food product marketing sector</li> <li>Access: emergency food and nutrition aid for vulnerable groups, (enhanced food safety nets)</li> </ol>	Availability: consolidating sustainable food production growth     Stability: improving food markets     Access: consolidating social protection systems (resilience of vulnerable groups)
Cross-cutting	Fiscal policy adjustments Institutional development and capacity strengthening: - policy/planning approaches (sector planning, etc.) - strengthening of information systems - monitoring/evaluation, impact analysis, etc efficient early warning systems	

The following table summarizes the supplementary costs and funding in US\$ million.

Action plan component	Short-term (August 2008–May 2009)	Medium-term (June 2009–2012)
Availability – Agricultural production support	25–30	80–90
2. Stabilization of markets and prices	3–5	25–30
3. Access and food safety nets	15–17	80
Total (US\$ million)	45–50	185–200

<sup>36</sup> Complemented by additional information provided by the FAO Representative in Madagascar.

## Malawi

(EC rapid appraisal, November 2008)

## Government's response

In response to the impact of increased food prices on consumers and to support farmers' supply response, the following measures were launched:

- Allocating a further MK 19 400 000 000 to the Input Subsidy Programme for the 2008/2009 financial year by the Ministry of Agriculture and Food Security.
- Increasing maize storage capacity through the construction of 600 metal storage facilities across the country.
- Ensuring the availability and affordability of maize to protect vulnerable groups
   (especially consumers). In late August 2008, the Government of Malawi banned the private purchase and sale of maize by large-scale traders, allowing only the Agricultural Development and Marketing Corporation (ADMARC), the State's grain marketer, to do so. Furthermore, informal cross-border trade registered a 44 percent decrease in maize imports between July and August 2008, reportedly owing to the government ban on private maize trade (USAID/FEWSNET, 2008).

## Action plan/intervention strategy

The overall objective of Malawi's response and intervention is to reduce the adverse impact of volatile food prices on poor rural and urban people in the short term, and to ensure sustainable food security in the medium to longer terms.

The main focus of the proposed intervention strategy is to strengthen and expand support for the implementation of the Input Subsidy Programme, which will need to be done through budget support to the Government of Malawi. This intervention is the most practical and efficient short-term response to volatile oil and fertilizer prices, which are likely to aggravate the shortfall in budget support for the Input Subsidy Programme. Such support will increase food security at both the household and national levels, and hence avoid the need for food imports, which may affect the balance of payments for the country.

In addition, the government will seek additional resources to support medium-term actions in the following priority areas:

- 1) Reducing the vulnerability of the poor to high and unstable food prices.
- Strengthening government capacity to ensure an enabling environment for sustainable agricultural growth by the private sector and other players in the agriculture sector.

After pledges/commitments by donors, the realistic estimated funding gap is expected to be US\$40 million to \$45 million.

## Mauritania

(Full-fledged IAA, August 2008)37

## Government's response

The Mauritanian authorities reacted promptly by:

- reducing customs duties on certain products from July 2007;
- reducing VAT on other products from December 2007;
- launching a wide-ranging Special Intervention Programme (PSI) in April 2008, for US\$2 million funded from its own resources.

## Post-PSI action plan, food security support initiative 2009–2011

#### I. Policy and marketing measures

- 1) Consumer protection, particularly for the most vulnerable, by adopting PSI measures, particularly: i) gas, electricity and water subsidies, which might be gradually scaled down; and ii) subsidizing wheat flour subsidies and abolishing rice taxation.
- 2) Promoting vegetable farming by vulnerable groups: The purpose is to draw support from the WFP and the Social Welfare and Food Security Commission (CPSSA) for FFW activities to strengthen local food security and ensure that price increases benefit poor producers.

## II. Reviving private investment

## III. Implementing measures that make a difference to crop production

- 1. Improved traditional rainfed crop and rice seeds.
- 2. Rehabilitating valley hydro-agricultural schemes.
- 3. Rehabilitating river valley watercourses.
- 4. Programme to intensify lowland cropping and dams in agropastoral zones. Postharvest activities and support for organizing crop sectors.

- 5. Improving the support, consultancy and crop protection services of the Ministry of Agriculture and Environment and the National Rural Development Company (SONADER).
- 6. Promoting wheat farming.

#### IV. Livestock operations

- 1. Providing specific support for poor people in agropastoral systems.
- 2. Intensifying production systems by adopting a crop-oriented approach.
- 3. Facilitating transhumance by continuing to implement pastoral hydraulics programmes to exploit underutilized pastoral resources.

## V. Social protection actions proposed by WFP

- 1. Food assistance for moderately malnourished vulnerable groups, to pre-empt severe malnutrition.
- 2. Free food distribution targeting poor households in urban and rural environments.
- 3. Food assistance in primary school canteens.
- 4. A FFW and protected relief and recovery operation (PRRO) for the rural poor.
- 5. CFW and/or subsidized coupons for identified poor urban and rural households.
- 6. Village food security reserves.

#### Cost estimate for the 2009 to 2011 initiative

The estimate is about US\$400 million, or US\$100 million to \$150 million a year, broken down approximately as follows:

- policy and marketing measures: US\$60 million a year;
- production activities: US\$200 million;
- social protection activities (2008 to 2010): US\$128.5 million, of which US\$33.5 million financed under IPSR and US\$14.8 million financed out of the WFP country programme for 2003 to 2010. The balance of US\$80.1 million still has to be found.

<sup>37</sup> Based on a summary note of the IAA report provided by Jacques Strebelle (FAO).

# Mozambique

(EC rapid appraisal, November 2008)

## Government's response

In 2008 the government adopted a set of measures to reduce the effects of the food price rises on overall living costs.

- Monthly salaries were increased by 15 to 30 percent, depending on economic sector. This measure raised the monthly minimum wage by US\$10 to \$20, to about US\$80. Mozambique has close to 500 000 wage labourers in formal organizations. This measure therefore has limited social effects and is territorially concentrated in the cities.
- Subsidies for fuel consumed by urban public transport services were implemented, to avoid too high a rise in the price of transport for users
- To cover the increase in expenditures caused by the increases in wages and subsidies (the State is a major employer, accounting for about one-third of formal jobs), tax increases were announced on non-essential consumer goods – tobacco and alcohol, except beer – and treasury bonds were issued.
- The budget allocated to agriculture was increased.
- The State continued to allocate Mt 7 000 000 (approximately US\$285 000) from the budget to each district in the country, with guidelines conducive to more careful use in small productive and employment-generating projects. Official policy statements reinforced the prioritization of government actions at the district level within the decentralization strategy.

## Action plan/intervention strategy

In April 2008, the Government of Mozambique established an inter-ministerial task force, which developed a soaring food price action plan comprising two main strategies: economic and agricultural growth measures, and social protection measures. For the agriculture sector, a draft action plan for food production was prepared by the Ministry of Agriculture, with the following priority areas of intervention:

- Increased local seed production by producer associations (out-grower schemes) through the private sector.
- Strengthened national seed quality control at the provincial level, through capacity building and provision of equipment, including:
  - a) rehabilitation of seed control laboratories;
  - b) improved technical and coordination capacity for seed quality control.
- 3) Increased agricultural production.

In line with the draft action plan, international organizations proposed the following interventions:

FAO: Establish an input voucher programme, inviting a network of agricultural input suppliers (existing retail outlets in the different areas) to participate as outlets for the supply of agricultural inputs. Subsidized agricultural inputs will be made available to farmers through the agrodealer networks already trained, in partnership with the Ministry of Agriculture and the IFDC. (Estimated budget: US\$12.78 million)

WFP will focus its purchasing of maize and beans on smallholder farmers. By offering an additional and valuable market opportunity, the initiative will increase smallholder farmers' sales, with positive effects in terms of both poverty reduction and food security for a large number of families. (Estimated budget: US\$3.03 million)

IFAD will scale up and expand, as appropriate, the financing to ongoing IFAD-financed programmes and projects in the districts and thematic areas identified as priorities under the government's draft action plan for food production. (Estimated budget: US\$10.72 million)

- Sofala Bank Artisanal Fisheries Project;
- Rural Finance Support Programme;
- National Programme for Agricultural Extension;
- Rural Markets Promotion Programme.

## Nepal

(Full-fledged IAA, October 2008)

## Government's response

#### Policy measures<sup>38</sup>

- State emergency food stocks increased by 15 000 tonnes.
- Extra NR 109 million (US\$1.71 million) to the Nepal Food Corporation to purchase food stock for future distribution.
- Establishing a ban on exports of rice, maize, wheat from 30 April 2008.

## Immediate responses (six months to one year)

- Effective mobilization of food assistance.
- Implementation of various support schemes for farmers, to enhance productivity and production for the next crop season.
- Large-scale distribution of improved seed kits to farmers.
- Support to rehabilitation of micro-irrigation schemes and strengthening of existing farmer-managed irrigation schemes.
- Implementation of pro-poor income enhancement programmes to increase access to food.
- Market development; collection centres.

The government also developed a short-term response plan (one to three years), and mediumand long-term strategies. The ISFP action plan detailed in the following is based on these plans.

### Action plan/intervention strategy

The proposed action plan is consistent with the government's Three-Year Interim Plan (2007 to 2010) and its current response strategies to counter soaring food prices. However, in the interest of retaining focus, the proposed action plan covers only a strategic and targeted selection of urgent priorities and needs for agriculture and food security, and not all interventions planned for the sector.

- I. Short term (six months to two years): The main objective is to ensure the food and nutrition security of the most vulnerable groups.
- 1) Provide an effective and targeted food safety net to the most vulnerable households, with FFW, CFW and other food distribution modalities through high-priority government rural community infrastructure works programmes.
- 2) Provide agricultural inputs (seeds and fertilizer) to enable the most vulnerable households to produce food.
- 3) Develop and rehabilitate micro-irrigation schemes.
- II. Medium term (one to five years): In parallel with ensuring that measures and interventions are taken to address immediate, short-term concerns, it is imperative that the government is assisted in its efforts to increase food production and stabilize food security over the medium and longer terms.
- 1) National agriculture, food security and nutritional surveillance system.
- 2) Medium-term national programme for food security.
- 3) Development of seed sub-sector.
- 4) Fertilizer and soil fertility management.
- 5) Small-scale irrigation development.
- 6) Rural and agricultural road development.
- 7) Post harvest management, storage and food distribution.39
- Research and technology transfer.

The financing gaps in the action plan remain indicative, and should be reconciled with the government's medium-term expenditure framework: they stand at US\$88.8 million for the immediate actions (six months to two years) and at US\$546.2 million for the medium term (one to five years).

<sup>38</sup> Based on GIEWS database on Policy measures www.fao.org/giews/english/policy/index.asp.

<sup>39</sup> This would include the establishment of market growth centres.

# The Niger

(Full-fledged IAA, December 2008)

## Government's response

In the face of soaring prices worldwide, the government developed a National Strategy to Combat Soaring Prices and Revive Production in March 2008, consisting of the following:

- A three-month suspension of import duties and taxes on edible oil, wheat flour, sugar, powdered milk and rice.
- Suspension of the mandatory quota of local rice withdrawals.
- Grant of customs credits to importers who had not disposed of their rice stocks on the market at the moment the tariff measures came into force.
- Increased pay for civil servants.
- Implementation of a plan to support vulnerable populations, initiated by the National Food Crisis Prevention and Management Unit.
- CFW: development work on pond construction, extension and management, small-scale irrigation, rehabilitating rural tracks, etc.
- Strengthening 200 existing grain banks.
- Sale of cereals at moderate prices.
- Free targeted food distribution in vulnerable zones.
- Nutrition component: the nutritional recovery programme scheduled for 2008 is continuing.

### Action plan/intervention strategy

The short- and medium-term priority interventions (2008 to 2010) hinge on improving the supply of food products and developing social safety nets, consistent with Rural Development Strategy programmes.

## I. Measures to improve food supplies

- 1) Improving plant production and productivity:
  - a) action on fertilizer and the sustainable management of soil fertility;
  - b) action on seed;

- c) action on developing *niébé*, cassava, groundnuts, *voandzou*, potato and sweet potato;
- d) mechanization and processing support;
- e) irrigation development.
- Improving livestock production and productivity:
  - a) supporting the promotion of dairy production by implementing the integrated project for development of dairy livestock in the Niger;
  - b) reviving the homestead poultry sector;
  - supporting the implementation of fodder crop mowing, conservation and storage microprojects and *niébé* haymaking accessible to the poor;
  - d) producing and marketing concentrated animal feed;
  - e) producing and marketing livestock feed.
- Implementing a support and advisory unit for rural development and the inclusion of gender concerns in agricultural production activities.

## II. Promotion of techniques and mechanisms for stabilizing markets and farm incomes

## III. Implementing a medium-term social safety net programme

- 1) Existing social safety nets: traditional food assistance for the most vulnerable groups.
- 2) Complementary social safety nets: non-food assistance for the poorest and most vulnerable populations.
- 3) Strengthening the capacities of the food crisis prevention and management unit.

The cost estimate for the proposed short- and medium-term measures is as follows: measures to improve the supply of agricultural products are estimated to cost **US\$132.2 million**, while those for social safety nets are estimated at **US\$83.6 million** for 2009.

## Sierra Leone

(Full-fledged IAA, July 2008)

## Government's response

In response to rising rice food prices, the Government of Sierra Leone established an emergency inter-ministerial task force, with the Ministers of Agriculture, Finance, and Trade and Commerce, to lead and coordinate all national initiatives. The government has also actively engaged development partners active in the country, and continuously monitors AU and NEPAD support frameworks for coordinated response actions and funding opportunities.

In line with its identified priorities, the government has initiated immediate mitigation policies which include:

- reducing tariffs on imported rice from 15 to 10 percent;
- assisting farmers with tractor services;
- implementing rice seed loans for the current planting season, and organic fertilizers.

## Action plan/intervention strategy

In collaboration with FAO, WFP, IFAD and the World Bank, the Ministry of Agriculture, Forestry and Food Security has drafted an integrated national response strategy proposal, which provides for short-, medium- and long-term interventions.

The national response focuses on three major mitigation and response strategies:

- 1) Policies to mitigate price increases through reductions in tariffs on imported rice and discussions with rice importers to minimize the pass through of price increases to consumers.
- 2) Safety nets to mitigate the impact of rising prices on the poorest and most vulnerable, through targeted programmes, such as FFW, CFW, school feeding and supplementary feeding for vulnerable groups - children under five years, pregnant and lactating women, and households affected by HIV/AIDS.
- 3) Increasing national production by providing such incentives as additional seeds and fertilizers, encouraging investment in larger producers, and improving handling and transport to ease access to food markets. Although these can be expected to have fairly rapid impacts, the characteristics of rice cultivation and natural conditions mean that the impacts will not be fast enough to ease the burden on poor households during the hungry season and in the short term.

The needs for the short term (2008 to 2009) are estimated at US\$53.85 million, and for the medium and long terms (2010 to 2015) at US\$140.51 million.

## Sri Lanka

(EC rapid appraisal, November 2008)

## Government's response

In response to price increases the government decided to implement the following:

- Lower import tariffs on rice and several other essential commodities: i) tariffs on wheat flour and milk powder had gradually been lowered earlier to contain the rise of domestic prices in the context of global price increases since 2005/2006; and ii) imports of poultry meat and the reduction of tariffs on canned fish, sugar, potatoes and condiments such as chillies and onions were implemented at different times over the last year with the intention of keeping domestic prices affordable to consumers.
- As an urgent measure to counter the sharp increases in rice prices during the lead-up to the traditional New Year festival in April, the government decided to order a consignment of rice from Myanmar at a concessionary price, as exports from traditional suppliers such as India, Pakistan and Thailand were either not available or too expensive. However, the supplies did not arrive until a few months after the festival, and the quality of the rice was not favoured by consumers.
- In response to the severe budget limitations caused by the continuous financing of the war, the government has responded to increased prices on global markets through periodic upward fuel price revisions affecting consumers. However, in adjusting fuel prices, kerosene subsidies were increased, slowing down the rise in its price to support the poor who are its main users. Nevertheless, the increase in energy prices has contributed significantly to spiralling inflation, which has marked its highest and most sustained levels in recent history.

## Action plan/intervention strategy

The strategy for improving food security comprises three main elements:

- Expansion, aimed at increasing the availability of food and feed ingredients through enhanced domestic production.
- Intensification, to address the productivity gap, thereby improving the competitiveness of domestic production and resource incomes.
- Diversification aimed at the commercialization of food production by achieving improved efficiency in resource management, enhanced income opportunities and increasing incomes.

Activities included in the action plan are as follows:

- Establish partnership agreements and clear operational procedures involving all stakeholders – the government, ILO, WFP, international financial institutions (IFAD, the World Bank, the Asian Development Bank) and local community-based organizations.
- 2) Finalize criteria for the selection of areas, beneficiaries and input distribution modes.
- 3) Engage implementing partners in needs assessment and beneficiary selection.
- Procure inputs and contractual services, land and irrigation works and other rehabilitation activities.
- 5) Carry out training on improved farming practices etc.
- 6) Launch programmes for strengthening agricultural extension.
- Design training and capacity building to strengthen the monitoring and evaluation system.

The estimated budget cost of this intervention is US\$20.8 million.

# United Republic of Tanzania

(EC rapid appraisal, November 2008)

## Government's response

The government has taken several steps to reduce the impact of food price increases on vulnerable households:

- temporary export ban on maize;
- removal of duty on cereal imports;
- releases from the strategic grain reserve for sale on the open market;
- increased budget allocation for fertilizer subsidies (linked to a voucher scheme that has been tested over the past three years).

## Action plan/intervention strategy

The Tanzania Accelerated Food Security Programme proposal for an integrated response seeks to address short-term issues that would accelerate food availability and accessibility through improved agricultural production at all levels of the economy.

The programme will follow a two-track approach (short- and medium-term) to complement ongoing agriculture sector development programme efforts. In the short term, the strategy will be to address immediate challenges by accelerating ongoing efforts aimed at improving access to improved agricultural inputs for smallholder farmers and enhancing the use of irrigation technology. As a priority, the programme will also focus on putting into place a safety net system to protect the rights to food of the most vulnerable groups. The programme will support a number of strategic short-term initiatives, while at the same time seeking to integrate and streamline medium-term issues into the agriculture sector development programme.

The specific objectives of the programme are to:

- 1) mitigate escalating fertilizer prices, making them more affordable to farmers;
- 2) empower rural agrodealers (financial and technical) so that they can supply inputs to farmers at affordable prices within their localities;
- 3) support the production of improved seeds at the local level (quality declared seeds) and within the country (certified seeds), which will be cheaper than imported seeds;
- 4) rehabilitate existing irrigation and marketing infrastructure for smallholder farmers;
- 5) put in place and support safety net systems to protect the rights to food of the most vulnerable groups;
- 6) strengthen public awareness.

The programme will have five components:

- 1) scaling up the input voucher scheme;
- 2) supporting/strengthening input markets and empowering agrodealers in rural areas;
- 3) improving the seed system;
- 4) constructing and rehabilitating infrastructure;
- 5) supporting safety nets through the work-forassets programme for the most vulnerable groups who cannot afford the contribution for inputs provided through the voucher programme.

The total estimated budget is US\$133.9 million.



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