



**FAO Regional Office for the Near East and North Africa  
FAO Representation in Jordan**

**PLAN OF ACTION  
Resilient Livelihoods for  
Agriculture and Food and Nutrition Security  
in Areas of Jordan Affected by the Syria Crisis**

**Amman, Jordan  
January 2014**





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**PLAN OF ACTION: JORDAN  
2014–2018**

**Resilient Livelihoods for  
Agriculture and Food and Nutrition Security  
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## TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS	II
EXECUTIVE SUMMARY	III
1. INTRODUCTION	2
2. PRE-CRISIS SITUATION	6
2.1 Farming Systems of Jordan	6
2.2 Role of Agriculture in the National Economy	6
2.3 Rural Poverty	7
2.4 Food Security	9
3. SITUATION ANALYSIS	12
3.1 Data Availability	12
3.2 Impact of the Syria Crisis on Agricultural Trade	12
3.3 Situation and Overview of Syrian Refugees in Jordan	14
3.3.1 Overall Status of Syrian Refugees Living in Host Communities	14
3.3.2 Overall Status of Communities Hosting Syrian Refugees	16
3.4 Food Access and Utilization	17
3.5 Food Safety	17
3.6 Agricultural Livelihoods	18
3.6.1 Transboundary Animal Diseases	18
3.6.2 Transboundary Crop Diseases and Pests	18
3.6.3 Marginalization of Smallholder Farmers	19
3.6.4 Depletion of Natural Resources	19
4. FAO'S APPROACH TO RESILIENT LIVELIHOODS	24
4.1 FAO's Strategic Objective 5 (Resilience)	24
4.2 FAO's Strategy for Strengthening Resilience to the Syria Crisis	25
4.3 FAO's Subregional Action Plan for Strengthening Resilience to the Syria Crisis	27
4.4 FAO Action Plan for Building Resilience in Communities Hosting Syrian Refugees in Jordan	28
4.5 Connection between FAO's Action Plan for Jordan and FAO's Resilience Objective	30
5. NATIONAL PROGRAMMES FOR RESILIENT LIVELIHOODS THROUGH AGRICULTURE AND FOOD AND NUTRITION SECURITY	34
5.1 Agricultural Livelihoods Options	34
5.2 Cross-cutting Actions	39
5.2.1 Capacity Development	39
5.2.2 Gender Equity	39
5.2.3 Strategic Partnerships	39
5.3 Subprogramme Priorities	54
5.4 Action Plan Budget	54
5.5 Agricultural Macro-economic Response Options	55
ANNEXES	
1. CONNECTION BETWEEN THE FAO ACTION PLAN FOR JORDAN AND UNITED NATIONS DEVELOPMENT FRAMEWORKS AND ORGANIZATIONS	59
2. CONNECTION BETWEEN THE FAO ACTION PLAN FOR JORDAN AND PROPOSED UNITED NATIONS RESPONSES TO THE SYRIA CRISIS	64

## ABBREVIATIONS AND ACRONYMS

ACTED	- Agency for Technical Cooperation and Development
BERP	- Badia Ecosystem Restoration Program (of UNCC)
CPF	- Country Programming Framework (of FAO)
DRM	- Disaster risk management
DRR	- Disaster risk reduction
ECTAD	- Emergency Centre for Transboundary Animal Diseases (of FAO)
FAO	- Food and Agriculture Organization of the United Nations
FBS	- Farmer business school
FFA	- Food assistance for assets (of WFP)
FFS	- Farmer field school
FFT	- Food assistance for training (of WFP)
FMD	- Foot-and-mouth disease
GDP	- Gross domestic product
GIEWS	- Global Information and Early Warning System
GIS	- Geographic Information Systems
ha	- Hectare
ICARDA	- International Center for Agricultural Research in Dry Areas
IFAD	- International Fund for Agricultural Development
ILO	- International Labour Organization
IDP	- Internally displaced person
JD	- Jordanian Dinar
LSD	- Lumpy skin disease
MoA	- Ministry of Agriculture
NAJMAH	- National Alliance Against Hunger and Malnutrition
NCARE	- National Center for Agricultural Research and Extension
NGO	- Non-governmental organization
OCHA	- United Nations Office for the Coordination of Humanitarian Affairs
OIE	- World Organisation for Animal Health
PPR	- <i>Peste des petits ruminants</i>
PRRO	- Protracted Relief and Recovery (project of WFP)
PSD	- Planning and Studies Department (of MoA)
RNE	- Regional Office for the Near East and North Africa (of FAO)
RRP	- Regional Response Plan (of UN for the Syria crisis)
SHARP	- Syria Humanitarian Assistance Response Plan
SO	- Strategic Objective (of FAO)
TAD	- Transboundary animal disease
TCP	- Technical Cooperation Programme (of FAO)
UN	- United Nations
UNCC	- United Nations Compensation Council
UNDAF	- United Nations Development Assistance Framework
UNDP	- United Nations Development Programme
USAID	- United States Agency for International Development
USD	- United States Dollar
WFP	- World Food Programme

## EXECUTIVE SUMMARY

### Background

The Syria crisis, which initially emerged in early 2011 and worsened dramatically in 2012 and 2013, has compounded the already difficult economic situation in the majority of Syria's neighbouring countries. The growing influxes of refugees and returnees, the dramatic disruption in trade within the region and the heightened uncertainty have all affected Jordan. Over 550 000 Syrian refugees are in Jordan, equal to 8 percent of the country's total population. The largest influx of Syrian refugees was between October 2012 and May 2013. Seventy-seven percent of the refugees live outside of camps, mostly in rented accommodation and with free access to education and healthcare. The largest populations of Syrian refugees are found in Mafraq, Amman and Irbid Governorates, with 33, 25 and 23 percent of the total population, respectively; with 9 percent in Zarqa, 3 percent in Balqa and 2 percent in each of Jarash and Ajloun.

In November 2013, the Food and Agriculture Organization of the United Nations (FAO) fielded an agriculture programme development mission to Jordan with the objectives of updating and expanding its "Agricultural Livelihoods and Food Security Impact Assessment and Response Plan for the Syria Crisis in the Neighbouring Countries of Egypt, Iraq, Jordan, Lebanon and Turkey" of March 2013, and developing an action plan of key short-term humanitarian relief, medium-term restoration and long-term development interventions aimed at the stabilization and recovery of the Jordanian agriculture sector and building resilience of Jordanian host communities to help them withstand the impact of the Syria crisis. This "Action Plan: Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas of Jordan Affected by the Syria Crisis" (referred to in this executive summary as the "*FAO Action Plan for Jordan*") has been prepared through stakeholder consultations and in line with the United Nations Office for the Coordination of Humanitarian Affairs (OCHA)-led draft "Towards a Comprehensive Regional Strategy – Dealing with the Effects of the Syria Crisis", the United Nations Development Programme (UNDP)-led national "Resilience-based Development Response to the Syria Crisis" and FAO's "**Subregional Strategy and Action Plan: Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas affected by the Syria Crisis**".

### Impact of the Syria Crisis on Agricultural Livelihoods

There is a serious lack of information available on the effects of the Syria crisis on Jordanian host communities – compared to that on Syrian refugees living in those communities. Host communities are primarily affected by rising prices and stretched public services due to the rapidly expanding refugee population. Since 2011, unemployment in Jordan has remained stable and has only recently recorded an upward trend. In total, 14 percent of the Jordanian population (i.e. 900 000 people) live below the official poverty line. Approximately 320 000 of these are located in vulnerable areas with particularly high refugee concentrations.

These developments have induced considerable losses of farm incomes; increases in costs of transportation, agricultural inputs, services and food; falling tourism and remittances; and dwindling investments, particularly in those governorates bordering Syria and hosting refugees. Another key impact on the host communities has been the competition for scarce resources, resulting in rising prices for housing and food. Of particular concern are "poverty pockets" such as those in Mafraq Governorate which contain high concentrations of refugees and where at least one in five of the national population already lives below the poverty line. Here, average rents have reportedly more than tripled and food prices have risen by 27 percent. The latter has a particularly negative impact on purchasing power as these communities on average spend 40 percent of their income on food items. Finally, strains are felt through reduced access to and quality of basic services.

The first and most important potential impact on Jordan's agriculture sector is the increased uncontrolled movements of livestock across borders from Syria and Iraq (especially the Badia

rangelands of Mafraq Governorate) – with a significant increase in the risk of transboundary animal diseases (TADs) affecting the animals of Jordan’s farmers and herders. This is a major concern because Syrian livestock have not been vaccinated against TADs and zoonoses for at least 18 to 24 months due to the collapse of Syria’s field veterinary services. Again, no official figures are available but isolated cases of lumpy skin disease (LSD), *peste des petits ruminants* (PPR), rabies and external and internal parasites and zoonotic *Rickettsia*, influenza and corona viruses were reported in Jordan between 2010 and 2013. The veterinary services of Jordan’s Ministry of Agriculture lack the resources to control the increased threat of TADs coming from Syria.

There is no evidence to date, but there is a similar significant risk with transboundary crop diseases and pests such as wheat rust and tomato leaf miner with the collapse of plant protection services in Syria, weak sanitary and phytosanitary controls at Jordanian border crossings and the recent completion of the FAO-supported project, “Regional Integrated Pest Management Programme in the Near East”. The productivity of Jordan’s crop subsector is already very low by global and pre-crisis Syrian standards and, with the reduced availability of irrigation water, any further losses in crop production could be damaging to impoverished rural communities in border areas.

It is estimated that there are some 57 000 landless, marginal and small-scale farmers found in the seven governorates of northern Jordan that are most severely affected by the Syria crisis, of which 40 percent of smallholder farmers from northern Jordan are found in Irbid Governorate, where nearly a quarter of the total population is Syrian refugees. Although there is no official data available to date, initial findings of socio-economic baseline surveys undertaken by non-governmental organizations (NGOs) have indicated that significant numbers of marginal and small-scale farmers and livestock breeders in Irbid and Mafraq Governorates (as well as the Jordan Valley) have suffered significant losses in farm income because of forced abandonment of farmlands (as a result of insecurity along border areas), falls in farm wages (for landless and marginal farmers only), loss of informal cross-border trading opportunities (“smuggling” agricultural inputs formerly heavily subsidized in Syria) and corresponding increases in the price of those inputs, reduced availability of irrigation water, reduced marketing opportunities for traditional export crops and a corresponding net decrease in farm-gate prices.

The total area of Jordan cultivated with vegetables has decreased from 49 000 ha in 2010 to 36 000 ha in 2012 as a result of the cessation of irrigation water supplies from Syria, a reduced share of irrigation water as more water is allocated for domestic use (given the increase in demand of Syrian refugees) and the increased costs of agricultural inputs and crop production.

Traditionally, livestock movements across parts of Jordan in the form of transhumance are very common – particularly across the Badia rangelands of southern Syria, northwestern Iraq and northeastern Jordan. The Badia rangelands are fragile semi-desert steppes characterised by a sparse vegetation cover (of nutritious species palatable for sheep and goats). The continued insecurity in Syria has meant that the cross-border movement of Bedouin herders from winter grazing in Syria to summer grazing in Iraq and Jordan has been severely disrupted. The protracted crisis has resulted in the nomadic and transhumant Bedouin herders abandoning their Syrian pastures and staying all year round on the rangelands of northwestern Iraq and northeastern Jordan. The consequences of this is the invasion of unpalatable species (weeds and scrub) in the Syrian pastures and overgrazing and land degradation (leading to potential desertification) of the Badia rangelands. There is no precise information but there is already evidence of overgrazing in northeastern Jordan as herders seek alternative animal feed sources, especially in winter months.



## FAO Action Plan for Building Resilience in Communities Hosting Syrian Refugees in Jordan

In line with national government priorities and with existing regional frameworks for addressing the Syria crisis, and in partnerships with national institutions, United Nations' (UN) agencies, non-state actors and private sector organizations, FAO has prepared a “**Subregional Strategy and Action Plan: Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas affected by the Syria Crisis**”. The overall goal of the Subregional Strategy is to “*strengthen the resilience of livelihood systems (including individuals, households, communities and agro-ecosystems) to absorb, recover and adapt in a sustainable way from the impacts of the Syria crisis, reduce risks, and anticipate and mitigate future shocks affecting the food and nutrition security and the renewable resource base*”. In this context, the Strategy identifies key emergency responses, agricultural restoration, livelihood recovery, risk-sensitive agricultural development and related policy and capacity development interventions aimed at humanitarian relief for internally displaced persons (IDPs), refugees and returnees; recovery and stabilization of national agriculture sectors; and strengthening the resilience of Egyptian, Iraqi, Jordanian, Lebanese and Turkish host communities to help them withstand the impact of the Syria crisis. The Strategy, which reflects FAO's global and regional frameworks (with the Syria crisis as its source and core), is articulated around four main mutually-reinforcing pillars, viz: **(i) support vulnerable and affected people coping with the impact of the crisis and protect their livelihood assets base for future self-reliance; (ii) promote prevention and impact mitigation measures; (iii) support information, monitoring and analysis networks; and (iv) institutional strengthening.**

FAO has, in turn, prepared a five-year national action plan for building resilient livelihoods for agriculture and food and nutrition security in communities hosting Syrian refugees in Jordan (2014 to 2018) of **three simultaneous tracks/timeframes**, viz: (i) **short-term emergency relief** (i.e. food nutrition and agriculture-based livelihoods) of Syrian refugees and Jordanian host communities in border areas and stakeholder agricultural policy and strategy development (0 to 12 months); (ii) **medium-term recovery of agricultural livelihoods and agro-ecosystems** in Ajloun, Amman, Balqa, Irbid, Jarash, Mafrqa and Zarqa Governorates (1 to 3 years); and (iii) **long-term development of the agriculture sector in Jordan as a whole, particularly in northern Jordan** (2 to 5 years). In this context, the FAO Action Plan for Jordan comprises **seven resilience agriculture and food and nutrition security programmes of 15 mutually reinforcing short-, medium- and long-term subprogrammes** – in support of the Jordanian agriculture and food and nutrition security. These programmes would be supported by four cross-cutting actions: (i) capacity development; (ii) gender equality; and (iii) strategic partnerships, with the International Center for Agricultural Research in Dry Areas (ICARDA), International Labour Organization (ILO), UNDP, World Food Programme (WFP), etc. The programmes are shown below *in priority order*.

<b>Programme:</b>	<b>USD</b>
<b>Short term (humanitarian relief and policy development)</b>	
<b>Medium term (agricultural livelihoods recovery)</b>	
<b>Long term (agricultural and rural development)</b>	
<b>J.1 Strengthening the national capacity for the control of TADs and improved animal health services</b>	<b>9 553 600</b>
<b>J.1.1 Emergency control of TADs (18 months)</b>	<b>2 602 600</b>
<b>J.1.2 National control of TADs and zoonoses (36 months)</b>	<b>6 951 000</b>
<b>J.2 Capacity development of the Ministry of Agriculture and other stakeholders of the agriculture sector in food and nutrition security and natural resource information systems and policy development in Jordan</b>	<b>1 752 500</b>
<b>J.2.1 Agricultural livelihoods, natural resources and vulnerability analysis of host communities (15 months)</b>	<b>1 752 500</b>
<b>J.2.2 Technical support to agricultural policy development in Jordan (24 months)</b>	
<b>J.3 Improved rural income generation and employment through integrated homestead farming, agroprocessing and marketing in communities hosting Syrian refugees</b>	<b>22 110 400</b>
<b>J.3.1 Livelihood resilience for vulnerable farm families hosting Syrian refugees in Irbid and Mafrqa Governorates (12 months)</b>	<b>2 100 000</b>
<b>J.3.2 Enhanced income generation of rural communities hosting Syrian refugees in Jordan (42 months)</b>	<b>9 600 000</b>
<b>J.3.3 Smallholder value chain development in northern Jordan (jointly with ILO 36 months)</b>	<b>10 410 400</b>
<b>J.4 Intensification and diversification of smallholder agriculture and food production in northern Jordan</b>	<b>8 949 400</b>
<b>J.4.1 Enhanced rural household energy in rural communities hosting Syrian refugees (18 months)</b>	<b>1 500 000</b>
<b>J.4.2 Climate-smart smallholder agricultural production through participatory extension approaches in northern Jordan (54 months)</b>	<b>7 449 400</b>
<b>J.5 Phytosanitary control in Syrian border areas of Jordan</b>	<b>2 715 700</b>
<b>J.5.1 Strengthening the control, reporting and early warning systems for transboundary plant diseases and pests and improved plant protection services (30 months)</b>	<b>2 715 700</b>
<b>J.6 Strengthening the national capacity for community-based natural resource management in the Badia rangelands of Jordan</b>	<b>6 179 800</b>
<b>J.6.1 Community-based water harvesting and range management in the northeast Badia (24 months)</b>	<b>916 300</b>
<b>J.6.2 Forest policy development (18 months)</b>	
<b>J.6.3 Restoring pastoral livelihoods and reducing land degradation through community-based range management in the Badia (in support of WFP and UNCC-funded projects, 54 months)</b>	<b>5 263 500</b>
<b>J.7 Food nutrition for Syrian refugees in Jordan</b>	<b>870 000</b>
<b>J.7.1 Improved food nutrition and food safety for Syrian refugees in host communities (12 months)</b>	<b>870 000</b>
<b>Total</b>	<b>52 131 400</b>

The total cost of the FAO Action Plan for Jordan is estimated at **USD 52.13 million** over a period of one to five years, not including two regional subprogrammes (totalling USD 18.72 millions) in support of TAD control and information networks, as shown below:

<b>Programme Title</b>	<b>Cost Estimate (USD millions)</b>			
	<b>Short term</b>	<b>Medium term</b>	<b>Long term</b>	<b>Total</b>
1. Strengthening the National Capacity for the Control of TADs and Improved Animal Health Services	2.60	6.95	14.22*	<b>9.55</b>
2. Capacity Development of the Ministry of Agriculture and Other Stakeholders of the Agriculture Sector in Food Security and Natural Resource Information Systems and Policy Development	0.7	1.05	4.50*	<b>1.75</b>
3. Improved Rural Income Generation and Employment through Integrated Homestead Farming, Agroprocessing and Marketing in Communities Hosting Syrian Refugees	2.10	9.60	10.41	<b>22.11</b>
4. Intensification and Diversification of Smallholder Agriculture and Food Production in Northern Jordan	1.50	-	7.45	<b>8.95</b>
5. Phytosanitary Control in Syrian Border Areas of Jordan	-	2.72	-	<b>2.72</b>
6. Strengthening the National Capacity for Community-based Natural Resource Management in the Badia Rangelands of Jordan	0.92	-	5.26	<b>6.18</b>
7. Improved Food Nutrition for Syrian Refugees in Jordan	0.87	-	-	<b>0.87</b>
<b>Total</b>	<b>8.69</b>	<b>20.32</b>	<b>23.12</b>	<b>52.13</b>

\* Regional subprogramme not included in the cost estimate for the FAO Action Plan for Jordan

# 1. INTRODUCTION





## 1. INTRODUCTION

The United Nations (UN) has estimated that 9.3 million Syrians are in need of humanitarian assistance, including 6.5 million who are internally displaced. Additional Syrians have lost their livelihoods, been displaced or fled to neighbouring countries. The number of Syrian refugees reached two million people in early September 2013. Over two-thirds of all Syrian refugees have registered since the beginning of 2013 – at an average of 6 000 people per day. This makes the Syrian refugee situation the worst such crisis since the Rwandan genocide of 1994.

The protracted situation of the crisis and the large numbers of refugees in Jordan are negatively affecting the food security, livelihoods, health and cohesion in the country. Jordan has always been welcoming and hospitable to its neighbours, and continues to be so. To date, more than half a million refugees are hosted in Jordan with more than three-quarters of them residing in communities outside the camps. With such high numbers entering the country and staying on indefinitely, this is causing friction and tension amongst the Jordanian host communities and the Syrian refugees.

Livelihood opportunities and access to services for both refugees and host communities need to be addressed on an equitable basis. Sustainable and meaningful stabilization in Jordan must ensure conflict-sensitive programming and prioritization of the crisis recovery needs. Early economic revitalization and livelihood strategies are critical to stabilize the current socio-economic balance and rapidly provide incomes to sustain livelihoods and recovery while simultaneously addressing social cohesion in the communities. Livelihood strategies complement the macro-economic and active labour market policies being planned with a longer-term timeframe. Areas with the highest concentration of refugees in the northern border areas are among the poorest and most under-served governorates of Jordan. Even before the crisis, social services, infrastructure and livelihood opportunities were inadequate.

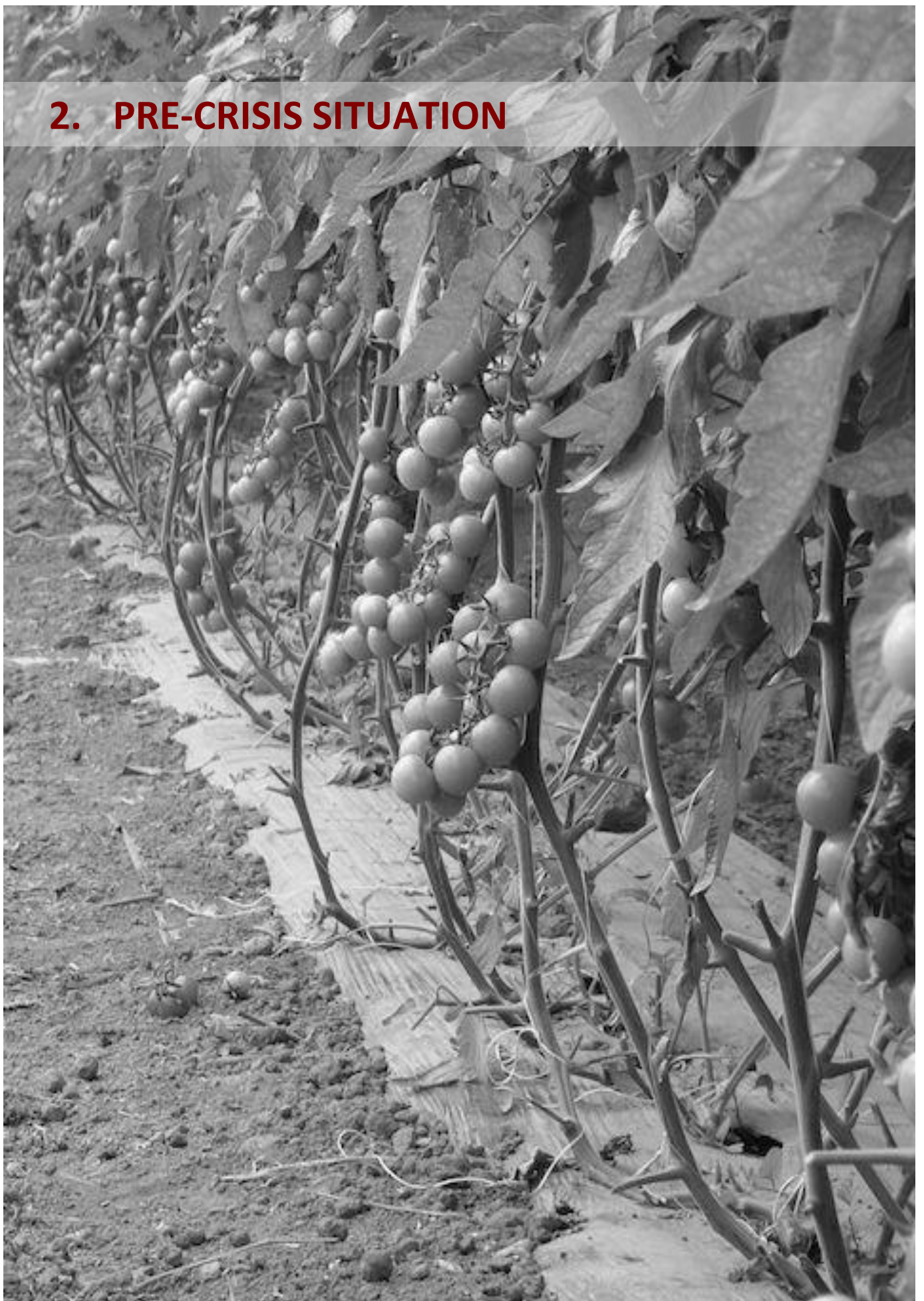
While the humanitarian response in Jordan is focusing on catering to the humanitarian needs of the refugees and the associated emergency needs of the host communities, development assistance is required to focus on the short, medium and longer term investments supporting the resilience of individuals, host communities and society at large while maintaining social and economic stability. A more in-depth analysis of the “relief”, “recovery” and “development” needs of Jordan’s agriculture sector and rural populations, especially those located in the northern governorates hosting the majority of Syrian refugees, is therefore required.

In October 2012, the Government of Jordan’s Ministry of Agriculture (MoA) and the Food and Agriculture Organization of the United Nations (FAO) jointly prepared the Country Programming Framework (CPF) which presents the broad commitment of FAO, subject to the availability of the required funding, to assist MoA in its efforts to achieve development objectives as articulated in the draft National Strategy for Agricultural Development, 2014 to 2020. In February and March 2013, FAO undertook a rapid agricultural livelihoods and food security impact assessment and prepared an initial response plan for the Syria crisis in the neighbouring countries of Egypt, Iraq, Jordan, Lebanon and Turkey. Both documents were prepared through countrywide stakeholder consultations and in line with the respective country United Nations Development Assistance Frameworks (UNDAFs) and FAO’s Strategic Framework, 2010 to 2019 (Annex 1).

It is against this background that, in November 2013, the FAO Regional Office for the Near East and North Africa (RNE) fielded an agricultural programme development mission to Jordan with the objectives of providing a Syria crisis and resilience perspective to the 2012 CPF, updating and expanding the Agricultural Livelihoods and Food Security Impact Assessment and Response Plan for the Syria Crisis in the Neighbouring Countries of Egypt, Iraq, Jordan, Lebanon and Turkey (March 2013) and developing an action plan of key short-term humanitarian relief, medium-term restoration

and long-term development interventions aimed at the stabilization and recovery of the Jordanian agriculture sector and building resilience of Jordanian host communities to help them withstand the impact of the Syria crisis. This “Action Plan: Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas of Jordan Affected by the Syria Crisis” (referred to in this document as the “*FAO Action Plan for Jordan*”) has been prepared through stakeholder consultations and in line with United Nations Development Programme (UNDP)-led national “Resilience-based Development Response to the Syria Crisis”, United Nations Office for the Coordination of Humanitarian Affairs (OCHA)-led draft “Towards a Comprehensive Regional Strategy – Dealing with the Effects of the Syria Crisis” and FAO’s New Strategic Objective (SO) 5, “Increase the resilience of livelihoods to threats and crises” (Annex 2).

## 2. PRE-CRISIS SITUATION







## **2. PRE-CRISIS SITUATION**

### **2.1 Farming Systems of Jordan**

Farming systems in Jordan are dependent mainly upon the scarcely available land, water and pasture. Owing to low rainfall, soil infertility and limited irrigation water, only 420 000 ha of the land (i.e. four percent of the total land area) is suitable for crop production, of which 340 000 ha is cultivated and 40 000 ha irrigated. More than half of the cropped area (i.e. 180 000 ha) consists of fruit tree orchards. Under rainfed conditions, 140 000 ha are planted with winter crops (e.g. wheat, barley, lentils, broad beans and forage crops). The area planted with summer crops is around 8 100 ha (e.g. chickpeas, sesame, maize and tobacco) and 8 000 ha is planted with vegetables (e.g. tomato, eggplant, squash, cucumber, cabbage, onions, potatoes, watermelon, lettuce, spinach and okra).

The northeastern border areas with Syria are characterised by the Badia (semi-desert) rangelands, where the significant land use is nomadic pastoralism. The western-central areas (where the Zaatari Syrian Refugee camp is located) are arid and are predominantly under barley cultivation, irrigated fruit trees and pastoralism, and the western areas (around Irbid city) are semi-arid and predominantly under wheat cultivation and irrigated vegetables with some fruit trees. In 2012, the total number of sheep, goats and cattle in Jordan amounted to more than 3 million, of which 2.1 million are located in Ajloun, Amman, Balqa, Irbid, Jarash, Mafraq and Zarqa Governorates hosting the majority of Syrian refugees.

### **2.2 Role of Agriculture in the National Economy**

The share of the agriculture sector<sup>1</sup> in terms of national gross domestic product (GDP) is at present 3.9 percent, but the sector does employ the majority of the rural population. It is estimated that 17 percent of Jordan's total population is "rural"<sup>2</sup>. While agriculture's contribution to GDP has increased from JD 561 million in 2010 to JD 605 million in 2012, annual growth of the agriculture sector decreased from 13 to 9 percent over the same period. Although the sector is small in relation to the overall economy, it is important not only for the production of tradable goods but also for its strong up- and downstream rural-urban linkages, as a result of which an estimated quarter of GDP is considered as agriculture-dependent.

In 2012, the agriculture sector provided a livelihood for 15 percent of the country's population and employed about six percent of the national labour force – while 26 percent were engaged in service and sales. However, the agriculture sector relies heavily on non-Jordanians for labour – whereby nearly two-thirds of agricultural labour prior to the Syria crisis were non-Jordanian (mainly Egyptian and, to a lesser extent, Syrian and Iraqi) – and because non-Jordanians often do not have official work permits, official numbers are difficult to determine<sup>3</sup>. However, an increased number of Syrian workers have now entered the labour market and are willing to work at lower wages. The International Labour Organization (ILO) has estimated that 160 000 Syrians are working across all sectors with irregular status in Jordan.

Female agricultural labour is systematically under-reported as it is viewed as an extension of household responsibilities and thus not recorded in national statistics. However, rural women play an important role in rainfed agriculture and subsistence farming, especially livestock breeding (caring for herds of up to 40 and 50 head of sheep and goats), where they are responsible for most tasks in animal care, feeding and watering. Rural women are also responsible for household and community milking and dairy production.

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<sup>1</sup> Including crops, livestock, fisheries and forestry subsectors

<sup>2</sup> In Jordan, any town with a population greater than 5 000 is considered "urban"

<sup>3</sup> It is estimated that there are 200 000 non-Jordanian workers in low to unskilled professions, including agriculture, 150 000 with work permits and the remainder working illegally

The bulk of the agricultural inputs (seeds, fertilizers, pesticides, herbicides, farm tools and machinery, animal vaccines and medicines, etc.) are imported into Jordan and regarded as expensive. Farmers located in the border areas however have benefitted from agricultural inputs (as well as veterinary services) which were heavily subsidized in Syria and illegally traded into Jordan in large quantities prior to the crisis. Moreover, Syria's research system and extension and veterinary services, unlike Jordan, were heavily supported by international organizations such as the Arab Centre for the Study of Arid Zones (ACSAD) and Dry Lands, FAO, International Center for Agricultural Research in the Dry Areas (ICARDA) and the International Fund for Agricultural Development (IFAD) which, among others, promoted new and improved agricultural production technologies and practices and controlled transboundary animal diseases (TADs) and transboundary crop diseases and pests in a region which is host to many virulent diseases and pests.

More importantly, agriculture is the main source of livelihoods for the majority of communities hosting Syrian refugees in Jordan. Despite the small contribution to GDP, the agriculture sector plays a central role in socio-political stability and protection of the environment, including biodiversity of rangelands and sustained management of natural resources.

The Government of Jordan's **National Strategy for Agricultural Development, 2002–2010**, cites the main constraints to sustainable agricultural development as:

- **Agricultural resources**, i.e. a decline in agricultural resources, fragmented agricultural land ownership, uncontrolled grazing and poor management of rangelands, irregular seasonal distribution of rainfall and a decline in irrigation water supplies, and a lack of rural social care programmes.
- **Agricultural production**, i.e. low productivity of rainfed agriculture due to poor agricultural research and extension, low productivity of livestock due to high mortality rates, poor adoption rates of new and improved crop and livestock production technologies, shortages of improved agricultural inputs, low agricultural competitiveness due to small size of farm enterprises and an absence of producer organizations.
- **Marketing of agricultural products**, i.e. high marketing margins, price instability, weak market linkages, high post-harvest losses, poor market infrastructure, weaknesses in specification and quality control systems and weak enabling environment for the private sector to play a leading role in agricultural marketing.
- **Agricultural policies and management of the sector**, i.e. a lack of comprehensive, integrated and continuous agricultural development planning, lack of administrative structures, measures and targeting, weak participation of the private sector, inadequate cooperation and coordination among government organizations, inadequate agricultural information, insufficient training of agricultural workers and farmers, limited role of the Ministry of Agriculture in land use planning and development of irrigation projects and shortage of financial resources.

The constraints listed above remain unchanged today and the National Strategy for Agricultural Development, 2002–2010, remains the guiding policy document for MoA and its respective agencies and development partners. However, the Ministry is now in the final stages of drafting a new national agricultural strategy and has requested FAO's assistance in evaluating this strategy and further developing a national agricultural policy.

### **2.3 Rural Poverty**

The seven main governorates of Jordan where Syrian refugees are living are the two border governorates of Irbid and Mafraq and five more southern and neighbouring governorates of Ajloun, Amman, Balqa, Jarash and Zarqa. All seven governorates vary greatly in terms of population and socio-economic characteristics. The majority of the populations in these governorates reside in urban areas, where urbanisation ranges between 94 percent in Amman to 76 percent in Ajloun. The exception is Mafraq, which is 60 percent rural. Irbid, which has the highest numbers of refugees, is also the most densely populated governorate in Jordan. Incidence of poverty is higher in rural areas (at

19 percent) than in urban areas (at 10 percent) in Jordan overall. Poverty incidence varies considerably among the seven affected governorates, from a high of 23 percent in Mafraq to a low of 9 percent in Amman. On the other hand, the total number of poor Jordanians is highest in Amman (28 percent of the total poor) and Irbid (17 percent) while lower in Mafraq (8 percent), meaning that the largest numbers of poor are not found in the poorest governorates. At the same time, while the majority of the poor are urban, the highest incidence of poverty (“pockets”) is found mostly in subdistricts in rural areas, where some are in isolated and remote areas while others are merely in areas with a poor resource base. It should be noted that six of Jordan’s 27 “poverty pockets” are located in Mafraq Governorate.

A lopsided and non-diversified economic outlook pursued by the Government of Jordan has focused on developing industry and services, leaving the agriculture sector underinvested. The implications of single sector dependence and the underutilization of land and agriculture are evident in the high rates of rural and urban unemployment across the country. Rural Jordan’s rich earn less than ten percent of their total per capita income from agriculture and more than 55 percent of it from non-farm sources.

In 2004, IFAD concluded that the high incidences of rural poverty are mainly due to: limited sources of family income and employment; large family sizes and high dependency rates; low rainfall and extremely limited water resources; fragmentation and small size of landholdings (whereby three-quarters of farmers in Jordan, i.e. 56 589 households, are growing crops and/or rearing livestock on farms of less than 5 ha and considered as “landless”, “marginal” and “small scale” – Table 1); low levels of agricultural technology; inefficient extension and animal health services; and limited access to rural finance<sup>4</sup>.

**Table 1. Smallholder Farmers in Northern Jordan**

Governorate	Smallholder Farmers			Farming Systems (number of all farmers)			
	Landless and marginal	Small scale	Total	Crops and livestock	Livestock only	Crops only	Total
Ajloun	3 744	2 006	<b>5 750</b>	505	429	5 433	<b>6 367</b>
Amman	3 203	1 716	<b>4 919</b>	561	1 676	3 210	<b>5 447</b>
Balqa	4 863	2 605	<b>7 468</b>	331	1 227	6 713	<b>8 271</b>
Irbid	15 366	7 287	<b>22 653</b>	2 405	3 250	20 478	<b>26 133</b>
Jarash	3 586	1 921	<b>5 507</b>	722	634	4 743	<b>6 099</b>
Mafraq	4 693	2 514	<b>7 207</b>	1 296	3 153	3 532	<b>7 981</b>
Zarqa	2 009	1 076	<b>3 085</b>	298	1 380	1 739	<b>3 417</b>
<b>Total</b>	<b>37 464</b>	<b>19 125</b>	<b>56 589</b>	<b>6 118</b>	<b>11 749</b>	<b>45 848</b>	<b>63 715</b>

Source: Department of Statistics; Agricultural Census; 2007

IFAD also concluded that “the most vulnerable groups include large rural households (with eight family members or more) headed by illiterate or poorly educated people, households headed by women, households with sick or elderly people and households that do not own land or have very little land”. Families headed by women tend to be among the poorest of the poor. They have fewer economic assets than households headed by men. For example, only 44 percent of households headed by women own agricultural land and 30 percent own livestock. Instead, 68 percent of households headed by men own land and 36 percent of them own livestock. Similarly, only 21 percent of women who are heads of households receive loans for agricultural development and 9 percent for income-generating activities, compared to 43 and 14 percent of men who are heads of households, respectively. In Jordan, female and youth unemployment rates are incredibly high. Nearly one in every three youth between ages 15 and 30 are unemployed and more than half of young Jordanian girls are inactive. Women face several barriers to employment – their family’s objection and mobility

<sup>4</sup> IFAD; project document for the Agricultural Resource Management Project – Phase II; 2004

restrictions being the most pronounced. Jordan's youth unemployment is a major challenge: more than half of the unemployed are youth under 25. Unemployment is particularly common among Palestinian refugee women, making them more vulnerable to poverty and food insecurity. The same problem is expected to affect the new wave of Syrian refugee women.

## **2.4 Food Security**

Jordan is a food deficit country with almost 85 percent of its food imported. The country imports almost all its cereals, pulses, vegetable oil and sugar requirements. It also imports between 20 and 50 percent of its beef and lamb meat, in addition to some fruits and vegetables. However, Jordan has self-sufficiency in dairy products, poultry, eggs and most of its fruit and vegetable requirements.

The Jordanian Department of Statistics reported that only 0.3 percent of Jordanian households are food insecure and 2.1 percent were vulnerable to food insecurity in 2010, translating to 155 000 food insecure/vulnerable people. The highest rates of food insecurity were registered in the rural areas of Amman, Aqaba, Karak, Mafraq and Zarqa Governorates. Female-headed households are twice as likely to be food insecure as households headed by males. The main reasons for food insecurity in poor areas of Jordan are limited purchasing power and lack of dietary diversity. With food constituting a high percentage of their consumption profile, the poor were the most affected by the food price increase in 2008–2009 and is the group most vulnerable to future shocks.

Since 2004, FAO has assisted the Government of Jordan-funded “National Special Programme for Food Security in Jordan” (JD 37 million) to address localized issues of food availability in the highland regions of the country. The programme comprised 21 projects under five components: on-farm soil and water management, field crop production, crop diversification, and income generation for employment and poverty alleviation (Annex 1, Section 2.4).

Malnutrition and food intake deficiency are major challenges to food security for Jordan's poor. Chronic malnutrition is deeper in rural areas where incidence of malnutrition and stunting in agricultural communities is estimated at 25 percent compared to 12 percent in urban areas.

### 3. SITUATION ANALYSIS





### 3. SITUATION ANALYSIS

#### 3.1 Data Availability

One of the most serious shortcomings with regards to proper planning for emergency, recovery and development interventions is the *de facto* absence of comprehensively reliable information and especially quantitative data – other than the generic macro-economic situation analyses and annual agricultural statistics published by the Jordan Department of Statistics and FAO’s “Agricultural Livelihoods and Food Security Impact Assessment and Response Plan for the Syria Crisis in the Neighbouring Countries of Egypt, Iraq, Jordan, Lebanon and Turkey” (March 2013) – to assess the exact impact of the various facets of the unfolding Syria crisis on the rural settings and agriculture sector of Jordan. Almost three years into the crisis, the quality and quantity of credible, timely and decision-focused agricultural livelihood, food and nutrition security and natural resource use information (from individual, institutional and ecosystem perspectives) related to the Syria crisis remains extremely low. To date, it has not been possible to gain a detailed picture of household income, food availability, access and utilization, nor land, water and forestry use and status of livelihood assets in the affected areas, which presents a major problem for informed decision-making. Furthermore, and directly related, is the absence of a food and nutrition security, agricultural livelihoods and natural resources information and analysis network/system to continuously monitor and assess related situations and thereby, *inter alia*, anticipate potential accentuation of threats and crisis requiring appropriate action.

#### 3.2 Impact of the Syria Crisis on Agricultural Trade<sup>5</sup>

Syria also has a unique position as a trade crossing point in the Middle East; a port of access to Eastern Europe, Central Asia, Russia and Turkey for Middle Eastern countries such as Jordan and vice versa. Three developments in agricultural trade flows to and from Jordan between 2011 and 2013 are worth noting: (i) a decline in total agricultural trade; (ii) a considerable drop in bilateral agricultural trade with Syria and in transit trade through Syria; and (iii) a significant change in trading routes.

Most of the trading in agricultural commodities with and through Syria and Jordan was made through land routes. Land routes through Syria were the main outlet for agricultural trade with Turkey and Eastern European countries before the crisis. On the whole, Jordan has so far been able to minimize the impact on consumers and producers by finding new trade routes and absorbing some of the increased costs. A significant volume of agricultural trade has been shifted away from the Ramtha border crossing with Daraa in Syria to Haifa in Israel through Al-Jasr and to Al-Aqaba port in the Red Sea. Trade routes in Turkey have also been gradually moving to Mersin port, applying a “rolled on and rolled off” shipping arrangement to other countries in the Middle East. However, exporters of horticultural products are experiencing difficulties coping with the new trading routes given the high perishability of their products which are primarily shipped through refrigerated trucks. The alternative marine transportation is costly and also unsuitable for a variety of highly perishable horticultural products – negatively affecting the competitive advantages of high-value Jordanian agriculture.

The share of agricultural products in total Jordanian exports has increased from 16 percent in 2010 to 18 percent in 2012. However, the value of agricultural exports growth decelerated from 12 percent between 2010 and 2011 to 6 percent between 2011 and 2012 (to USD 872 million). This slowdown was an outcome of a drop in the quantity index of agricultural exports by 9 percent, and the rise in the price index of agriculture exports by 18 percent. The share of agricultural inputs and products in total annual imports has been estimated at 18 percent for the period 2010 to 2012, an increase of 12 percent between 2010 and 2011 and 3 percent between 2011 and 2012 (to USD 4 672 million)<sup>6</sup>.

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<sup>5</sup> As presented by FAO to the UNDP-led “Needs Assessment Review”; 5 November 2013

<sup>6</sup> Computed by UNDP from the Department of Statistics Database; November 2013

Syria is considered a major trading partner for all its neighbouring countries, including Jordan. The crisis has disrupted agriculture and food trade in the region, with negative consequences felt both at the livelihood level and in the sector as a whole. Agricultural trading between the two countries decreased significantly over the period 2011 to 2012, as seen in the decline in agricultural exports to Syria and agricultural imports from Syria in Table 2. It should be noted that more than a quarter of Jordan's fruits and vegetables were exported to Syria in 2010.

**Table 2. Bilateral Agricultural Exports and Imports between Jordan and Syria (USD million)**

Year	2009	2010	2011	2012	Changes in 2011 (compared with 2010) (%)	Changes in 2012 (compared with 2011) (%)
Exports to Syria	212	241	257	186	7	-28
Imports from Syria	97	116	134	114	16	-14

The disruption in agricultural and food trade between Jordan and Syria poses serious challenges to farmers and those involved in agribusiness support activities. Additional costs were incurred by Jordanian traders who had to take alternative transport routes, with additional business requirements, placing heavy financial burdens on them. Traders also had to accommodate cost increases connected to port facilities, storage and other logistical requirements<sup>7</sup>. Jordanian farmers have incurred great losses as large quantities of fruits and vegetables had to be destroyed because of export constraints. According to the Jordanian Association of Fruit and Vegetable Exporters, farmers in the Jordan Valley lost more than 23 000 ha of vegetables as a result of marketing constraints, export bottlenecks and a sharp decline in local prices during 2012.

Since 2010, there has been a steady rise in agriculture prices (Figure 1), as would be expected with a steady increase in the population. It is important to note that the relative impact weight of agriculture produce in the Consumer Price Index is 45.73 percent. The Price Index of Agricultural Producers increased by 8.1 percent for the first eight months of 2013, as compared with the same period of 2012 (100 percent = 2007). The total price index reached 127.5 percent for 2013, compared with 117.9 percent for the same period in 2012. The most significant crops whose Price Index Average contributed to this increase were banana (8.2 percent), cucumber (3 percent) and tomato (0.4 percent), whose relative importance constituted 70.3 percent<sup>8</sup>.

The local supply of animal products has also been affected by the Syria crisis. Animal feed, which used to be imported through Syria, has been affected significantly, resulting in a negative impact on the livestock subsector. Animal feed prices in 2012 increased by 22 percent for barley and 38 percent for bran compared with the averages of 2009/2010, mostly because of the increase in transportation cost as a result of the change in trading route from Tartous in Syria to the new ports of Al-Aqaba in Jordan and Haifa. The change in import routes of feed has increased prices and affected the available quantities of meat, poultry and eggs. This problem has been compounded by increasing demand, which again has resulted in price hikes in the local markets. There is now evidence that the increased cost of feed has resulted in some farmers selling large numbers of their herds to cover additional costs of animal feed.

<sup>7</sup> FAO; Agricultural Livelihoods and Food Security Impact Assessment and Response Plan for the Syria Crisis in the Neighbouring Countries of Egypt, Iraq, Jordan, Lebanon and Turkey; March 2013

<sup>8</sup> Jordan Department of Statistics; October 2013



**Figure 1. Agriculture Wholesale Price Index 2010-2013**



The bulk of the agricultural inputs (fertilizers, animal feed, pesticides and chemicals, agricultural machinery, etc.) are imported into Jordan. Such imports have been disrupted and the costs of imports have increased. This does not account for agricultural inputs which were heavily subsidized in Syria and illegally traded across the border in large quantities prior to the crisis. Such inputs are no longer available and smuggling into Jordan no longer takes place. This has resulted in the loss of a major source of income for local Jordanian traders and a significant increase in production costs for resource-poor smallholder farmers, especially those in the border areas.

### 3.3 Situation and Overview of Syrian Refugees in Jordan

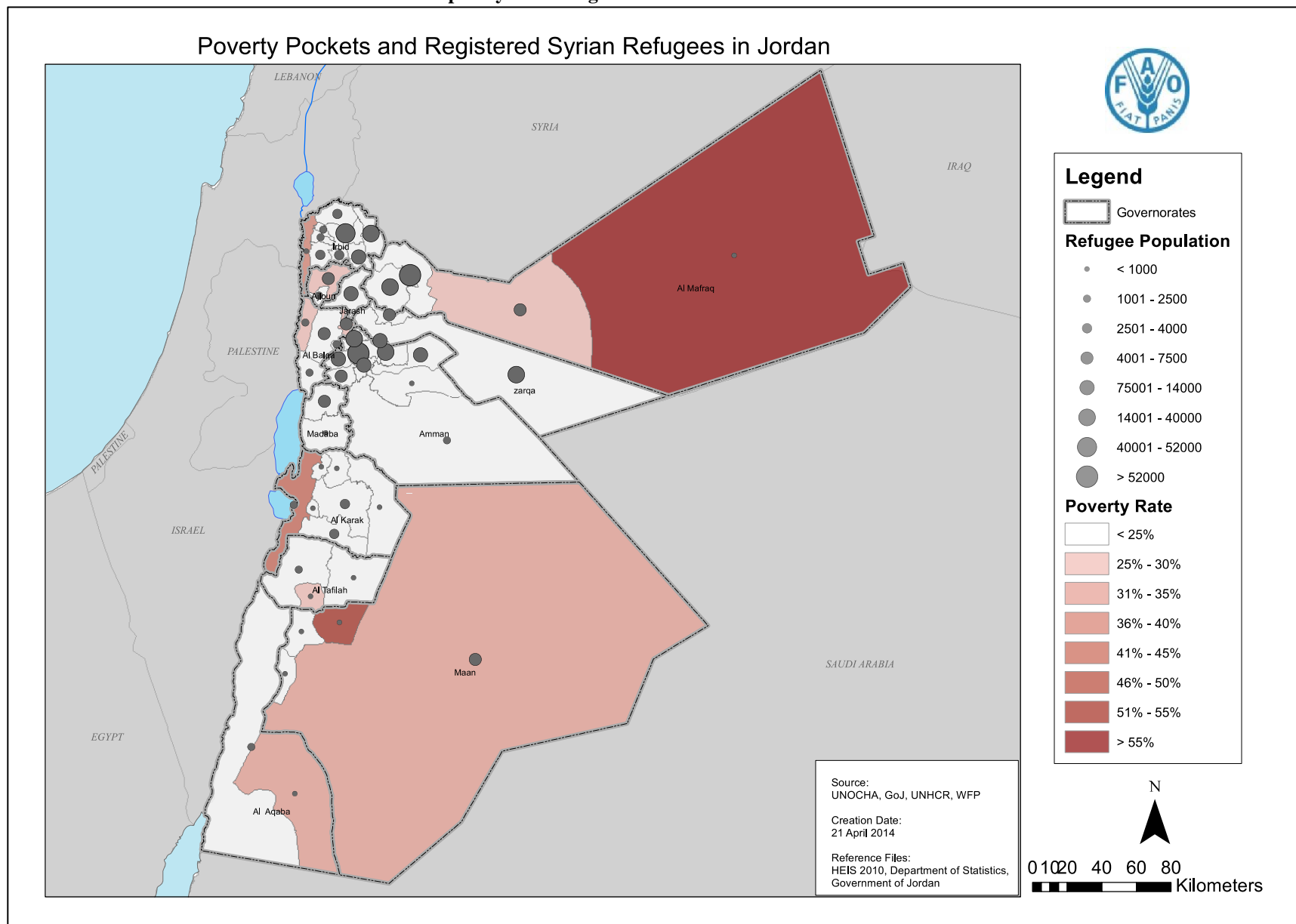
The Syria crisis, which initially emerged in early 2011 and worsened dramatically in 2012 and 2013, has compounded the already difficult economic situation in the majority of Syria's neighbouring countries. The growing influxes of refugees and returnees, the dramatic disruption in trade within the region and the heightened uncertainty have all affected Jordan. Some 550 000 Syrian refugees are in Jordan, equal to 8 percent of the population. The largest influx of Syrian refugees was between October 2012 and May 2013. Seventy-seven percent of the refugees live outside of camps, mostly in rented accommodation and with free access to education and healthcare. The largest populations of Syrian refugees are found in Mafrq, Amman and Irbid Governorates with 33, 25 and 23 percent of the total population, respectively; with 9 percent in Zarqa, 3 percent in Balqa and 2 percent in each of Jarash and Ajloun (Map 1).

#### 3.3.1 Overall Status of Syrian Refugees Living in Host Communities

A recent study commissioned by the British Embassy in Amman, the United Nations Children's Fund (UNICEF) and the United Nations High Commissioner for Refugees (UNHCR) and undertaken by REACH<sup>9</sup> (in the food and agriculture sector, among other sectors) concluded that more than 60 percent of Syrian refugees living in the host communities of Al Ramtha, Beni Obaid and Irbid districts of Irbid Governorate; Al-Badiya district of Mafrq Governorate; and Jarash Governorate reported that they did not have adequate access to food – with Ajloun Governorate reporting more than 80 percent affected. The main challenges reported by refugees in accessing adequate food supplies were the cost of food and a lack of cash.

<sup>9</sup> REACH (a consortium of ACTED, IMPACT Initiatives and UNOSAT); Syrian Refugees In Host Communities – District Profiles; October 2013

**Map 1. Syrian Refugees in Host Communities of Jordan**



The same study also concluded that half of the heads of refugee households are unemployed, whilst a quarter of households rely on seasonal economic activities and casual labour for income. Again, Ajloun district has the highest reported percentage of refugee households with an unemployed head of household, at 70 percent. The three main challenges to accessing livelihoods, as perceived by more than three-quarters of refugees are: scarcity of employment opportunities; lack of work permit; and low wages. The age profile of vulnerable Syrians forced from the country is also of concern, whereby more than half are under 17 years of age and 38 percent are younger than 11. Some of these children have been separated from their parents and some are now born as refugees.

The economic and psychological insecurities related to the refugee status tend to aggravate existing gender discrimination, such as early marriages for girls, or women cutting down their food intake at the expense of men and children. On the other hand, the changing circumstances have a potential to change existing gender roles and relations and improve the situation of vulnerable women and men by addressing their long-term strategic needs.

### **3.3.2 Overall Status of Communities Hosting Syrian Refugees**

There is a serious lack of information available on the effects of the Syria crisis on Jordanian host communities – compared to that on Syrian refugees living in those communities (cf. the “REACH study” of October 2013). However, WFP has recently embarked on a vulnerability assessment and FAO plans to undertake a food security and livelihood analysis in early 2014 in partnership with the Agency for Technical Cooperation and Development (ACTED) (Table 5; Subprogramme J.2.1).

Host communities are primarily affected by rising prices and stretched public services due to the rapidly expanding refugee population. Since 2011 unemployment in Jordan has remained stable and has only recently recorded an upward trend. In total, 14 percent of the Jordanian population (i.e. 900 000 people) live below the official poverty line. Approximately 320 000 of these are located in vulnerable areas with particularly high refugee concentrations.

These developments have induced considerable losses of farm incomes; increases in costs of transportation, agricultural inputs and services and food; falling tourism and remittances; and dwindling investments, particularly in those governorates bordering Syria and hosting refugees. Another key impact on the host communities has been the competition for scarce resources, resulting in rising prices for housing and food. Of particular concern are “poverty pockets” such as those in Mafraq Governorate which contain high concentrations of refugees and where at least one in five of the national population already lives below the poverty line. Here, average rents have reportedly more than tripled from JD 50 to JD 150-200 per month and food prices have risen by 27 percent. The latter has a particularly negative impact on purchasing power as these communities on average spend 40 percent of their income on food items. Finally, strains are felt through reduced access to and quality of basic services. All of these strains are likely to be felt most severely by the most vulnerable members of the communities and households, i.e. women, girls, the elderly and the disabled.

In February and March 2013 FAO prepared a report on Agricultural Livelihoods and Food Security Impact Assessment and Response Plan for the Syria Crisis in the Neighbouring Countries of Egypt, Iraq, Jordan, Lebanon and Turkey. The main output of the analysis was a comprehensive document that: (i) identified the major impacts of the Syria crisis on the agriculture sector, and on the food and nutrition security of neighbouring countries; and (ii) presented the immediate and medium-term needs related to food and nutrition security and agricultural-based livelihoods of displaced people, returnees, host communities and other vulnerable groups in neighbouring through the development of regional and national response plans for the crop and livestock subsectors. This FAO Action Plan for Jordan to the Syria Crisis in Jordan” represents an update and more detailed Jordanian response to the neighbouring countries’ assessment and response plan.

### 3.4 Food Access and Utilization<sup>10</sup>

The Syrian conflict has compounded the already existing economic crisis in Jordan, affecting almost all sectors in the country. Food security has also been affected after a period of slow recovery from the global food crisis in 2008. Regional instability, the closure of borders, disruption of trade and the influx of over 550 000 refugees have all posed significant challenges to food security in Jordan, namely:

- **Stress on local food supplies** – the supply of locally produced commodities has come under stress especially for those that are produced at the level of self-sufficiency, such as chicken, sheep, goats, dairy products, eggs, olives and olive oil, in addition to a number of fruits and vegetables.
- **Upward pressure on food prices** – food prices in Jordan stabilized after the 2008 crisis, though at higher rates. The fact that meat, dairy products and eggs have the highest rate of price increase among all food items poses a real challenge for the poorest segments of the society who will not be able to afford these items, worsening their food consumption pattern and reducing nutritional diversity.
- **Increased pressure on food safety nets** – Syrian refugees benefit from Government of Jordan bread, electricity, gas and water subsidies and school feeding.
- **Potential worsening of household food security** – no recent data is available on the number of food insecure and vulnerable. Nevertheless, this population stratum is highly fragile and can be severely impacted by any shock. Falling in the lowest income category, food insecure households will have to make trade-offs between food and non-food expenditures. Food price increases and the removal of subsidies will shrink their real incomes and reduce their purchasing power, leaving them in a worse-off situation.

### 3.5 Food Safety

There is no available data to date on food safety, but refugee camps and impoverished host communities facing lack of food supply and cash and water supplies of questionable quality are highly exposed to food and water-borne disease outbreaks. This can be aggravated by the additional workload on public authorities already lacking either capacity or preparedness arrangement to face such situations. While the provision of health care to respond is a matter of public health, it must be underlined that this additional burden on displaced populations is mostly preventable. As FAO is striving to improve food and nutrition security, the safety of the food and water supply must be integrated in all its supportive activities.

In addition to TADs, the biosecurity of animal production needs to be strengthened to secure animal health as well as reduce the exposure of populations to highly debilitating chronic diseases such as brucellosis transmitted by unpasteurized milk. Water quality and/or sanitation is not only critical to preventing water-borne diseases, starting with cholera (there is a history of documented past and current cholera outbreaks linked to refugee camps on the continent), but also the contamination of food at community-based agro- and food processing levels as well as community and household kitchen level. In general, the surge in food needs, inappropriate storage, in particular cold storage associated with disorganized logistics and energy supply, including for cooking as a major and simple kill step, increases food safety risks, in particular microbiological contaminations.

Jordanian authorities need support to analyse and take appropriate action to prevent and mitigate food safety hazards affecting the food supply of displaced and resident populations, including the effectiveness of border control in light of increased imports of humanitarian food consignments. Risk communication and training at community level is critical and should be associated with communication on nutrition at community kitchen level. Further assistance is required in food safety surveillance and national preparedness to respond timely and effectively to food safety emergencies to

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<sup>10</sup> As presented by WFP to the UNDP-led “Needs Assessment Review”; 6 November 2013

prevent escalation with appropriate coordination and contingency planning. Moreover, non-governmental organizations (NGOs) and other first responders need assistance on immediate food safety risk management measures to prevent and mitigate additional food safety and food-borne disease burden on refugees and host communities.

### **3.6 Agricultural Livelihoods<sup>11</sup>**

#### **3.6.1 Transboundary Animal Diseases**

The first and most important potential impact on Jordan's agriculture sector is the increased uncontrolled movements of livestock across borders from Syria and Iraq (especially to the Badia rangelands of Mafrq Governorate). This is a major concern because Syrian livestock have not been vaccinated against TADs and zoonoses for at least 18 to 24 months due to the collapse of Syria's field veterinary services. Syrian refugees have brought unvaccinated sheep, goats and cattle to almost all countries sharing borders with Syria. This threatens the health of livestock, animal disease control programmes, grasslands, rangelands and health of the people of those countries. There is clear evidence that unvaccinated live animals are being imported or have crossed illegally into Jordan, with minimum or zero quarantine, for slaughter and sale on the open market (e.g. MoA was aware that some 300 000 sheep and goats were illegally imported from Syria in 2012).

The veterinary services of Jordan's MoA – comprising some 100 veterinary officers<sup>12</sup> (some 15 of whom are stationed in the two governorates bordering Syria) – lack the resources to control the increased threat of TADs coming from Syria. The risk of TADs such as brucellosis, foot-and-mouth disease (FMD), LSD, PPR, rabies and external and internal parasites and zoonotic cutaneous leishmania and *Rickettsia* that have already broken out in Syria and are spreading across border areas of Jordan is therefore severely heightened. Whereas all animals in Jordan are registered and vaccinated regularly – a requirement for farmers to benefit from subsidized animal feed (for sheep and goats only) – the country does not undertake any TAD surveillance and reporting, and its nearest (and inadequate) quarantine facility and diagnostic laboratory are 15 km from the Syrian border, which does not comply with minimum international biosecurity standards.

No official figures are available, but isolated cases of LSD, PPR, rabies and external and internal parasites and zoonotic *Rickettsia*, influenza and corona viruses were reported in Jordan between 2010 and 2013. Furthermore, MoA has requested assistance from FAO for TAD surveillance and control because of a lack of financial resources for emergency vaccination and treatment and regular animal vaccination campaigns for the 2014 financial year.

#### **3.6.2 Transboundary Crop Diseases and Pests**

There is no evidence to date, but there a similar risk to TADs with transboundary crop diseases and pests, such as wheat rust and tomato leaf miner, with the collapse of plant protection services in Syria, weak sanitary and phytosanitary controls at Jordanian border crossings and the recent completion of the FAO-supported project, "Regional Integrated Pest Management Programme in the Near East". The productivity of Jordan's crop subsector is already very low by global standards, e.g. 0.811 compared to 1.679 metric tons per hectare/annum for all cereals in pre-crisis Syria, and 41 compared to 70 metric tons per hectare/annum for tomato in pre-crisis Syria). And, with the reduced availability of irrigation water, any further losses in crop production could be damaging to impoverished rural communities in border areas. Undermining this is the lack of financial and technical resources provided by the Government of Jordan for national agricultural research systems and extension services in support of marginal and small-scale farmers towards new and improved technologies already places this group of vulnerable people at a high risk of food insecurity and increased poverty.

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<sup>11</sup> As presented by FAO to the UNDP-led "Needs Assessment Review"; 6 November 2013

<sup>12</sup> Reduced from 150 veterinary officers in 2012

### 3.6.3 Marginalization of Smallholder Farmers

It is estimated that there are some 72 430 smallholder farmers producing crops and/or rearing livestock on less than 5 ha of land in Jordan, i.e. 90 percent of the total number of farms in the country. It is further estimated that a total 56 589 smallholder farmers are found in the seven governorates of northern Jordan that are most severely affected by the Syria crisis; divided into 37 464 of landless and marginal farmer families (less than 1 ha) and 19 125 small-scale farm families (between 1 and 5 ha). It should be noted that 40 percent of the smallholder farmers from northern Jordan are found in Irbid Governorate, where nearly a quarter of the total population is Syrian refugees. Further details on farming systems and landholding size are provided in Table 1 (Section 2.3).

Although there is no official data available to date, initial findings of socio-economic baseline surveys undertaken by NGOs, such as ACTED<sup>13</sup>, have indicated that significant numbers of marginal and small-scale farmers and livestock breeders in Irbid and Mafrq Governorates (as well as the Jordan Valley) have suffered significant losses in farm income because of forced abandonment of farmlands (as a result of insecurity along border areas), loss of informal cross-border trading opportunities (“smuggling”), reduced availability of irrigation water, increases in the prices of agricultural inputs, reduced marketing opportunities for traditional export crops and a corresponding net decrease in farm-gate prices.

Many farmers and livestock breeders are selling their valuable breeding-quality animals in order to purchase food and non-food items for their families. Livestock breeders unable to afford animal feed have also been forced to sell their animals or graze them on already over-exploited pastures and rangelands. Farmers without access to such coping mechanisms have been forced to seek alternative unskilled work in other sectors, most of which are found in urban areas with high unemployment rates and low wages – and so increasing the risk of falling into an escalating “poverty trap” already identified in those pockets.

### 3.6.4 Depletion of Natural Resources

MoA is reporting that the total area of Jordan cultivated with vegetables has decreased from 49 000 ha in 2010 to 36 000 ha in 2012 as a result of the cessation of irrigation water supplies from Syria, a reduced share of irrigation water as more water is allocated for domestic use (given the increase in demand of Syrian refugees) and the increased costs of agricultural inputs and crop production (Section 3.2). On the other hand, MoA has reported that the area of irrigated vegetables has increased significantly in Mafrq Governorate between 2011 and 2012 – impinging on the fragile land and water resources of the Badia.

Over the past two decades, Jordanian farmers have been irrigating parts of the Badia rangelands using underground water sources (from local aquifers) to grow vegetables (especially tomato, water melon and potato), wheat, fruit trees and animal fodder. The Government of Jordan is now very concerned that recent boreholes sunk for water supplies at the Zaatari Syrian Refugee Camp and other major host communities in the border areas will deplete, if not exhaust, the local aquifer used by rural communities and large-sale irrigated famers in those areas. The Government is further concerned that the inadequate waste disposal systems found in the Zaatari Camp and major host communities will also lead to pollution of local irrigation water supplies.

Traditional livestock movements across the Near East region in the form of transhumance are very common – particularly across the Badia rangelands of southern Syria, northwestern Iraq and northeastern Jordan. The Badia rangelands are fragile semi-desert steppes characterised by a sparse vegetation cover (of nutritious species palatable for sheep and goats). The continued insecurity in Syria has meant that the cross-border movement of Bedouin herders from winter grazing in Syria to

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<sup>13</sup> ACTED; Syrian Refugees in Host Communities – District Profiles; October 2013

summer grazing in Iraq and Jordan has been severely disrupted. The protracted crisis has resulted in the nomadic and transhumant Bedouin herders abandoning their Syrian pastures and staying all year round on the rangelands of northwestern Iraq and northeastern Jordan. The consequences of this are the invasion of unpalatable species (weeds and scrub) in the Syrian pastures and overgrazing and land degradation (leading to potential desertification) of the Badia rangelands of Iraq and Jordan. There is no precise information but there is already evidence of overgrazing in northeastern Jordan as herders seek alternative animal feed sources, especially in winter months.

Traders near Jordan's border with Syria estimate that hundreds of thousands of sheep and goats have been smuggled across the border since the Syria crisis began, either by refugees as insurance and/or for sale or by local traders for slaughter and sale of meat products on the open market. Whatever the reason, the animals are grazing on the fragile pastures and rangelands and utilizing limited feedstocks of the border areas – increasing competition and the potential for social conflict with Jordanian animal breeders (as was witnessed by the Gulf crisis in 1990 and 1991).





## 4. FAO'S APPROACH TO RESILIENT LIVELIHOODS





## **4. FAO'S APPROACH TO RESILIENT LIVELIHOODS**

### **4.1 FAO's Strategic Objective 5 (Resilience)**

In order to achieve the Vision of FAO and the Global Goals of its Members, the Organization has defined five Strategic Objectives (SOs), viz: (SO1) eradicate hunger, food insecurity and malnutrition; (SO2) increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner; (SO3) improve the livelihoods of rural populations and, in particular for women and youth, through enhanced employment opportunities and conditions, increased access to productive resources and rural services; (SO4) enable more inclusive and efficient food and agricultural systems at local, national and international levels; and (SO5) increase the resilience of livelihoods to threats and crises (Annex 1). The focus of this FAO subregional Action Plan is therefore in areas of direct relevance to FAO's SO5, while also linking to the other four SOs in addressing longer-term stresses.

For FAO, "resilience to shocks" is the ability to prevent and mitigate disasters and crises as well as to anticipate, absorb, accommodate or recover and adapt from them in a timely, efficient and sustainable manner. This includes protecting, restoring and improving livelihood systems in the face of threats that impact agriculture, food and nutrition (and related public health) in situations such as the protracted Syria crisis.

Resilience reflects strengths and capacities of a system and its parts to manage risks and crises, while vulnerability is the degree of susceptibility and exposure to shocks. The resilience of communities is particularly important when institutions are challenged, for example, in protracted crises, violent conflicts and post-crisis transitions. Resilient livelihood systems withstand threats or adapt to new pathways in times of crisis. This resilience is the first – and sometimes only – line of defence for vulnerable smallholders when threats become crises. Those who have limited capacity to buffer crisis impacts risk life-long, intergenerational consequences when the marginally food secure slip into malnutrition and the impoverished fall into destitution.

Capacities to absorb and manage shocks have been depleted by the frequency and magnitude of crises and their cumulative effects. Recurrent, multifaceted crises have eroded livelihoods and triggered unsustainable natural resource use, with deleterious consequences for millions of poor and marginalized rural people. This is compounded by inadequate institutional environments that otherwise should protect, preserve and promote the resilience of agricultural livelihoods.

Public and private systems that provide support and protect livelihoods and rights are often inadequate, especially in low income, disaster-prone and protracted crisis countries such as Syria and its neighbours. The poor in rural and urban areas are disproportionately affected, with poverty serving as both a driver and a consequence of inadequate livelihoods. Malnutrition is both an impact of crises and of the related coping strategies households are compelled to adopt as well as a driving factor threatening the resilience of livelihoods. Moreover, crises tend to perpetuate and reinforce existing social (including gender) and economic inequalities, hampering processes of sustainable and equitable recovery and development.

The inability of families, communities and institutions to anticipate, absorb, accommodate or recover and adapt from crises and disasters in a timely, efficient and sustainable manner is at the crux of FAO's Strategic Objective. This weakness in resilience triggers a downward spiral – household livelihoods and national development gains that have taken years to build are compromised or at times shattered.

FAO's resilience agenda encompasses strategic partnerships and direct action in four key, mutually reinforcing areas for agriculture, food and nutrition (including crops, livestock, fish, forests and natural resources) at local, national, regional and global levels:

- **Govern risks and crises:** Countries and regions adopt and implement legal, policy and institutional systems and regulatory frameworks for risk reduction and crisis management (e.g. agricultural policies which incorporate disaster risk management (DRM) in mainstream development and national DRM strategies that promote community-based disaster risk reduction (DRR) actions)<sup>14</sup>.
- **Watch to safeguard:** Countries and regions provide regular information and early warning against potential, known and emerging threats (e.g. FAO-supported Integrated Food Security Phase Classification System [IPC], Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases [EMPRES] and Global Information and Early Warning System [GIEWS]).
- **Apply risk and vulnerability reduction measures:** Countries reduce risks and vulnerability at household and community level (e.g. natural resource management, livelihood diversification and risk-proof infrastructure and plantation such as rainwater harvesting, agroforestry, soil conservation, riverbank protection, flood control and landslide stabilization)
- **Prepare and respond:** Countries and regions affected by disasters and crises prepare for, and manage effective responses (e.g. seed reserves, storage facilities, livestock shelters, issuing of mitigation and preparedness best-practice guidelines for cyclones, droughts, fires, floods, tsunamis, etc.).

#### 4.2 FAO's Strategy for Strengthening Resilience to the Syria Crisis

Under this complex and multidimensional scenario, with expected long-lasting impacts on both Syria and its neighbouring countries, FAO places “resilience” at the heart of its interventions, addressing both the short-term humanitarian needs and the longer-term underlying causes of vulnerability. With the final aim to protect, restore and strengthen livelihoods and the agro-ecosystems on which livelihoods depends, short-, medium- and longer-term actions are tailor-made to address the specific needs of the main groups affected by the crisis (Syrian internally displaced people and affected populations, refugees, returnees, host communities, and national and local authorities). This entails interrelated and mutually supporting actions at all levels, i.e. households, communities, institutions and agro-ecosystems at national and regional levels.

In line with the priorities of national governments and within existing regional frameworks for addressing the Syria crisis and in partnerships with national institutions, UN agencies, non-state actors and private sector organizations, FAO has prepared a “**Subregional Strategy and Action Plan: Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas affected by the Syria Crisis**”. The overall goal of the Subregional Strategy is to “*strengthen the resilience of livelihood systems (including individuals, households, communities and agro-ecosystems) to absorb, recover and adapt in a sustainable way from the impacts of the Syria crisis, reduce risks, anticipate and mitigate future shocks affecting the food and nutrition security and the renewable resource base*”. In this context, the Strategy identifies key emergency response, agricultural restoration, livelihood recovery, risk-sensitive agricultural development and related policy and capacity development interventions aimed at humanitarian relief for internally displaced persons (IDPs), refugees and returnees, recovery and stabilization of national agriculture sectors and strengthening the resilience of Egyptian, Iraqi, Jordanian, Lebanese and Turkish host communities to help them withstand the impact of the Syria crisis. The Strategy, which reflects FAO's global and regional frameworks (with the Syria crisis as its source and core), is articulated around four main mutually-reinforcing pillars, viz:

- Support vulnerable and affected people coping with the impact of the crisis and protect their livelihood assets** base for future self-reliance, through short-term impact nutrition-sensitive agriculture and livestock interventions and related control and surveillance of immediate risks for TADs and transboundary crop diseases and pests – “*Prepare and respond*”.

<sup>14</sup> In many countries crops, livestock, fisheries and forestry subsectors and natural resources are often not part of the DRR/DRM debate – unlike infrastructure.

- ii. **Promote prevention and impact mitigation measures** through the application of technologies, good practices (including climate-smart agriculture) and approaches for farming intensification and diversification, cross-border control and prevention of animal and crop diseases and pests, forestry, range and water management, and value chain development through public–private partnerships – “*Apply risk and vulnerability reduction measures*”.
- iii. **Support information, monitoring and analysis networks** on food and nutrition security (including safety), transboundary animal and crops threats and natural resources (land, water and forests) to inform decision making and early action – “*Watch to safeguard*”.
- iv. **Institutional strengthening** for building regional, national and local capacities as well as related policy frameworks to scale up and sustain the risk management and crisis recovery efforts, e.g. developing capacities of individuals and institutions at all administrative levels in affected countries to manage the above-mentioned three areas of work linked to multiple threats and protracted crisis – “*Govern risk and crisis*”.

FAO’s “Resilience Objective” straddles across and encompasses both emergency and development interventions aiming to ensure a continuum of short-term and longer-term action in support of most vulnerable affected groups. So far, FAO emergency interventions aimed at addressing the humanitarian, short-term needs of the affected population which have been ongoing since 2012. Actions have been mainly focusing on protecting the livelihoods of affected and vulnerable populations to restore small-scale farming and herding activities and avoid full depletion of assets, as the first frontline for enhancing resilience in Syria. These activities include the rehabilitation of irrigation infrastructure through “cash for work”, provision of quality cereal seeds and fertilizers, recovery of small-scale livestock production, safeguarding livestock health and survival through the distribution of emergency feed and veterinary supplies as well as increasing small-scale food production, nutrition knowledge and food utilization through provision of backyard gardening and poultry kits. In Lebanon, FAO is supporting emergency vaccination and feeding of Bedouin sheep and goats herds grazing and dairy cattle located in areas along the Syrian border. In addition, seven FAO regional agricultural programmes have been recently completed or are ongoing, which also contribute to strengthen the resilience of communities and institutions to threats and crisis (Annex 1). Thus, the Subregional Action Plan aims to expand and build up from the ongoing crisis emergency response to coherent integrated recovery and sustainable risk-sensitive development.

In order to sustain adequate standards of living, combat poverty and substantially increase and maintain food and nutrition security in the geographical areas affected by the Syria crisis, it is important to strengthen and enhance the local economies that currently provide agricultural livelihoods for the vast majority of the local rural populations. As indicated earlier, it is estimated that the livelihoods of the great majority of rural populations in the main affected areas depend directly or indirectly on agriculture<sup>15</sup> and related services and industries. The populations of these rural communities mostly affected by the direct and indirect impact of the Syria crisis are however already amongst the poorest communities of Syria and its neighbouring countries and most of them live below official poverty lines.

The most affected areas, while applying low or underexploited input/output production systems, have substantial potential for agriculture development (i.e. crops, livestock and forestry). Experience from other countries around the world has shown that economic growth from agriculture has been twice as effective at reducing poverty, and thereby contributing to social stability, compared to growth originating from other sectors. Sustainable increases in agricultural production will also increase demand for related sectors, such as rural services, agroprocessing, agribusiness, and transport and communication, and is thereby a catalyst for income generation and employment creation in a series of related domains.

Therefore, resource mobilization for assistance should be geared towards enabling crisis-affected smallholder crop and livestock farmers, not only to cover their minimum needs to sustain food

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<sup>15</sup> “Agriculture” includes crops, livestock, fisheries, forestry and other renewable natural resources

production but also to facilitate the desperately needed additional income and employment-generating capacity of the agriculture sector, in particular for host communities. This is necessary in order for these communities to be able to cope with the pressure, feed themselves and strengthen their potential to assist refugees and returnees. Equally, creating income-generating opportunities for refugees and returnees will help them meet their basic needs of food and other necessities and will minimize pressure on local hosting communities.

In this context, it becomes pivotal to apply efficient measures to sustainably reduce the steadily increasing cost of crop and livestock production in affected areas. Many of the affected vulnerable rural households will remain burdened by asset/harvest/income losses over the medium term while also suffering from the loss of other sources of income due to the state of disrepair and generic economic downturns. For these most vulnerable farming households, assistance should therefore target the lack of working capital which poses the greatest threat to safeguarding remaining production assets and to the recovery of the food and nutrition security and agricultural livelihoods in the affected communities. Farmers, input suppliers and buyers/traders are unable to appropriately pre-finance agriculture production due to crisis-related losses and increasing poverty. Therefore, some of the below recommended interventions (Section 4.5) are designed to address the critical situation of accumulated debt and unavailability of needed working capital amongst the most vulnerable farming communities in affected areas of Egypt, Iraq, Jordan, Lebanon, Syria and Turkey through appropriate supply of indispensable production and post-harvest inputs, working capital, market intelligence, capacity development, etc. crucial to sustain food production in host communities and kick-start the revitalization of agricultural subsectors.

Direct support to the resource-poor and crisis-affected communities should not simply be punctual in response to a crisis but should— where feasible – comprise longer-term actions oriented towards socio-economic and risk-sensitive development of the agriculture sector (thus avoiding creating and accumulating additional risks). Equally important and critical in such a complex and protracted crisis situation, is creating resilience by reducing risks in preserving and protecting crucial assets and options for food and nutrition security (cf. **FAO’s “Subregional Strategy for Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas affected by the Syria Crisis”**, Section 4.2). When rural households and communities and networks for agricultural goods and services are resilient, people realise that positive livelihood outcomes (i.e. sufficient income, food and nutrition security, food safety, good health, etc.), the sustained preservation and protection of agro-ecosystems for current and future generations and enhanced social cohesion and peaceful co-existence are achievable. In addition, this is the only viable financial solution because short-term crisis emergency response is too expensive and cannot be sustained by the international and regional community in the longer term.

#### **4.3 FAO’s Subregional Action Plan for Strengthening Resilience to the Syria Crisis**

In order to operationalize its Subregional Strategy – while supporting the strategic objectives of various regional and national comprehensive strategies, resilience plans and roadmaps – FAO has prepared the **“Subregional Action Plan for Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas affected by the Syria Crisis”**. The Action Plan encompasses key emergency response, agricultural restoration, livelihood recovery, risk-sensitive agricultural development, and policy and capacity development interventions aimed at the humanitarian relief for IDPs, refugees and returnees, stabilization and recovery of the national agriculture sectors and strengthening resilience of Egyptian, Iraqi, Jordanian, Lebanese and Turkish host communities to help them withstand the impact of the Syria crisis. The Subregional Action Plan would also aim at:

- Optimizing the utilization of natural resource endowments (i.e. sustainable natural resources [land, water, forests and range] management) and human capital (abundance of labour and farming skills and knowledge) for increased productivity in the crops, livestock and forestry subsectors, and related income generation and employment creation on a cost-effective and sustainable basis.

- Overcoming the status of pre-existing stagnating production levels – the farming communities would be given the means to increase production volumes in order to benefit from existing and new markets inside and outside of their origins (taking advantage of developing value chain approaches).
- Ensuring that short-term emergency relief initiatives and medium-term recovery/stabilization efforts are rationally combined in order to form a sound basis for the long-term risk-sensitive development of the agriculture sector; in this respect, simultaneous institutional building and human resources development will be fundamental for creating the needed implementation capacity and lasting sustainability of public sector services provision – for crisis prevention, preparedness and mitigation.

One of the main constraints encountered during preparation of the Subregional Action Plan was related to the lack of data on food security, agricultural livelihoods, vulnerability analysis, as well on the impact of the crisis on the already fragile natural resources, which poses a major challenge for informed decision making. Now, almost three years into the Syria crisis, the quality and quantity of credible and timely information on the food security, agricultural livelihood and natural resource situation remain extremely variable in terms of coverage and frequency. While some useful studies have been conducted, these have generally focused on specific areas and/or population groups in Syria and its neighbouring countries and quality varies widely. The Action Plan tries to address this challenge by stressing the need for development of food security, agricultural livelihoods and natural resources information networks – the work in this field will represent one of the key focus areas for FAO’s engagement in the short, medium and long term.

#### **4.4 FAO Action Plan for Building Resilience in Communities Hosting Syrian Refugees in Jordan**

As a follow-up to FAO’s “Agricultural Livelihoods and Food Security Impact Assessment and Response Plan for the Syria crisis in the Neighbouring Countries of Egypt, Iraq, Jordan, Lebanon and Turkey (March 2013)” and as contributions to FAO’s “**Subregional Strategy and Action Plan: Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas affected by the Syria Crisis**”, the OCHA-led “Comprehensive Regional Strategy” and the UNDP-led “National Resilience Plan” for Jordan, FAO has prepared this (national) Action Plan for strengthening resilient livelihoods for agriculture and food and nutrition security in areas of Syria affected by the protracted conflict, IDP settlements and refugee camps, and in communities hosting refugees and returnees in Jordan over five years (2014 to 2018) and across three overlapping/interlocking tracks/timeframes, viz:

##### **(i) Short-term Rapid Delivery and Immediate Impact Food and Agriculture Emergency Relief and Stakeholder Agricultural Policy Development (0 to 12 months)**

This track includes food and nutrition security and agriculture-based livelihood subprogrammes and projects, which would have an immediate impact on families and communities directly affected by the Syria crisis. This track would seek to support “quick win” interventions that mitigate some of the critical impacts of the crisis<sup>16</sup> and existing programmes and projects that can be modified<sup>17</sup> to respond to strategic objectives of regional and national comprehensive strategies, resilience plans and roadmaps and scaled up and/or implemented speedily and for which funding resources can be made available.

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<sup>16</sup> For example, those short-term food and agriculture and employment creation interventions presented for funding under SHARP and RRP6 and inclusion under the OCHA-led “Comprehensive Regional Strategy” and UNDP-led “National Resilience Plan for Jordan” (Annex 2)

<sup>17</sup> For example, two short-term FAO-funded projects, “Food Security and Livelihoods Analysis for Jordanian Host Communities” and “Strengthening the Capacity of Veterinary Services for the Control of Transboundary, Zoonotic and Vector-borne Diseases in Jordan” (Annex 1)

This track also includes capacity development of the Ministry of Agriculture and stakeholders of the agriculture sector in food security, agricultural livelihoods and natural resource information gathering, analysis and knowledge sharing, DRM approaches and policy and strategy development that would enable effective preparation and implementation of programmes and projects under the medium and partly long-term tracks, which would complement and extend some resilience-orientated interventions in humanitarian and food and agriculture emergency relief responses (e.g. irrigation infrastructure rehabilitation and integrated homestead farming) and would be closely coordinated to ensure effective targeting of gaps and needs and prevent relapse.

**(ii) Medium-term Delivery and Impact for the Recovery of Agricultural Livelihoods and Agro-ecosystems (1 to 3 years)**

This track would include medium-sized subprogrammes and projects that need longer preparation and implementation time as well as short-term track interventions that are further scaled up in areas affected by the Syria crisis<sup>18</sup>. These should be simple and lean interventions adapted to the specific circumstances of national governments and affected areas – according to agreed upon parameters and mechanisms for pooling grants from government budgets and interested development partners to finance well-targeted and sustainable agriculture, food and nutrition, income generation/employment and natural resources interventions.

**(iii) Long-term Delivery and Impact for Risk-sensitive Development of the Agricultural and Rural Sectors (2 to 5 years)**

This track includes subprogrammes and projects aimed at mitigating the impact of the Syria conflict at governorate/provincial and national levels – such as extensive use and depletion of physical assets – strengthening livelihood resilience and institutional capacities that are nested within national governments’ development strategies<sup>19</sup>. These interventions would have a sustained development impact and the potential to carry out agriculture sector policy reforms prepared under the “short-term track”, e.g. agricultural diversification and intensification through the adoption of climate-smart agricultural technologies and practices, value chain development of key agricultural commodities and community-based forestry and range management in degraded areas.

These interventions could be funded by international financing institutions and possibly blended with grant financing from multilateral and bilateral donors. The finalization of these programmes and projects will hinge on individual country’s institutional capacity and political will to enter into sector policy reform programmes while also managing and reducing multi-hazard risks. This track, although large and ambitious in terms of financial contributions, could be the most promising in terms of overcoming the current crisis and building national multidimensional livelihood resilience and agricultural development programmes.

Further details of programmes and short-, medium- and long-term subprogrammes/projects proposed under FAO’s Action Plan for Jordan are provided in Chapter 5.

The scale and scope of interventions proposed under this Action Plan have been based, *inter alia*, on four strategic considerations. Firstly, there is a need for a realistic dimension of achievable programme and subprogramme/project objectives (especially regarding the number of beneficiaries), given the uncertainty of the scope and duration of the Syria crisis and the limited timelines of 12 months, three years and five years. Secondly, the currently limited and overstretched government and local implementation capacity for the execution of emergency, recovery and rehabilitation projects, especially in more remote areas along the Syrian borders, should be taken into consideration. Thirdly, overly ambitious lines of action entail high risk of under-delivery and suboptimal achievement of objectives (possibly due to limited implementation capacities and restricted timeframes), reducing

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<sup>18</sup> For example, those medium-term food and agriculture interventions presented for inclusion under the OCHA-led “Comprehensive Regional Strategy and UNDP-led National Resilience Plan” for Jordan (Annex 2)

<sup>19</sup> For example, Government of Jordan-funded and FAO-assisted “National Special Programme for Food Security in Jordan” (Annex 1)



potential for successive donor support. Finally, existing localised crop calendar needs have to be respected within any input-related project, and therefore represent, *per se*, a limitation in terms of speediness and number of initiatives to be implemented within a given period of time.

#### 4.5 Connection between FAO’s Action Plan for Jordan and FAO’s Resilience Objective

Table 3 shows how the short-, medium- and long-term interventions proposed under this **FAO Action Plan for Jordan** fall under the four “pillars” of FAO’s “Resilience Objective” (SO5; Section 4.1). Chapter 5 provide details of programmes and subprogrammes/projects proposed under the Action Plan.

**Table 3. Connection between FAO’s Action Plan for Jordan and FAO’s Resilience Pillars**

<b>FAO/DRR Pillar</b>	<b>FAO Action Plan Interventions (subprogrammes*)</b>
1. Govern risks and crises ( <i>enable the environment</i> )	Agricultural policy development, including review of DRM and coordination arrangements (J.2.2) Forest policy development (J.6.2)
2. Watch to safeguard	National surveillance and reporting of TADs (J.1.2) Livelihood and natural resource assessment of host communities (J.2.1) National surveillance and reporting of transboundary plant diseases and pests (J.5.1) Regional surveillance and reporting of TADs (R.1) Regional agricultural livelihoods, food and nutrition security and natural resources Information Network (R.2)
3. Apply risk and vulnerability reduction measures ( <i>protect and build livelihoods</i> )	Income generation and food nutrition through integrated homestead farming and household and community-based agroprocessing (J.3.2). Income generation through value chain development (J.3.3) Technology transfer of new and improved climate-smart technologies and practices through farmer field schools (FFSs) (J.4.2) Pilot community-based water harvesting and range management (J.6.1) Technical support to investment programmes for the extension of community-based water harvesting and range management approaches (J.6.2)
4. Prepare and respond	Emergency control of TADs in Syrian border areas (J.1.1) Emergency support to income generation and food nutrition through integrated homestead farming (J.3.1) Emergency support to rural household energy sources in hosting communities (J.4.1) Food nutrition and food safety of Syrian refugees in host communities (J.7.1)

\* Chapter 5 and Table 5

FAO would ensure that all agricultural investments in the crops, livestock and forestry subsectors of the above-mentioned interventions/subprogrammes are protected through DRR elements, and helping the most vulnerable rural people of Jordan (especially those affected by the Syria crisis) to become food secure and less poor.

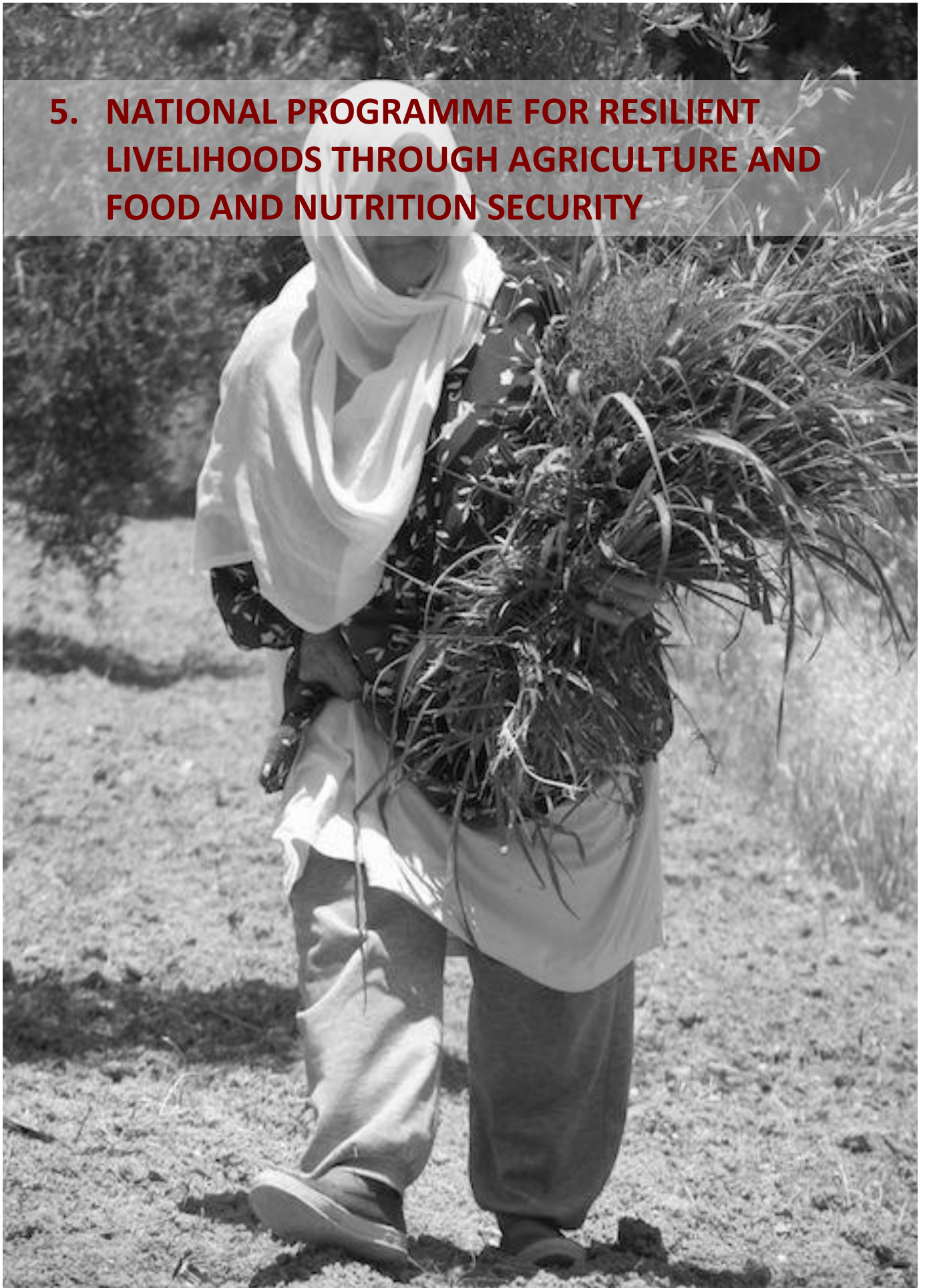
While the present FAO Action Plan for Jordan focuses specifically on addressing the impact of the Syria crisis, it also looks at the capacity of rural society to face other risks and threats that could further affect the livelihoods of the most vulnerable and food and nutrition security as a whole, thus impacting on the development gains. Hazards in Jordan are mainly drought and epidemic-related and, in particular at this very moment, the risk of transboundary animal and crop diseases and pests. Reduction and control of the aforementioned risks are an integral of the current Action Plan – the threat of TADs is addressed under Programmes No. J.1 and R.1, the risk of crop diseases and pests under Programme No. J.5 and drought mitigation (e.g. water harvesting, on-farm water management

and conservation agriculture) are at the core of interventions supporting climate-smart agriculture and natural resource management of host communities under Programmes No. J.4 and J.6.

Within the framework of the policy actions foreseen under stakeholder capacity building interventions, the overall institutional set-up for DRM/resilience (at the country level and for the agriculture sector) would be supported under the Jordan Action Plan. Coordination mechanisms for DRM/resilience would be reviewed and mainstreamed into the national agricultural policies supported by FAO as well as *vice versa* with proper consideration (of international best practice) for agriculture and food and nutrition security incorporated into national DRM plans.

Interventions proposed under this Action Plan would, in turn, directly enhance the resilience of impoverished and vulnerable rural populations (Jordanian host communities and Syrian refugees) in Ajloun, Amman, Balqa, Irbid, Jarash, Mafraq and Zarqa Governorates by: (i) reducing cross-border threats of TADs and transboundary crop diseases and pests from Syria and subsequently protecting their livestock and crop-based assets; (ii) reducing the risk of further degradation of agro-ecosystems (and potential desertification), particularly their sustained access to land, water and pasture resources of the Badia; (iii) increasing household and community-based income generation to compensate for higher farm input costs and reduced farm-gate prices and farm wages, and improving the possibility of purchasing more nutritious food and other essential non-food items; (iv) diversifying livelihoods and promoting risk-proof and cost-effective crop and livestock production and post-harvest (i.e. “climate-smart”) technologies and practices that reduce production costs and improve farm-gate prices on a sustainable basis; and (v) improving family diets and food nutrition (including food preparation and storage) on a sustainable basis.

**5. NATIONAL PROGRAMME FOR RESILIENT  
LIVELIHOODS THROUGH AGRICULTURE AND  
FOOD AND NUTRITION SECURITY**





## 5. NATIONAL PROGRAMMES FOR RESILIENT LIVELIHOODS THROUGH AGRICULTURE AND FOOD AND NUTRITION SECURITY

### 5.1 Agricultural Livelihoods Options

Based on the situation analysis and needs assessment of the previous sections and taking into account the most likely scenario that the protracted Syria crisis will continue for some time, FAO and MoA have jointly prepared an action plan that provides a food and agriculture approach for humanitarian, recovery and development actions with the overall objective of ensuring that Syrian refugees in Jordan are assisted, host communities in rural areas and their Jordanian agricultural services are supported and reinforced and the needs of all affected rural populations in Jordan are addressed. In this context, the FAO/MoA response plan is in line with:

- national policies and programmes, e.g. the Jordan Poverty Alleviation Strategy (2002), National Agenda (2007 to 2017), National Water Strategy (2008 to 2022), Executive Development Programme (2011 to 2013), National Climate Change Policy (2013 to 2022) and draft National Strategy for Agricultural Development (2014 to 2020).
- all three actions of FAO’s “Subregional Approach to Building Resilience through Support to Food and Agriculture”, i.e. food security and natural resources information management, control of TADs and community-based resilience building (Section 4.2);
- three of the four outputs of the proposed OCHA-led “Comprehensive Regional Strategy”, i.e. supporting the most vulnerable communities, enabling/empowering host communities to cope and encompassing the intervention of the widest possible partnerships (Annex 2);
- two of the three strategic objectives of the proposed UNDP-led “Resilience-based Development Response”, i.e. recovery of vulnerable households and macro-economic, social and political stability (Annex 2);
- food security response objectives of RRP6 (Annex 2);
- ten development programmes from all four priority areas of UNDAF, 2013 to 2017 (Annex 1); and
- FAO pillars for DRR and resilience (Section 4.1).

Further details are provided in Table 4.

In this context, the FAO Action Plan for Jordan encompasses key short-term humanitarian relief, medium-term restoration and long-term development interventions aimed at the stabilization and recovery of the Jordanian agriculture sector and building resilience of Jordanian host communities to help them withstand the impact of the Syria crisis. FAO and MoA, working together with other relevant actors, aim to leverage the Organization’s comparative advantage in food security and agricultural-based livelihood programming, both globally and in the Near East region, by focusing on seven programmes – comprising 14 mutually reinforcing short-, medium- and long-term national subprogrammes and two long-term regional subprogrammes – in support of the Jordanian agricultural livelihoods, food and nutrition security and natural resources (Table 5, Sections 1 and 2)<sup>20</sup>, viz:

1. **Strengthening the National Capacity for the Control of TADs and Improved Animal Health Services** – disease surveillance, diagnostic analyses, issuing disease early warning, vaccination campaigns, strengthening veterinary quarantine systems and capacity through training in preparedness, good emergency management practices and community-based animal health services to protect the asset base and health of Jordan’s vulnerable socio-economic groups in Syrian border areas and Jordan as a whole and reduce impacts on the livestock subsector and its contribution to food security and income generation (Table 5; Programmes J.1 and R.1).

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<sup>20</sup> As presented by FAO to the UNDP-led “Needs Assessment Review” on 6 November 2013 and OCHA-led “Comprehensive Regional Strategy” on 26 November 2013

2. **Capacity Development of MoA and Other Stakeholders of the Agriculture Sector in Food Security and Natural Resource Information Systems and Policy Development** – to inform decision making through enhanced understanding of the impact of the Syria crisis on food security and natural resource depletion in Jordan, taking into account also the different impacts on men and women, and to strengthen the ability of the Government, NGOs and private sector to cope with food and agricultural livelihood aspects of the Syria crisis and implement and monitor the aforementioned response options (Table 5; Programmes J.2 and R.2).
3. **Improved Rural Income Generation and Employment through Integrated Homestead Farming, Agroprocessing and Marketing in Communities Hosting Syrian Refugees** – household small animal husbandry, small-scale horticultural production, wastewater micro-irrigation, food processing, etc. and community-based agroprocessing, packaging, storage, marketing, rural transportation, etc. to increase the resilience of men and women farmers, households and communities to the impact of the Syria crisis on household food access and utilization and income generation by means of community-based and gender-sensitive adaptive research and participatory extension approaches (e.g. “farmer business schools” (FBSs) and “junior farmer field and life schools”), public-private partnerships and value chain development approaches (Table 5; Programme J.3).
4. **Promotion of Climate-smart Agriculture Technologies and Practices in Communities Hosting Syrian Refugees through Community-based Adaptive Research and Participatory Extension Approaches** – crop diversification and intensification through improved land management/conservation agriculture, on-farm water management, integrated plant soil nutrient management, integrated pest and disease management, integrated homestead farming, animal husbandry, water and labour-saving technologies, etc. to increase the resilience of individuals, households and communities to the impact of the Syria crisis on household food availability and income generation by means of community-based and gender-sensitive adaptive research and participatory extension approaches (e.g. FFSs)<sup>21</sup> (Table 5; Programme J.4).
5. **Phytosanitary Control in Syrian Border Areas of Jordan** – evaluation of the phytosanitary situation in the country, surveillance, control, reporting and early warning systems for transboundary plant diseases and pests, improved plant protection services and FFS programmes for integrated pest and disease management (Table 5; Programme J.5).
6. **Strengthening the National Capacity for Community-based Natural Resource Management in the Badia and Jordan** – policy development and technical support to MoA in the implementation of natural resource management-based projects in Syrian border areas and Jordan as a whole, including community-based water harvesting, range and forestry management and pasture development (Table 5; Programme J.6).
7. **Improved Food Nutrition and Food Safety for Syrian Refugees in Jordan** – through enhanced food and nutritional knowledge of the vulnerable Syrian refugee households by empowering women to change and improve their and their families’ dietary habits and food safety, including community kitchens and training (Table 5; Programme J.7).

With no end to the protracted Syria crisis in sight, this FAO Action Plan for Jordan is a living document which would be reviewed and updated on a regular basis and at critical times, e.g. following results of the FAO Agricultural Livelihoods, Natural Resources and Vulnerability Analysis of Host Communities in March 2014 (Table 5; Subprogramme J.2.1).

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<sup>21</sup> As developed in Jordan by the National Center for Agricultural Research and Extension (NCARE) with technical support of FAO (cf. Regional IPM in the Near East and Management of the Invasive Plant *Solanum elaeagnifolium*) in the Near East Programmes

Table 4

**CONNECTION BETWEEN THE FAO ACTION PLAN FOR JORDAN AND  
THE GOVERNMENT OF JORDAN AND UNITED NATIONS' RESPONSE AND DEVELOPMENT PLANS**

**Outline of FAO Jordan/MoAs' Action Plan for Resilient Agricultural Livelihoods in Areas Affected by the Syrian Crisis with Linkages to Government of Jordan and United Nations Response and Development Plans**

<b>Poverty Reduction and Increased Resilience of Host Communities</b>				
<b>UNDAF Priority Areas for Agriculture (2013-2017):</b> <u>PA1 – Enhancing Systematic Reform</u> (Scientific research – Agriculture); <u>PA2 Ensuring Social Equity</u> (Development of the Jordanian economy and reducing poverty in rural areas); <u>PA3 and PA4 – Investing in Young People and Preserving the Environment</u> (agribusiness and rural investment and reduced unemployment); <u>PA4 Preserving the Environment</u> (improving the usage of available irrigation water)				
<b>Draft UNDG Resilience-based Development Response (elements):</b> <u>2. Economic Recovery and Sustainable Livelihoods</u> - complementing food security and the provision of non-food items (i.e. stabilizing livelihoods through promoting income generation, and incorporating agriculture and livestock production and building capacity through technology transfer to boost production and productivity using value chain approaches and partnerships with the private sector)				
<b>Draft CRSF (Way Forward):</b> 4.3. Host Governments, with national and international partners, will undertake integrated planning and programming in identified locations of high vulnerability; 4.4. International partners and host Governments will seek to strengthen and expand existing public-private partnerships and increased private sector engagement in the response to address gaps, secure greater sustainability, and reduce costs.				
<b>Government of Jordan MoA Special Programme for Food Security (components)</b>	<b>FAO Jordan/MoA Action Plan (interventions)</b>			<b>FAO/RNE Subregional Approach to Building Resilience (activities)</b>
	<b>Short term (0-12 months)</b>	<b>Medium-term Recovery (1-3 years)</b>	<b>Long-term Development (2-5 years)</b>	
<b>FAO Proposed Program:</b> 3. Improved Rural Income Generation and Employment through Integrated Homestead Farming, Agroprocessing and Marketing in Communities Hosting Syrian Refugees				
3. Diversification of Production Systems by Introducing Horticultural Crops 4. Development of Small Livestock at Household Level	Integrated homestead farming in host communities (i.e. poultry and horticultural production, food nutrition and relevant training) * <i>RRP6 – (ii)</i>	<b>Enhanced Integrated Homestead Farming in Host Communities:</b> • poultry production • horticultural production • wastewater irrigation • women and youth FFSs	Agroprocessing and value chain development (see below)	3. Community-based resilience building in food and agriculture
<b>FAO Proposed Program:</b> 4. Promotion of Climate-smart Agricultural Technologies and Practices in Communities Hosting Syrian Refugees through Community-based Adaptive Research and Participatory Extension Approaches				
1. Soil and Water Management at the Farm Level 2. Development of Field Crops Production 3. Diversification of Production Systems by Introducing Horticultural Crops	<b>Enhanced Rural Household Energy:</b> • expansion of the use of olive pomace oil as environmentally friendly and economically viable and • efficient sources of household energy as fuel for the winter season, and income generation for vulnerable groups	<b>Climate-smart Agriculture (i.e. intensification and diversification):</b> • implementation of men, women and youth FFS programmes (i.e. group-based adaptive research and participatory extension) for transferring new and improved technologies and practices, e.g. conservation agriculture, water harvesting, on-farm water management, integrated pest and disease management, integrated plant soil nutrient management, integrated livestock production (including fodder production and improved cross breeding), post-harvest management, product safety, alternative rural energy and farm management • regular participatory monitoring and evaluation of FFSs • develop a national FFS network (to share lessons learned)		3. Community-based resilience building in food and agriculture
<b>FAO Proposed Program:</b> 3. Improved Rural Income Generation and Employment through Integrated Homestead Farming, Agroprocessing and Marketing in Communities Hosting Syrian Refugees				
5. Income-Generating Activities for Employment Creation and Poverty Alleviation	<b>Food Processing:</b> • homestead food processing, storage and marketing in host communities	<b>Agroprocessing:</b> • community-based agroprocessing, storage and marketing for host communities • implementation of men, women and youth FBSs	<b>Value Chain Development:</b> • input supply and marketing of • agricultural commodities from host governorates (through public-private partnerships) • agribusiness development	3. Community-based resilience building in food and agriculture

## Poverty Reduction and Increased Resilience of Host Communities

**UNDAF Priority Areas for Agriculture (2013-2017):** PA1 – Enhancing Systematic Reform (orientation of policies and programmes - agriculture and rural development); PA3 and PA4 – Investing in Young People and Preserving the Environment (development of the Jordanian economy - in rural areas)

**Draft UNDG Resilience-based Development Response (elements):** 2. Economic Recovery and Sustainable Livelihoods – complementing food security and the provision of non-food items (i.e. technical support to the Government of Jordan to create flexible responses that address negative macro-economic impacts)

**Draft CRSF (Way Forward):** 2.4. International partners will continue to assist host Governments (central and local authorities) and other national actors in addressing capacity gaps at national and sub-national level to support sustainable service delivery and formal and informal social safety nets; 3.1. Host governments and international partners will seek to jointly undertake common assessments of vulnerabilities and related immediate, medium and long-term needs of affected populations to inform more targeted and more effective programmes.

Government of Jordan MoA Special Programme for Food Security (Capacity Building)	FAO Jordan/MoA Action Plan (interventions)			FAO/RNE Subregional Approach to Building Resilience (activities)
	Short term (0-12 months)	Medium-term Recovery (1-3 years)	Long-term Development (2-5 years)	
<b>FAO Proposed Program: 2.</b> Capacity Development of the Ministry of Agriculture and Other Stakeholders of the Agriculture Sector in Agricultural Livelihood, Food Security and Natural Resource Information Systems				
Enhanced capacity of Food Security and Rural Development and Planning Units of the Ministry of Agriculture	<b>Food Security and Livelihoods Analysis:</b> <ul style="list-style-type: none"> <li>• baseline surveys (7 governorates)</li> <li>• market systems assessment</li> <li>• data analysis/local capacity building</li> </ul> <i>* RRP6 – (iii)</i>	<b>Regional Agricultural Livelihood, Food Security and Natural Resource Information Network</b> <ul style="list-style-type: none"> <li>• national baseline surveys/data analysis and regular monitoring</li> <li>• pricing trend and macro-economic analyses</li> <li>• regional information management and knowledge sharing</li> <li>• national and regional capacity development (including upgraded geographic information systems [GIS] and food security units)</li> </ul>	<b>Capacity Development of MoA's Planning Capability</b> <ul style="list-style-type: none"> <li>• Upgrade and expand GIS Unit of MoA</li> <li>• Evaluate draft National Agricultural Strategy (2013) and develop a National Agricultural Policy (2014-2020)</li> </ul>	<b>1. Food Security and Natural Resource Information and Analysis Network</b>
<b>FAO Proposed Program: 1.</b> Strengthening the National Capacity for the Control of Transboundary Animal Diseases and Improved Animal Health Services				
Enhanced capacity of Livestock Department of MoA	Training veterinary professionals in vaccination campaigns	Stakeholder capacity development for national and regional TAD control and management		<b>2. Cross-border control of TADs and zoonoses</b>
<b>FAO Proposed Program: 4.</b> Promotion of Climate-smart Agricultural Technologies and Practices in Communities Hosting Syrian Refugees through Community-based Adaptive Research and Participatory Extension Approaches				
Enhanced capacity of NCARE		Develop capacity of service providers in FFS approaches and climate-smart agriculture technologies and practices		<b>3. Community-based resilience building in food and agriculture</b>
<b>FAO Proposed Program: 5.</b> Phytosanitary Control in Syrian Border Areas of Jordan				
Enhanced capacity of NCARE		Promote effective control and eradications of transboundary plants pests in the country through improved diagnostics, reporting and early warning capacities, and the application of the necessary measures for pest control		<b>3. Community-based resilience building in food and agriculture</b>
<b>FAO Proposed Program: 3.</b> Improved Rural Income Generation and Employment through Integrated Homestead Farming, Agroprocessing and Marketing in Communities Hosting Syrian Refugee				
Enhanced capacity of public-private partnerships in Jordan		Service provider capacity development for FBS approaches, agroprocessing, value chain development, etc.		<b>3. Community-based resilience building in food and agriculture</b>



**Poverty Reduction and Increased Resilience of Host Communities**

**UNDAF Priority Areas for Agriculture (2013-2017):** PA4 - Preserving the Environment (securing adequate water supplies for various sectors (e.g. agriculture) and improving the usage of rural water)

**Draft UNDG Resilience-based Development Response (elements):** 6. Natural Resource Management (i.e. innovative solutions that save water, land and forests)

**Draft CRSF (Way Forward):** 2.4. International partners will continue to assist host Governments (central and local authorities) and other national actors in addressing capacity gaps at national and sub-national level to support sustainable service delivery and formal and informal social safety nets; 4.5. Host Governments, with support from international partners, will continue to seek to harness the human capital of the refugee population to address their own needs, whilst ensuring their legal protection and paying due consideration to the national context.

Government of Jordan MoA Special Programme for Food Security (Capacity Building)	FAO Jordan/MoA Action Plan (interventions)			FAO/RNE Subregional Approach to Building Resilience (activities)
	Short term (0-12 months)	Medium-term Recovery (1-3 years)	Long-term Development (2-5 years)	
<b>FAO Proposed Program: 1. Strengthening the National Capacity for the Control of Transboundary Animal Diseases and Improved Animal Health Services</b>				
	<b>Local Control of TADs:</b> <ul style="list-style-type: none"> <li>• rapid needs assessments</li> <li>• vaccination and treatment campaigns</li> <li>• upgrading of MoA Veterinary Epidemiology Unit</li> <li>• training of vet professionals</li> <li>• * <i>RRP6 – (iv)</i></li> </ul>	<b>National Control of TADs:</b> <ul style="list-style-type: none"> <li>• baseline surveys</li> <li>• TAD surveillance system</li> <li>• vaccination campaigns</li> <li>• establish CAHWs</li> <li>• capacity development of animal health services</li> <li>• expansion of mobile clinics</li> </ul>	<b>Regional Control of TADs:</b> <ul style="list-style-type: none"> <li>• develop CAHW networks</li> <li>• TAD surveillance</li> <li>• TAD monitoring</li> <li>• vaccination programmes</li> <li>• capacity development of national TAD surveillance</li> <li>• services</li> </ul>	2. Cross-border Control of TADs and zoonoses
<b>FAO Proposed Program: 6. Strengthening the National Capacity for Community-based Natural Resource Management in the Badia Desert and Jordan</b>				
	<b>Support to Natural Resource Management Initiatives in Jordan</b> <ul style="list-style-type: none"> <li>• Develop community-based water harvesting and range management strategies (piloted and demonstrated in Mafraq Governorate)</li> </ul>			
	<ul style="list-style-type: none"> <li>• Finalize national forest policy</li> </ul>			
	<ul style="list-style-type: none"> <li>• Technical support to MoA for key elements of the WFP-funded and MoA-implemented PRRO/200537 (including forestry, rangeland improvement and water harvesting "food for asset" interventions) and UNCC (Environmental Compensation Award)-funded and Ministry of Environment (and MoA/Ministry of Water and Irrigation)-implemented "Community Action Plan" of the Badia Ecosystem Restoration Programme"</li> </ul>			
<b>FAO Proposed Program: 7. Improved Food Nutrition for Syrian Refugees in Jordan</b>				
	Improved food nutrition of Syrian refugees (i.e. community kitchens, sensitisation and training) * <i>RRP6 – (i)</i>			

## **5.2 Cross-cutting Actions**

There are three cross-cutting actions which would support the seven above-mentioned programmes and their 16 national and regional subprogrammes, as shown below.

### **5.2.1 Capacity Development**

Although “Capacity Development of MoA and Other Stakeholders of the Agriculture Sector in Food Security and Natural Resource Information Systems and Policy Development” is an identified programme, FAO would support all stakeholders of the Jordanian agriculture sector (in particular staff of MoA and the impoverished farm families affected by the Syria crisis) across all seven programmes according to the Organization’s Capacity Development Framework<sup>22</sup>. FAO’s Capacity Development Framework is an analytical tool that guides FAO staff and their partners in analysing jointly existing situations in terms of capacities and identifying the appropriate type(s) of intervention for fostering the development of capacities in countries such as Jordan. The framework is based on the enhancement of technical and functional capacities (i.e. policy/normative, knowledge, partnering and implementation), which are prerequisites to achieving the Global Goals of FAO Member States (Annex 1) across three dimensions, namely, individual (e.g. farmers and extension workers), organizational (e.g. MoA and farmers’ groups) and the enabling environment (e.g. policy development and market information). Special attention would also be given to address gender issues in capacity development activities to raise awareness on the specific concerns of female and child-headed households.

### **5.2.2 Gender Equity**

It is essential to increase the importance given to gender-based analysis. In particular, it is necessary to identify specific needs and capacities with regard to men, women, boys and girls and the elderly and/or disabled in order to implement targeted action and strengthen their livelihood resilience in crisis situations.

Women play a fundamental role in Jordan at all levels of food and nutrition systems. They are often responsible for managing the family plot or small homestead gardens and are very much involved in developing and cultivating larger household plots. In Jordan, women are more vulnerable in the event of crisis because of their more limited access to production inputs, especially to credit and inputs (i.e. seeds, fertilizers, phytosanitary products, etc.), as well as land and water. Special attention will be given to gender division of labour and to address women’s burden identifying labour-saving technologies and income-generating activities. As a result, and in line with an approach which seeks to integrate nutritional support and increase resilience, FAO aims to give priority to women in its emergency, recovery and development interventions in Jordan over the next five years.

The gender issues among the Syrian refugees should also be acknowledged given that a considerable number of Syrian refugees are from female-headed households, i.e. widows, women abandoned by their husbands and women whose husbands are in detention or hiding from Syrian authorities. These households are particularly vulnerable. In addition, the gender relations and roles within the refugee families are changing, which makes it possible to challenge some traditional attitudes. Careful gender analysis is needed throughout the implementation of the action plan to increase women’s access to resources and services.

### **5.2.3 Strategic Partnerships**

It is acknowledged by all actors that no sectoral intervention alone would build resilience for sustainable development which could only be achieved through complementary actions in relation

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<sup>22</sup> FAO; Corporate Strategy for Capacity Development; 2012

with the respective mandates and comparative advantages that each actor brings in addressing resilience from different angles. In this regard, it is worth noting that the Action Plan would complement important humanitarian assistance aimed at addressing the life-saving needs of the Syrian refugees (e.g. RRP6; Annex 2). This group is only limitedly targeted in the FAO Action Plan for Jordan which predominantly focuses on host communities and national authorities. The complementarities of these actions, in properly and comprehensively addressing the needs of both refugees and host communities, are essential to reduce competition over natural and economic resources and maintain social cohesion.

In line with OCHA's proposed Comprehensive Regional Strategy (Annex 2), FAO and MoA would ensure that strategic partnerships and alliances are created for each of the aforementioned programmes at local, national, regional and global levels in order to share the burden and encompass the intervention of the widest possible partnerships and knowledge sharing for strengthening the resilience of those most vulnerable rural populations in Jordan affected by the Syria crisis. The FAO Action Plan for Jordan would represent an essential component (for agriculture and food and nutrition security) to the contributions of all partners supporting resilience in the country. Potential partnerships include the following:

- **Agency for Technical Cooperation and Development (ACTED)** – agricultural livelihoods and natural resources survey and analysis of host communities (Table 5.2; Subprogramme J.2.1);
- **Emergency Centre for Transboundary Animal Diseases (ECTAD) of FAO** – surveillance and control of TADs (Subprogrammes J.1.1, J.1.2 and R.1);
- **Food Security and Rural Development Unit of MoA** – agricultural livelihoods and natural resources survey and analysis of host communities (Subprogrammes J.2.1 and J.2.2);
- **United Nations Development Programme (UNDP) and World Food Programme (WFP)** – development of a national agriculture policy (Subprogramme J.2.2);
- **International Centre for Agricultural Research in the Dry Areas (ICARDA)** – adaptive research for new and improved production and post-harvest technologies and practices (Subprogrammes J.3.1, J.3.2 and J.4.2);
- **International Labour Organization (ILO)** – value chain development (Subprogramme J.3.3);
- **Mercy Corps** – capacity development of rural community-based organizations and water harvesting (Subprogrammes J.3.1, J.3.2, J.4.2, J.6.1 and J.6.2);
- **National Centre for Agricultural Research and Extension (NCARE)** – implementation of FFSs and FBSs and transfer of new and improved production and post-harvest technologies and practices (Subprogrammes J.3.1, J.3.2 and J.4.2);
- **Rangeland Directorate of MoA** – community-based range management (Subprogrammes J.6.1, J.6.2 and J.6.3); and
- **WFP** – land management, range management and water harvesting (Subprogramme J.6.3).

Table 5

**1. JORDAN – PROGRAMME PROFILES  
(FOR RELIEF, RECOVERY AND DEVELOPMENT  
OF AGRICULTURAL LIVELIHOODS AND FOOD AND NUTRITION SECURITY)**

<b>Programme:</b>	<b>USD</b>
<b>Short term (humanitarian relief and policy development)</b>	
<b>Medium term (agricultural livelihoods recovery)</b>	
<b>Long term (agricultural and rural development)</b>	
<b>J.1 Strengthening the national capacity for the control of TADs and improved animal health services</b>	<b>9 553 600</b>
<b>J.1.1 Emergency control of TADs (18 months)</b>	<b>2 602 600</b>
<b>J.1.2 National control of TADs and zoonoses (36 months)</b>	<b>6 951 000</b>
<b>J.2 Capacity development of the Ministry of Agriculture and other stakeholders of the agriculture sector in food and nutrition security and natural resource information systems and policy development in Jordan</b>	<b>1 752 500</b>
<b>J.2.1 Agricultural livelihoods, natural resources and vulnerability analysis of host communities (15 months)</b>	<b>1 752 500</b>
<b>J.2.2 Technical support to agricultural policy development in Jordan (24 months)</b>	
<b>J.3 Improved rural income generation and employment through integrated homestead farming, agroprocessing and marketing in communities hosting Syrian refugees</b>	<b>22 110 400</b>
<b>J.3.1 Livelihood resilience for vulnerable farm families hosting Syrian refugees in Irbid and Mafraq Governorates (12 months)</b>	<b>2 100 000</b>
<b>J.3.2 Enhanced income generation of rural communities hosting Syrian refugees in Jordan (42 months)</b>	<b>9 600 000</b>
<b>J.3.3 Smallholder value chain development in northern Jordan (jointly with ILO, 36 months)</b>	<b>10 410 400</b>
<b>J.4 Intensification and diversification of smallholder agriculture and food production in northern Jordan</b>	<b>8 949 400</b>
<b>J.4.1 Enhanced rural household energy in rural communities hosting Syrian refugees (18 months)</b>	<b>1 500 000</b>
<b>J.4.2 Climate-smart smallholder agricultural production through participatory extension approaches in northern Jordan (54 months)</b>	<b>7 449 400</b>
<b>J.5 Phytosanitary control in Syrian border areas of Jordan</b>	<b>2 715 700</b>
<b>J.5.1 Strengthening the control, reporting and early warning systems for transboundary plant diseases and pests and improved plant protection services (30 months)</b>	<b>2 715 700</b>
<b>J.6 Strengthening the national capacity for community-based natural resource management in the Badia rangelands of Jordan</b>	<b>6 179 800</b>
<b>J.6.1 Community-based water harvesting and range management in the northeast Badia (24 months)</b>	<b>916 300</b>
<b>J.6.2 Forest policy development (18 months)</b>	
<b>J.6.3 Restoring pastoral livelihoods and reducing land degradation through community-based range management in the Badia (in support of WFP and UNCC-funded projects, 54 months)</b>	<b>5 263 500</b>
<b>J.7 Food nutrition for Syrian refugees in Jordan</b>	<b>870 000</b>
<b>J.7.1 Improved food nutrition and food safety for Syrian refugees in host communities (12 months)</b>	<b>870 000</b>
<b>Total</b>	<b>52 131 400</b>

<b>Programme name</b>	<b>J.1 Strengthening the national capacity for the control of TADs and improved animal health services</b>				
<b>Objective</b>	Effective control of TADs in Jordan (particularly in governorates along the Syrian border).				
<b>Rationale and justification (Section 3.9):</b> High threat of TADs due to the collapse of Syria's field veterinary services and increased uncontrolled movements of unvaccinated livestock across borders. Isolated cases of LSD, PPR, rabies, external and internal parasites, zoonotic <i>Rickettsia</i> , cutaneous leishmania and corona viruses have been reported in Jordan. The Jordanian Ministry of Agriculture lacks the capacity to develop both emergency cross-border and long-term national TAD surveillance and control systems.					
<b>Subprogrammes</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
<b>J.1.1 Emergency control of TADs (18 months)</b>					
<b>Outcome:</b> Increased animal production by 17 870 livestock farmers of host communities in Syrian border areas of Irbid and Mafraq Governorates.					
<b>Outputs:</b>					
(i) Reduced number of TADs outbreaks due to improved surveillance and control by Jordanian veterinary services, including vaccination campaigns (i.e. 2.1 million animals vaccinated, of which approximately 50 percent would be financed by the Government).					
(ii) Increased livestock productivity within communities hosting Syrian refugees due to improved animal husbandry practices.					
<b>J.1.2 National control of TADs and zoonoses (36 months)</b>					
<b>Outcome:</b> Significant reduction in the threat of outbreaks of TADs and zoonoses in Jordan.					
<b>Outputs:</b>					
(i) Improved national TADs surveillance, diagnosis, reporting, disease early warning and containment systems (i.e. 3.24 million animals vaccinated annually (of which approximately 50 percent would be financed by the Government)).					
(ii) Increased livestock production among 28 300 livestock farmers and pastoralists through improved animal health services, including the establishment of community animal health workers' networkers.					
<b>Beneficiaries</b>		<b>Cost estimate</b>			
<ul style="list-style-type: none"> <li>Livestock farmers and pastoralists of northern Jordan</li> <li>Staff of Government, private sector veterinary and livestock extension services</li> </ul>		<b>FAO cost categories</b>	<b>Short term (USD)</b>	<b>Medium term (USD)</b>	
		Personnel and travel	727 000	1 711 300	
<b>Implementing partners</b> <ul style="list-style-type: none"> <li>Government of Jordan's Ministry of Agriculture (Department of Livestock)</li> <li>Jordan University of Science and Technology (Faculty of Veterinary Medicine)</li> <li>CBOs</li> <li>FAO ECTAD</li> </ul>		Contracts	255 000	322 000	
		Training	280 000	298 500	
		Expendable and non-expendable procurement	960 000	3 236 700	
		Technical support services	70 000	317 400	
		General operating expenses	74 000	433 200	
		Support costs	236 600	631 900	
		<b>Total</b>	<b>2 602 600</b>	<b>6 951 000</b>	

<b>Programme name</b>	<b>J.2 Capacity development of the Ministry of Agriculture and other stakeholders of the agriculture sector in food and nutrition security and natural resource information systems and policy development in Jordan</b>					
<b>Objective</b>	Promote and support efficient and effective agricultural livelihood and food security emergency and recovery programming in Jordan in response to the protracted Syria crisis.					
<b>Rationale and justification (Section 3.1):</b>	Lack of up-to-date information on the status of livelihoods, food and nutrition security and vulnerability of communities hosting Syrian refugees. Outdated agriculture policies and crop, livestock, forestry and fisheries strategies, especially those related to coping with the protracted Syria crisis and climate change and variability.					
<b>Subprogrammes</b>						
	<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
	<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
<b>J.2.1 Agricultural livelihoods, natural resources and vulnerability analysis of host communities (15 months)</b>						
<b>Outcome:</b>	Efficient and effective agricultural livelihood and natural resource programming for rural host communities.					
<b>Outputs:</b>						
(i)	Greater understanding of livelihood conditions and natural resources of vulnerable host rural communities by stakeholders of the agriculture sector (including a detailed livelihood assessment of affected areas).					
(ii)	Enhanced capacity of Government and NGO partners in conducting and formulating livelihood assessments of impoverished rural areas.					
<b>J.2.2 Technical support to agricultural policy development in Jordan (24 months)</b>						
<b>Outcome:</b>	The Ministry of Agriculture is able to prepare a national agricultural policy reflecting the present needs of the country and promoting international best practices.					
<b>Outputs:</b>						
(i)	An effective Geographic Information System Unit capable of supporting Ministry of Agriculture in the development of subsectoral strategies.					
(ii)	Preparation and adoption of the National Agricultural Development Policy, 2014–2020 and related strategies for international best practices in all subsectors (including DRM).					
<b>Beneficiaries</b>	<b>Cost estimate</b>					
<ul style="list-style-type: none"> <li>Staff of the Ministry of Agriculture's Food Security and Rural Development Unit and Planning and Studies Department)</li> <li>Staff of specialized NGOs (e.g. ACTED and National Alliance Against Hunger and Malnutrition [NAJMAH])</li> </ul>	<b>FAO cost categories</b>		<b>Short term (USD)</b>			
	Personnel and travel		700 000			
	Contracts		410 000			
	Training		160 000			
	Expendable and non-expendable procurement		120 000			
	<b>Total</b>		<b>1 752 500</b>			
<b>Implementing partners</b>						
<ul style="list-style-type: none"> <li>Government of Jordan's Ministry of Agriculture (Food Security and Rural Development Unit and Planning and Studies Department)</li> <li>Specialized NGOs, such as ACTED and NAJMAH</li> <li>FAO, UNDP and WFP</li> <li>FAO GIEWS</li> <li>FAO/WFP global Food Security Cluster</li> </ul>						

<b>Programme name</b>	<b>J.3 Improved rural income generation and employment through integrated homestead farming, agroprocessing and marketing in communities hosting Syrian refugees</b>					
<b>Objective</b>	To enhance income generating opportunities and food utilization capacities of landless and marginal farming families of vulnerable rural communities hosting Syrian refugees.					
<b>Rationale and justification (Sections 3.3.2 and 3.8):</b> Serious declines in (formal and informal) trade between Jordan and Syria, and the closure of important trade routes passing through Syria, have resulted in a significant increase in the cost of agricultural production inputs, an inability for smallholder farmers to market their perishable horticultural produce and an overall fall in farm-gate prices. The increasing availability of Syrian labour has also resulted in a significant decrease in farm wages for those landless and marginal Jordanian farming families reliant on seasonal agricultural work. This has all meant an overall reduction in the income of already vulnerable families of landless, marginal and small-scale farmers and worsened their living conditions, in particular their ability to purchase safe and nutritious foodstuffs, thereby affecting their diets and nutrition security.						
<b>Subprogrammes</b>						
<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>		
<i>January-June 2014</i>		<i>July-December 2014</i>		<i>2015</i>	<i>2016</i>	<i>2017</i>
						<i>2018</i>
<b>J.3.1 Livelihood resilience for vulnerable farming families hosting Syrian refugees in Irbid and Mafraq Governorates (12 months)</b>						
<b>Outcome:</b> Enhanced income generating and food utilization capacities for some 4 000 landless and marginal farming families of rural host communities.						
<b>Outputs:</b> (i) Increased integrated homestead farming production through the adoption of new and improved poultry, horticultural and micro-irrigation technologies and practices. (ii) Improved household food nutrition security through healthier diets and better food preparation and storage. (iii) Increased capacity of Government and private agricultural service providers, and lead men and women farmers to promote integrated homestead farming approaches and improved food nutrition and food safety.						
<b>J.3.2 Enhanced income generation of rural communities hosting Syrian refugees in Jordan (42 months)</b>						
<b>Outcome:</b> To increase the income generating opportunities and food utilization capacities of 14 730 landless and marginal farming families in Ajloun, Amman, Balqa, Irbid, Jarash, Karak Mafraq and Zarqa Governorates.						
<b>Outputs:</b> (i) Increased integrated homestead farming production through the adoption of new and improved poultry, horticultural and wastewater/micro-irrigation technologies and practices. (ii) Reduced post-harvest losses and improved quality of animal and horticultural products consumed and sold in local markets. (iii) Increased capacity of Government and private agricultural service providers, and lead men and women farmers to promote integrated homestead farming approaches, post-harvest management techniques and improved food nutrition and food safety.						
<i>Continued .....</i>						

<b>J.3 Subprogrammes continued</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
			<b>J.3.3 Smallholder value chain development in northern Jordan (jointly with ILO, 36 months)</b>		
			<p><b>Outcome:</b> Small local agribusiness enterprises established and market linkages strengthened for target poor communities to increase sales of their agricultural products and improve competitiveness and sustainability of their value chains in governorates hosting Syrian refugees.</p> <p><b>Outputs:</b></p> <ul style="list-style-type: none"> <li>(i) Small local agribusiness enterprises established and/or strengthened to enhance sustainable and inclusive agricultural input supply and produce marketing chains.</li> <li>(ii) Farmers' associations able to process and market food commodities on a sustainable basis through improved post-harvest management technologies and practices and market information systems.</li> <li>(iii) Public-private partnerships established and/or strengthened to improve input supply and marketing linkages of food-based value chains.</li> </ul>		
<b>Beneficiaries</b>		<b>Cost estimate</b>			
<ul style="list-style-type: none"> <li>• Landless and marginal farming families hosting Syrian refugees</li> <li>• Government staff, NGO and private agricultural service providers (e.g. extension workers, input suppliers and buyers)</li> </ul>		<b>FAO cost categories</b>	<b>Short term (USD)</b>	<b>Medium term (USD)</b>	<b>Long term (USD)</b>
		<ul style="list-style-type: none"> <li>• Government of Jordan's Ministry of Agriculture and National Centre for Agricultural Research and Extension</li> <li>• NGOs (e.g. Mercy Corps)</li> <li>• CBOs and farmers' associations</li> <li>• Private sector organizations (e.g. chambers of commerce and commodity boards)</li> </ul>		Personnel and travel	441 000
		Contracts	210 000	1 422 100	1 643 200
		Training	189 000	1 469 800	1 726 400
		Expendable and non-expendable procurement	957 000	1 955 400	1 591 200
		Technical support services	51 000	198 800	208 000
		General operating expenses	63 000	493 300	509 600
		Support costs	189 000	817 300	946 400
		<b>Total</b>	<b>2 100 000</b>	<b>9 600 000</b>	<b>10 410 400</b>



<b>Programme name</b>	<b>J.4 Intensification and diversification of smallholder agriculture and food production in northern Jordan</b>				
<b>Objective</b>	Promotion of climate-smart agriculture technologies and practices through community-based adaptive research and participatory extension approaches (particularly for rural communities hosting Syrian refugees in Irbid and Mafraq Governorates).				
<b>Rationale and justification (Sections 3.3.2, 3.6.1 and 3.8):</b> The Jordanian agriculture sector, by global and Jordanian standards, has low levels of crop and livestock productivity and, prior to the Syria crisis, was already struggling to cope with the challenges of climate change. Since the crisis, smallholder farmers (especially those from border areas) have suffered a significant increase in the cost of agricultural inputs, an inability to market perishable horticultural produce (to traditional export markets, e.g. Syria) and an overall fall in farm-gate prices – and therefore need to diversify.					
<b>Subprogrammes</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
<b>J.4.1 Enhanced rural household energy in rural communities hosting Syrian refugees (18 months)</b>					
<b>Outcome:</b> Significant increase in the use of alternative and sustainable rural household energy sources by vulnerable rural host communities.					
<b>Outputs:</b> Some 2 450 farming families using cheaper and environmentally friendly energy sources for cooking and heating (through cash transfers); and generating income from their local manufacture (e.g. olive pomace oil).					
<b>J.4.2 Climate-smart smallholder agricultural production through participatory extension approaches in northern Jordan (54 months)</b>					
<b>Outcome:</b> Increased food availability and access by 9 560 marginal and small-scale farmers from communities hosting Syrian refugees through agricultural intensification and diversification, and the validation and adoption of new and improved sustainable crop and livestock production and post-harvest management technologies and practices (initially in Irbid and Mafraq Governorates, and ultimately in Ajloun, Amman, Balqa, Jarash, Karak and Zarqa Governorates).					
<b>Outputs:</b>					
(i) Increased crop and livestock productivity and value of agricultural products produced through improved and sustainable technological innovation and management practices (e.g. conservation agriculture; water harvesting; on-farm water management; integrated pest and disease management; integrated plant soil nutrient management; eradication of invasive weeds [e.g. <i>Solanum elaeagnifolium</i> ]; integrated livestock production, including fodder production and improved cross-breeding; post-harvest management; food safety; alternative rural energy; basic farm management/book-keeping; DRR; and gender dynamics).					
(ii) Increased capacity of government and private agricultural service providers and lead men and women farmers to promote “climate-smart” agricultural technologies and practices through group-based adaptive research and participatory extension approaches (e.g. FFS).					
<b>Beneficiaries</b>		<b>Cost estimate</b>			
<ul style="list-style-type: none"> <li>• Marginal and small-scale farming families</li> <li>• Staff of Government and private sector agricultural extension services</li> </ul>		<b>FAO cost categories</b>	<b>Short term (USD)</b>	<b>Medium/long term (USD)</b>	
		Personnel and travel	341 300	1 711 000	
<b>Implementing partners</b> <ul style="list-style-type: none"> <li>• Government of Jordan’s Ministry of Agriculture and National Centre for Agricultural Research and Extension</li> <li>• NGOs (e.g. Mercy Corps)</li> <li>• CBOs</li> <li>• FAO and ICARDA</li> </ul>		Contracts	208 500	1 183 200	
		Training	154 500	876 800	
		Expendable and non-expendable procurement	557 700	2 647 400	
		Technical support services	22 500	87 000	
		General operating expenses	69 000	266 800	
		Support costs	146 500	677 200	
		<b>Total</b>	<b>1 500 000</b>	<b>7 449 400</b>	

<b>Programme name</b>	<b>J.5 Phytosanitary control in Syrian border areas of Jordan</b>				
<b>Objective</b>	Promote effective control and eradications of transboundary plants pests in the country through improved diagnostics, reporting and early warning capacities, and the application of the necessary measures for pest control.				
<b>Rationale and justification (Section 3.10):</b> The prevailing conditions and collapse of the plant and phytosanitary services in Syria generate a serious risk of transboundary crop pests and disease, as plants and plant products are taken across the border without any control. This hazard is heightened given the weak phytosanitary inspection systems in Jordan – particularly at existing border crossings with Syria and especially so at the new border crossings with Iraq and Syria.					
<b>Subprogrammes</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term agricultural recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
		<b>J.5.1 National control of transboundary plant diseases and pests (30 months)</b>			
		<p><b>Outcome:</b> Enhanced control of transboundary plant diseases and pests, reporting and early warning systems and improved plant protection services, particularly in Ajloun, Amman, Balqa, Irbid, Jarash, Karak, Mafraq and Zarqa Governorates (benefiting some 5 000 smallholder farmers and 80 agricultural engineers of the National Centre for Agricultural Research and Extension (NCARE)).</p> <p><b>Outputs:</b></p> <ul style="list-style-type: none"> <li>(i) Implementation of a phyto-sanitary capacity evaluation (PCE).</li> <li>(ii) Formulation and implementation of a surveillance programme for pest and crop diseases.</li> <li>(iii) Formulation and implementation of a plant disease and pest control campaign in the most affected areas for the important crops most at risk.</li> <li>(iii) Strengthening the diagnosis and reporting capacity of plant protection services, particularly in border areas with Syria and Iraq, including the upgrading of phytosanitary laboratory facilities at or near border crossings, updating post-entry regulation measures and improving treatments.</li> <li>(iv) Establishment of a national early warning system for plant diseases and pests.</li> <li>(v) Implementation of FFS in northern Jordan to test and demonstrate integrated pest management practices (i.e. identification, control and reporting of crop pest and disease, as well as the most appropriate means of disease and pest control and prevention).</li> </ul>			
<b>Beneficiaries</b>			<b>Cost estimate</b>		
<ul style="list-style-type: none"> <li>• Smallholder farmers participating in FFS</li> <li>• Agricultural engineers/extension workers of NCARE</li> </ul>			<b>FAO cost categories</b>		<b>Short/medium term (USD)</b>
<b>Implementing partners</b>			Personnel and travel	695 000	
<ul style="list-style-type: none"> <li>• Government of Jordan's Ministries of Agriculture (Plant Protection Department) and of Industry and Trade and NCARE</li> <li>• Farmers' groups and associations</li> <li>• FAO</li> </ul>			Contracts	350 000	
			Training	301 000	
			Expendable and non-expendable procurement	942 800	
			Technical support services	40 000	
			General operating expenses	140 000	
			Support costs	246 900	
			<b>Total</b>	<b>2 715 700</b>	

<b>Programme name</b> J.6 Strengthening the national capacity for community-based natural resource management in the Badia rangelands of Jordan					
<b>Objective</b>		Restoring pastoral livelihoods and reducing land degradation through sustainable community-based range management initiatives on the Badia rangelands of Jordan (particularly for communities hosting Syrian refugees and Syrian herders in Mafraq Governorate).			
<b>Rationale and justification (Section 3.11 and 3.8):</b> A serious threat is the increasing risk of land degradation and potential “desertification” in the Badia rangelands of Mafraq Governorate because nomadic and transhumant herds are not able to seasonally migrate to Syria, and therefore stay in the Badia for longer periods than tradition dictates, as well as overgraze the fragile pastures. The limited water resources of the Badia are also seriously at risk given the increasing demand of refugees, livestock populations and irrigated farmers. The Ministry of Environment recently launched a UNCC-funded USD 160 million Badia Ecosystem Restoration Program (BERP), which focuses on water harvesting and rangeland improvement, but lacks a community focus for resource ownership, range management and environmental and economic sustainability. WFP recently launched a USD 24 million “food assistance for assets and training” project, which includes water harvesting, land reclamation and income-generating/agroprocessing interventions. The project is lacking a community-based approach. The Ministry of Agriculture is an implementing partner of both projects.					
<b>Subprogrammes</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
<i>January-June 2014</i>		<i>July-December 2014</i>		<i>2015</i>	
				<i>2016</i>	
				<i>2017</i>	
				<i>2018</i>	
<b>J.6.1 Community-based water harvesting and range management in the northeast Badia (24 months)</b>					
<b>Outcome:</b> Community-based water harvesting and range management approaches adopted by stakeholders of the Badia rangelands in Mafraq Governorate, targeting 4 450 livestock farmers and pastoralists (with 700 100 cattle, sheep and goats).					
<b>Outputs:</b>					
(i) Appropriate community-based water harvesting technologies and gender-sensitive water management approaches tested and validated (including the construction/rehabilitation of water points).					
(ii) Appropriate community-based range management practices tested and validated (including linkages with the Savory Institute, Zimbabwe).					
<b>J.6.2 Forest policy development (18 months)</b>					
<b>Outcome:</b> Community-based forest management approaches adopted by stakeholders of the Jordanian forestry sector.					
<b>Output:</b>					
(i) National Forest Policy Statement (2007) reviewed and updated.					
(ii) National Forest Policy – reflecting international best practice in community-based forest management – prepared by the Ministry of Agriculture and promulgated by the Government of Jordan.					
<i>Continued .....</i>					

<b>J.6 Subprogrammes continued</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
<b>J.6.3 Restoring pastoral livelihoods and reducing land degradation through community-based range management in the Badia (in support of WFP and UNCC-funded projects, 54 month)</b>					
<b>Outcome:</b> Increased animal wealth of pastoralists grazing the Badia rangelands of Jordan through the more sustainable use of natural resources (i.e. water, forests, pastures, etc.).					
<b>Outputs:</b> (building on lessons learned from the short-term intervention and shared with BERP and WFP-supported projects):					
(i) Validated community-based water harvesting technologies and integrated water management practices replicated and up-scaled by livestock farmers and pastoralists.					
(ii) Validated community-based range management practices replicated and up-scaled by livestock farmers, pastoralists and Bedouin herders.					
(iii) Community animal health services established and community animal health workers trained and equipped.					
(iv) Enhanced household income generated and sustained through improved post-harvest management of animal products, e.g. agroprocessing, packaging and marketing.					
<b>Beneficiaries</b>		<b>Cost estimate</b>			
<ul style="list-style-type: none"> <li>Livestock farmers, pastoralists and Bedouin herders</li> <li>CBOs (from rural areas of Badia)</li> <li>Staff of Government forest and rangeland services</li> </ul>		<b>FAO cost categories</b>	<b>Short term (USD)</b>	<b>Medium/long term (USD)</b>	
		Personnel and travel	181 500	675 000	
<b>Implementing partners</b> <ul style="list-style-type: none"> <li>Government of Jordan's Ministry of Agriculture (Forest and Rangeland Directorates) and Ministries of Environment and Water and Irrigation</li> <li>NGOs (e.g. Mercy Corps)</li> <li>CBOs</li> <li>FAO and WFP</li> </ul>		Contracts	85 500	750 000	
		Training	74 500	500 000	
		Expendable and non-expendable procurement	387 000	2 590 000	
		Technical support services	54 500	120 000	
		General operating expenses	50 000	150 000	
		Support costs	83 300	478 500	
		<b>Total</b>		<b>916 300</b>	<b>5 263 500</b>

<b>Programme name</b>		<b>J.7 Food nutrition for Syrian refugees in Jordan</b>			
<b>Objective</b>		Contribute towards improved food nutrition and food safety knowledge and food utilization of vulnerable Syrian refugee families living in northern Jordan.			
<p><b>Rationale and justification (Sections 3.3.1, 3.6.2 and 3.7):</b> Chronic malnutrition is deeper in rural areas of Jordan where incidence of malnutrition and stunting in agricultural communities is estimated at 25 percent, compared to 12 percent in urban areas. One key impact of the Syria crisis on host communities has been the competition for scarce resources, resulting in rising prices for housing and food, especially in the “poverty pockets” of Mafraq Governorate. Average rents have reportedly more than tripled and food prices have risen by 27 percent since 2011. The latter has a particularly negative impact on purchasing power as these communities on average spend 40 percent of their income on food items. The supply of locally produced commodities has subsequently come under stress especially for those that are produced at the level of self-sufficiency, such as chicken, sheep, goats, dairy products, eggs, olives and olive oil, in addition to a number of fruits and vegetables. The fact that meats, dairy products and eggs have the highest rate of price increase among all food items poses a real challenge for the poorest segments of the society who will not be able to afford these items, worsening their food consumption pattern and reducing nutritional diversity.</p>					
<b>Subprogrammes</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term livelihood recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>	
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
<b>J.7.1 Improved food nutrition and food safety for Syrian refugees in host communities (12 months)</b>					
<p><b>Outcome:</b> Enhanced food utilization and food safety behaviour of vulnerable Syrian refugee households living in Irbid, Mafraq, Ajloun and Jarash Governorates through sustained changes and improvements in their dietary habits.</p>					
<p><b>Outputs:</b> Food consumption of some 5 000 refugee families improved through increased knowledge of quality and safe micronutrient and protein-rich foods, i.e. awareness campaigns, communication and training on nutrition, balanced diets, food preparation, storage and safety, the establishment of community kitchens, and distribution of appropriate nutritional and food safety equipment and materials identified during sensitization sessions.</p>					
<b>Beneficiaries</b>		<b>Cost estimate</b>			
<ul style="list-style-type: none"> <li>Syrian refugee families living in rural communities</li> <li>CBOs (from rural areas)</li> </ul>		<b>FAO cost categories</b>		<b>Short term (USD)</b>	
		Personnel and travel		390 000	
<p><b>Implementing partners</b></p> <ul style="list-style-type: none"> <li>Government of Jordan’s Ministry of Health (Department of Nutrition) and Ministry of Agriculture (Food Security and Rural Development Unit)</li> <li>NGOs</li> <li>CBOs</li> <li>FAO</li> </ul>		Contracts		15 000	
		Training		170 000	
		Expendable and non-expendable procurement		185 000	
		Technical support services		57 000	
		General operating expenses		53 000	
		Support costs		61 600	
		<b>Total</b>		<b>870 000</b>	

**2. NEAR EAST REGION – PROGRAMME PROFILES  
(FOR RELIEF, RECOVERY AND DEVELOPMENT  
OF AGRICULTURAL LIVELIHOODS AND FOOD AND NUTRITION SECURITY)**

<b>Programme:</b>	<b>USD</b>
<b>R.1 (Long term)</b> Strengthening regional capacity for the control of TADs in the Near East region ( <i>42 months</i> )	14 218 000
<b>R.2 (Long term)</b> Subregional agricultural livelihoods, food and nutrition security and natural resources information network ( <i>48 months</i> )	4 496 800
<b>Total</b>	<b>18 714 800</b>

<b>Countries</b>	<b>Egypt, Iraq, Jordan, Lebanon, Syria, Turkey and other countries in the Near East region</b>					
<b>Programme Name</b>	<b>R.1 Strengthening regional capacity for the control of TADs in the Near East region (42 months)</b>					
<b>Objective</b>	Effective control of TADs in Syria and along the Syrian border areas of Iraq, Jordan, Lebanon and Turkey and the strengthening of national capacities and regional coordination for better management of animal health systems.					
<b>Rationale and justification (Section 3.6.1):</b> Syrian veterinary services and animal vaccination programmes have virtually collapsed or are at a minimal coverage level of all times since June 2012. The “number one” threat to the agriculture sector of the region is the spread of TADs from Syria to the neighbouring countries. The worrying news is that some new diseases are being reported for the first time in all of these countries (lumpy skin disease [LSD]), bluetongue (BT) in Lebanon and camel pox in Jordan. Endemic diseases in the region, whose negative impacts have been minimized through vaccinations and disease reporting before the Syria crisis, have now gained momentum and are causing huge economic losses to livelihoods and assets of farmers and pastoralists. These include foot-and-mouth disease (FMD), <i>peste des petits ruminants</i> (PPR), brucellosis, external and internal parasites. Others that are mainly zoonotic (brucellosis, rabies, bovine tuberculosis, cutaneous leishmaniasis and Rickettsia) are also spreading at a rapid rate. Up to 30% of neonatal mortalities in livestock are caused by two diseases – enterotoxaemia and pasteurellosis; these are all preventable through vaccination. Most TADs peak during winter months. Veterinary services in Iraq and Lebanon are weak, in Jordan they are inconsistent (but weak in border areas) and in Turkey they are effective (having received European Union support over the past decade) to address such threats. In Egypt, FAO supports the Government’s veterinary services to operate a fully functional TADs control programme, mainly for Avian Influenza (H5N1). There is potential for this programme to be up-scaled to meet the new challenges related to the Syria crisis.						
<b>Subprogrammes</b>						
<b>Short term (1 to 12 months)</b>		<b>Medium-term agricultural recovery (1 to 3 years)</b>		<b>Long-term agricultural development (2 to 5 years)</b>		
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	
			<b>R.1.1</b>			
			<b>Outcome:</b> Significant reduction in the threat of TADs in Syria, Jordan, Lebanon, Iraq, Egypt and Turkey			
			<b>Outputs:</b>			
			(i) An effective emergency response to any outbreaks of TADs in the region (particularly in Jordan, Iraq, Lebanon, Syria and Turkey) through the capacity development of veterinary services and support to vaccination campaigns.			
			(ii) Prevention of TAD outbreaks in the region through improved surveillance, diagnostic, epidemiological investigation, reporting, early warning and horizon scanning systems and upgrading of laboratories and quarantine facilities.			
			(iii) More efficient and effective regional coordination and networking systems for the monitoring and reporting of TADs, including re-establishment of a regional centre for animal health and food safety.			
			(iv) (iv) Increased national capacities for the control of TADs (e.g. strategies, scientific advice, technical assistance and training in national responses to animal health threats).			
<b>Beneficiaries</b>			<b>Cost estimate</b>			
<ul style="list-style-type: none"> <li>Staff of the Ministries of Agriculture and government and private sector animal health departments, animal diagnostic laboratories and veterinary services</li> </ul>			<b>FAO cost categories</b>		<b>Medium/long term (USD)</b>	
			Personnel and travel		2 699 000	
<b>Implementing partners</b> <ul style="list-style-type: none"> <li>Ministries of Agriculture (animal health departments and veterinary services) of the Governments of Iraq, Jordan, Lebanon, Syria and Turkey</li> <li>FAO ECTAD</li> <li>OIE and World Health Organization</li> </ul>			Contracts		3 794 000	
			Training		2 525 000	
			Expendable and non-expendable Procurement		2 250 000	
			Technical support services		658 000	
			General operating expenses		1 000 000	
			Support costs		1 292 600	
			<b>Total</b>		<b>14 218 600</b>	

<b>Country</b>	Iraq, Jordan, Lebanon, Syria and other countries in the Near East region				
<b>Programme Name</b>	R.2 Subregional agricultural livelihoods, food and nutrition security and natural resources information network (48 months)				
<b>Objective</b>	To promote and support efficient and effective agricultural livelihood and food security emergency and recovery programming in the Near East region in response to the protracted Syria crisis.				
<b>Rationale and Justification (Section 3.1):</b> Lack of up-to-date information on the status of livelihoods, food and nutrition security and vulnerability of rural populations in Syria and communities hosting Syrian refugees in Iraq, Jordan and Lebanon. Lack of coordination mechanisms for exchanging information and targeting and planning food and agricultural interventions in the subregion. The intervention is based on lessons learned and successes of FAO's recent national post-disaster agricultural livelihood assessments (e.g. Afghanistan, Indonesia, Pakistan and Philippines) and national and regional Integrated Food Security Phase Classification system which has been adopted or tested by many countries of sub-Saharan Africa and South and Southeast Asia – with sustained linkages to FAO's GIEWS and FAO/WFPs' global Food Security Cluster.					
<b>Subprogrammes</b>					
<b>Short term (1 to 12 months)</b>		<b>Medium-term Agricultural Recovery (1 to 3 years)</b>		<b>Long-term Agricultural Development (2 to 5 years)</b>	
<i>January-June 2014</i>	<i>July-December 2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
		<b>Outcome:</b> Efficient and effective agricultural livelihood, food and nutrition security and natural resource programming for vulnerable rural communities in Syria and of countries neighbouring to Syria <b>Outputs:</b> <ul style="list-style-type: none"> <li>(i) Greater understanding of livelihood and food accessibility and utilization conditions and natural resources of vulnerable rural communities by stakeholders of Iraq's, Jordan's, Lebanon's and Syria's agriculture sectors through the design and establishment of harmonised agricultural livelihood, food and nutrition security and natural resource assessment methodologies to gather sex and age-disaggregated data for the status of affected communities, impact of relief and recovery interventions and any uncovered needs.</li> <li>(ii) Enhanced capacity of Ministries of Agriculture (MoAs) of Iraq, Jordan, Lebanon and Syria and their development partners in conducting and formulating livelihood assessments and agricultural development programmes for impoverished rural areas through the development of assessment and data analysis tools and reporting mechanisms for the approval of relevant stakeholders at the national and regional levels (e.g. MoAs and concerned United Nations agencies and donors) and training of humanitarian and development actors from MoAs and NGOs in assessment methodologies and coordination mechanisms, including gender awareness.</li> <li>(iii) Regional coordination mechanisms developed and maintained for sharing information on agricultural livelihoods, food and nutrition security and natural resources.</li> </ul>			
<b>Beneficiaries</b>			<b>Cost estimate</b>		
<ul style="list-style-type: none"> <li>• Staff of national governments' food security units and statistics and agricultural planning departments</li> <li>• Staff of specialized NGOs</li> </ul>			<b>FAO Cost Categories</b>		<b>Medium/Long term (USD)</b>
			Personnel and travel		2 356 000
<b>Implementing partners</b> <ul style="list-style-type: none"> <li>• National Governments' Ministries of Agriculture (Food Security Units and Planning Directorates) and Departments of Statistics</li> <li>• Specialized NGOs (e.g. ACTED)</li> <li>• FAO and World Food Programme (WFP) Country and Regional Offices</li> <li>• FAO's Global Information and Early Warning System (GIEWS)</li> <li>• FAO/WFPs' global Food Security Cluster</li> </ul>			Contracts		1 200 000
			Training		178 000
			Expendable and non-expendable procurement		115 500
			Technical support services		54 000
			General operating expenses		184 500
			Support Costs		408 800
			<b>Total</b>		<b>4 496 800</b>



### 5.3 Subprogramme Priorities

FAO Jordan and MoA have tentatively agreed on the prioritization for resource mobilization and operationalization of the above-mentioned programmes and short-, medium- and long-term subprogrammes for its “Action Plan: Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas of Jordan Affected by the Syria Crisis” (Table 6).

**Table 6. Subprogramme Priority Ranking**

Priority Ranking	Subprogramme Title (from Table 5)	Track
1st	J.1.1 Emergency Control of TADs in Syrian Border Areas*	Short term
2 <sup>nd</sup>	J.2.1 Agricultural Livelihoods and Natural Resources Analysis of Host Communities – through survey and data analysis*	Short term
3 <sup>rd</sup>	J.3.1 Livelihood Resilience for Vulnerable Farm Families Hosting Syrian Refugees – through integrated homestead farming	Short term
4 <sup>th</sup>	J.7.1 Improved Food Nutrition for Syrian Refugees in Jordan	Short term
5 <sup>th</sup>	J.1.2 National Control of TADs in All Border Areas of Jordan	Medium term
6 <sup>th</sup>	J.5.1 Phytosanitary Control in Syrian Border Areas of Jordan	Medium term
7 <sup>th</sup>	J.4.1 Enhanced Rural Household Energy in Rural Communities Hosting Syrian Refugees	Short term
8 <sup>th</sup>	J.6.1 Community-based Water Harvesting and Range Management in the Northeast Badia – pilot demonstration intervention*	Short term
9 <sup>th</sup>	J.2.2 Policy Development in the Ministry of Agriculture*	Short term
10 <sup>th</sup>	R.1 Regional Control of TADs in Jordan, Iraq, Lebanon, Syria and Turkey	Long term
11 <sup>th</sup>	J.3.2 Enhanced Income Generation of Rural Communities Hosting Syrian Refugees in Jordan – through integrated homestead farming and community-based agroprocessing	Medium term
12 <sup>th</sup>	J.4.2 Climate-smart Smallholder Agricultural Production through Participatory Extension Approaches in Northern Jordan – through FFSs	Medium to Long term
13 <sup>th</sup>	J.6.2 Forest Policy Development*	Short term
14 <sup>th</sup>	J.6.3 Restoring Pastoral Livelihoods and Reducing Land Degradation through Community-based Range Management in the Badia	Medium to Long term
15 <sup>th</sup>	J 3.3 Smallholder Value Chain Development in Northern Jordan	Long term
16 <sup>th</sup>	R.2 Regional Agricultural Livelihoods, Food Security and Natural Resources Information Network	Medium to Long term

\* Potential FAO Technical Cooperation Programme (TCP) project

### 5.4 Action Plan Budget

The total cost of the FAO Action Plan for Jordan” is estimated at **USD 52.13 million** over a period of one to five years, not including two regional subprogrammes (totalling USD 18.72 millions) in support of TAD control and information networks (Table 7). It is further estimated that: USD 8.74 million are required for short-term interventions (0 to 12 months), including humanitarian relief; USD 19.27 million are required for medium-term interventions (1 to 3 years), including agricultural livelihood recovery; and USD 23.12 million for long-term interventions (1 to 5 years), including agricultural development. It should be noted that more than half of the total cost estimate for Jordan is dedicated to food accessibility and utilization and income generation-based, targeting rural communities hosting Syrian refugees. Further details are provided as cost estimates in Table 5; Sections 1 and 2).

**Table 7. Summary Cost Estimate for FAO Action Plan for Jordan Interventions**

Programme Title	Cost Estimate (USD millions)			
	Short term	Medium term	Long term	Total
1. Strengthening the National Capacity for the Control of TADs and Improved Animal Health Services	2.60	6.95	14.22*	9.55
2. Capacity Development of MoA and Other Stakeholders of the Agriculture Sector in Food Security and Natural Resource Information Systems and Policy Development	0.7	-1.05	4.50*	1.75
3. Improved Rural Income Generation and Employment through Integrated Homestead Farming, Agroprocessing and Marketing in Communities Hosting Syrian Refugees	2.10	9.60	10.41	22.11
4. Intensification and Diversification of Smallholder Agriculture and Food Production in Northern Jordan	1.50	-	7.45	8.95
5. Phytosanitary Control in Syrian Border Areas of Jordan	-	2.72	-	2.72
6. Strengthening the National Capacity for Community-based Natural Resource Management in the Badia Rangelands of Jordan	0.92	-	5.26	6.18
7. Improved Food Nutrition for Syrian Refugees in Jordan	0.87	-	-	0.87
<b>Total</b>	<b>8.69</b>	<b>20.32</b>	<b>23.12</b>	<b>52.13</b>

\* Regional subprogramme not included in the cost estimate for the FAO Action Plan for Jordan

### 5.5 Agricultural Macro-economic Response Options<sup>23</sup>

Addressing the macro-economic impact of the Syria crisis on the agriculture sector in Jordan will require central-level policy decision making on wholesale diversification and intensification and large investments in agricultural trading infrastructure, inspection of food commodities and enhancement of new and existing public-private partnerships as markets and trading routes adapt to change. In detail, response options include:

- i. Long-term and sustainable diversification of traditional farm enterprises away from low productivity cereal crops and highly perishable export crops towards more high-value products and replacements for those commodities previously imported from Syria (where financially and economically viable).
- ii. Increased crop and livestock productivity and production and improved food quality through “climate-smart agriculture” and modernised government and private sector agricultural support services, again to promote the replacement of agricultural inputs and commodities previously imported from or through Syria.
- iii. Reduced on and off-farm losses, increased added value and enhanced shelf-life of Jordanian agricultural produce through improved post-harvest management and agroprocessing technologies.
- iv. Identification of non-traditional agricultural markets, increased promotion of Jordanian niche products and development of appropriate value chains, including modern storage, transportation and port handling facilities.
- v. Improved food safety, quality and control and adoption of international food standards to establish and sustain new domestic and export markets (in particular to the European Union and Gulf States).

While some elements of the aforementioned macro-economic options would be addressed in the short, medium and long-term agricultural livelihood options (Section 5.1), the overall agricultural macro-economic response would require more detailed review and investment planning for the Jordanian agriculture sector by FAO’s Investment Centre and/or international financial institutions – that is beyond the scope of this Action Plan for Jordan.

<sup>23</sup> As presented by FAO to the UNDP-led “Needs Assessment Review”; 5 November 2013



# ANNEXES





## CONNECTION BETWEEN THE FAO ACTION PLAN FOR JORDAN AND UNITED NATIONS DEVELOPMENT FRAMEWORKS AND ORGANIZATIONS

### 1. United Nations Development Assistance to Jordan

The third Jordan United Nations Development Assistance Framework (UNDAF), 2013 to 2017 has four strategic priority areas, viz: (1) enhancing systematic reform; (2) ensuring social equity; (3) investing in young people; and (4) preserving the environment.

It anticipated that FAO will have a key role to play in supporting ten development programmes from all four Priority Areas (PA), viz:

- i. PA-1: Orientation of (*agricultural*) policies and programmes and projects in conformity with national objectives and priorities (Sections 2.4 and 5.1. and Subprogrammes J.2.2 and J.6.2).
- ii. PA-1: Promote and enhance (*agricultural*) scientific research and linking it to comprehensive development objectives (in partnership with the International Center for Agricultural Research in the Dry Areas [ICARDA]).
- iii. PA-2: Contribute to the development of the Jordanian (*rural*) economy to become prosperous and open to regional and global markets (Section 3.1 and Subprogrammes J.3.2 and J.3.3).
- iv. PA-2: Reducing the (*rural*) poverty rate in Jordan (Section 5.1).
- v. PAs-3 and 4: Provide an appropriate environment for (*agri-*) business and investment and to enhance the competitiveness of the national economy at the local and international levels (Sections 3.1 and 3.5 and Subprogramme J.3.3).
- vi. PAs-3 and 4: Contribute to the development of the Jordanian (*rural*) economy to become prosperous and open to regional and global markets (Sections 3.5 and 5.5 and Subprogramme J.3.3).
- vii. PA-4: Integrate local (*farming*) communities into the (*agricultural*) development and planning process (Sections 5.1 and 5.2.1 and Subprogramme J.4.2).
- viii. PA-4: Participate in the reduction of the unemployment rate and in increasing (*rural*) employment (Section 3.2.2 and Programmes J.3, J.4 and J.6)
- ix. PA-4: Securing adequate water supplies for various sectors (*including agriculture*) at reasonable tariffs to serve the economic, social and environmental sustainable development objectives (Sections 3.5.4 and 5.1 and Subprogramme J.2.2)
- x. PA-4: Improving the usage of available (*irrigation*) water resources (Sections 3.5.3, 3.5.4 and 5.1 and Subprogrammes J.4.2 and J.6.2).

### 2. FAO's Strategic Framework, 2010 to 2019

#### 2.1 FAO's Strategic Objectives

FAO's Strategic Framework for the period 2010 to 2019 has a vision that "by 2020, we will be living in a world free of hunger and malnutrition where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner". This will be achieved through the active pursuit of three global goals, viz:

- i. Reduction in the number of people suffering from hunger, progressively ensuring a world in which all people at all times have sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
- ii. Elimination of poverty and the driving forward of economic and social progress for all, with increased food production, enhanced rural development and sustainable livelihoods.
- iii. Sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources, for the benefit of present and future generations.

Added to these global goals, strategic objectives and priority areas, FAO has also identified six guiding principles to underpin the Organization's development work in countries such as Jordan, viz: (i) work through participatory and process-oriented approaches; (ii) build on existing knowledge, methods and capacities; (iii) ensure complementarity of actions and links with other stakeholders and actors; (iv) focus on capacity development of rural communities and all other stakeholders of the food chain; (v) focus on gender equity; and (vi) promote "do no harm" and "rights-based" approaches.

In order to achieve the Vision of FAO and the Global Goals of its Members, the Organization has defined five Strategic Objectives (SOs). They focus on where FAO can best assist Member States to achieve sustainable impacts in addressing the challenges and opportunities facing food, agriculture and rural development. The Strategic Objectives represent a combination of interlinked and cross-sectoral impacts, addressing the areas of crops, livestock, fisheries, food safety, forestry, natural resources, enabling environments, food security, gender, emergencies and investment, viz: (SO1) eradicate hunger, food insecurity and malnutrition; (SO2) increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner; (SO3) improve the livelihoods of rural populations and, in particular for women and youth, through enhanced employment opportunities and conditions, increased access to productive resources and rural services; (SO4) enable more inclusive and efficient food and agricultural systems at local, national and international levels; and (SO5) increase the resilience of livelihoods to threats and crises.

## 2.2 FAO's Regional Priority Areas

In 2012, FAO/RNE defined five priority areas for the region. The focus of the Agriculture Response Plan to the Syria Crisis is in areas of direct relevance to FAO/RNE's Priority Area E, "Preparedness for, and response to, food and agriculture emergencies"; while supporting Priority Area A, "Enhancing food security and nutrition", B, "Fostering agricultural production and rural development for improved livelihoods", and D, "Sustainable management of natural resources".

## 2.3 FAO's Country Programming Framework

The priority areas for FAO's collaboration with Jordan have been closely aligned to those agreed by the United Nations system with the Government in the context of UNDAF (Annex 1, Section 1 above). The FAO Country Programming Framework (CPF) for Jordan, which was prepared through extensive stakeholder consultations in 2012, covers a similar period to UNDAF (2012 to 2017). The priority areas of CPF are also consistent with FAO's global and regional priorities (Annex 1, Sections 2.1 and 2.2). The CPF, which is co-owned by the Government of Jordan and FAO, presents the broad commitment of FAO, subject to the availability of the required funding, to assist MoA in its efforts to achieve development objectives as articulated in the draft National Strategy for Agricultural Development, 2014 to 2020 (Table 5; Subprogramme J.2.2). The two priority areas of CPF that are relevant to the FAO Action Plan for Jordan are as follows:

**A – Facilitate Multilateral Cooperation:** addressing transboundary crop, livestock and fish diseases and pests and including "support to the establishment of veterinary quarantine centres".

**C – Pilot Innovative Approaches:** including improvement of food security at the household level in rural areas; improvement of water canals to reduce losses; rangeland development in Badia (the eastern semi-desert rangelands bordering Iraq and Syria); introduction of methods of water-harvesting in rangeland areas; and post-harvest management and value chain development for small-scale farmers and livestock producers.

## 2.4 FAO's Ongoing Initiatives in Jordan and the Near East Region

Recently completed FAO-supported agricultural programmes and projects in Jordan, upon which a food and agriculture response to the Syria crisis could be built, include:

- Government of Jordan-funded and FAO-assisted “National Special Programme for Food Security in Jordan” (2004 to 2010; JD 37 million), which comprised five components and 21 projects<sup>24</sup> in the highland regions of the country<sup>25</sup>.
- FAO-funded projects to provide: “Emergency Animal Health Assistance to Pastoral Small Stockholders Affected by Drought” (2001 to 2003, USD 330 000); “Technical Assistance to Restructuring Livestock Health and Production Delivery Systems in Rural Jordan (2002 to 2005, USD 300 000); “Home Gardening for Better Family Nutrition and Income in Upland Areas” (2004 to 2005; USD 210 000); “National Drought Mitigation Strategy (2005 to 2007, USD 229 000); “Development of a National Agricultural Information System (2006 to 2011; USD 269 000); “Sustainable Agricultural Production through the Promotion of Conservation Agriculture” (2009 to 2011, USD 270 500); and “Adaptation to Climate Change to Sustain Jordan’s MDG Achievements” (2009 to 2012, USD 828 000).

**Two FAO-funded projects are due to start in early 2014, i.e. “Food Security and Livelihoods Analysis for Jordanian Host Communities” (six months, USD 130 000); and “Strengthening the Capacity of Veterinary Services for the Control of Transboundary, Zoonotic and Vector-borne Diseases in Jordan” (12 months, USD 300 000).**

Seven recently completed and ongoing FAO-supported global and regional programmes benefitting Jordan’s agriculture sector include the: (i) Regional Integrated Pest Management (IPM) in the Near East (2004 to 2011; USD 7.6 million); (ii) Control of TADs in the Middle East Region (2007 to 2011; USD 2.9 million); (iii) Support to Policy Consultation and Actions to Boost Sustainable Use of Water and Energy Resources for Agricultural Production and Livelihood Improvement in the Near East and North Africa Region in the Context of Climate Change (2010 and 2011; USD 436 000); (iv) Management of the Invasive Plant *Solanum elaeagnifolium* in the Near East (2010 to 2012; USD 389 000); (v) **Strengthening Veterinary Quarantine Capacity in the Middle East Region (2011 to 2013; USD 307 000); (vi) Coping with Water Scarcity (The Role of Agriculture) – Phase III, Strengthening National Capacities (2011 to 2014; USD 2.4 million); and (vii) Management of Tomato Borer *Tuta absoluta* in the Near East Region (2013 and 2014; USD 440 000).**

### **3. International Center for Agricultural Research in the Dry Areas (ICARDA)**

Prior to the Syria crisis, the headquarters, laboratory and gene bank of ICARDA were located in Aleppo in northern Syria. In December 2010, ICARDA relocated its international staff, experts, facilities and much of its equipment from the organization’s headquarters and principle research station to other offices, mainly Jordan, Lebanon, Egypt and Ethiopia. ICARDA is also in the process of decentralizing its organizational structure with the aim of creating five hubs, viz: (i) Headquarters and West Asia (based temporarily in Beirut and Amman with the aim of returning to Aleppo, Syria); (ii) Nile Valley (Cairo, Egypt); (iii) North Africa (Rabat, Morocco); Central Asia (Tashkent, Uzbekistan) and (v) Sub-Saharan Africa (Addis Ababa, Ethiopia).

ICARDA’s Regional Programme for West Asia includes some 25 projects which focus on: providing agricultural research institutions in the region with plant material for their breeding programmes on barley, wheat, lentil, chickpea, faba bean, vetch, grass pea and medic; reversing land degradation through water harvesting and planting of fodder shrubs on the Badia rangelands of Jordan and Syria; pilot village-level wastewater treatment units in Jordan; conservation of genetic resources in Jordan; and developing technological, institutional and policy options on agricultural research.

<sup>24</sup> i.e. (i) on-farm soil and water management (3 projects); (ii) field crop production (2 projects); (iii) crop diversification, including horticulture (4 projects); (iv) household small livestock development (7 projects); and (v) income generation for employment and poverty alleviation (5 projects)

<sup>25</sup> FAO and Ministry of Agriculture; National Programme for Food Security Review; 2011



FAO and ICARDA have recently prepared a memorandum of understanding on characterisation, conservation and management of plant genetic resources. Since 2005, FAO and ICARDA have been collaborating in: (i) germplasm and crop development (ii) seed production; (iii) natural resources management; (iv) livestock management; (v) information management and exchange; and (vi) human capacity development. Another important model for working with FAO is the regional platform of partnership in the Asia and Pacific Region where in FAO, Asian Development Bank, IFAD, World Bank, WFP, and ICARDA are partners working in partnership with the national agriculture systems in the countries of the region. Such partnerships outline ICARDA's responsibilities with regard to agricultural research and FAO's responsibility to agricultural policy development, extension and capacity building in any given region, subregion, country and/or agro-ecological zone.

#### **4. International Fund for Agricultural Development (IFAD)**

IFAD is a specialized agency of the United Nations that provides finance for agricultural development and food security projects in remote and rural areas of developing countries. Like FAO, IFAD's headquarters are located in Rome, Italy. Prior to the crisis, IFAD was financing three projects inside Syria with a total investment of USD 65.7 million – one of which was a national “Integrated Livestock Development Project” (2011 to 2019; USD 28 million). At present, IFAD is financing one project in Jordan, i.e. “Jordan Agricultural Resource Management Project – Phase II” (2005 to 2015; USD 11.8 million – co-financed by the Organization of the Petroleum Exporting Countries [OPEC] and the Global Environment Facility [GEF], USD 16.8 million), which aims to improve food and water security and income level in Karak, Ma'an and Tafila Governorates of western-central Jordan through community-based participatory approaches.

#### **5. World Food Programme (WFP)**

In December 2013 WFP will launch the Protracted Relief and Recovery Operation (PRRO) - Jordan PRRO/200537 benefiting some 160,000 people over two year at a total estimated cost of USD 24 million. This PRRO will assist vulnerable Jordanians in rural and urban areas affected by the protracted economic crisis, the degraded and scarce natural resource base and those whose situation has been aggravated by the Syria conflict. It aims to improve access to food, protect livelihoods and restore productive capacity through asset creation (i.e. food assistance for assets [FFA] and food assistance for training [FFT]).

FFA will be the main activity of the PRRO in rural areas. Community and household works will be organized to generate short-term income for food-insecure and vulnerable rural households, to restore community assets and natural resources, and, where complementary partnerships and resources are leveraged, to strengthen livelihoods. Rural FFA interventions will concentrate on forestry and rangeland improvement projects, maintenance of water infrastructure and construction of water harvesting infrastructure. Some of the rural FFA interventions will be dedicated to protect or create productive household assets, such as land reclamation and improvement, especially where MoA or partner NGOs, such as the National Alliance Against Hunger and Malnutrition (NAJMAH), can provide the additional materials and equipment. Such income-generating activities could be complemented through FFT to improve household livestock management, dairy product processing and marketing, kitchen gardening, vegetable production, olive production, alfalfa production, water management and others.

The rural FFA activity will be implemented through MoA and local NGOs, such as NAJMAH, in close coordination with other development partners, specifically FAO, IFAD and UNDP. Particular attention will be made to ensure alignment and complementarity with ongoing and planned projects to improve food security and support livelihoods, to leverage technical expertise and to integrate activities where feasible.

## **6. International Labour Organization (ILO)**

In cooperation with Government and public sector partners in Irbid and Mafrq Governorates, ILO is implementing a component titled: “Enhancing Access to Employment Opportunities and Livelihoods in Host Communities in Irbid and Mafrq Governorates”, under the framework of the UNDP-supported project “Mitigating the Impact of the Syrian Refugee Crisis on Jordanian Vulnerable Host Communities”. The ILO component has two subcomponents relevant to FAO Jordan/MoA’s Action Plan: (i) “participatory value chain development for decent work”; and (ii) “enabling environment through public-private sector dialogue. ILO has already completed analyses of the olive value chain in Irbid Governorate and the tomato value chain in Mafrq Governorate with recommendations for future value chain development interventions (i.e. production, processing, marketing, support services, etc.).

## CONNECTION BETWEEN THE FAO ACTION PLAN FOR JORDAN AND PROPOSED UNITED NATIONS RESPONSES TO THE SYRIA CRISIS

### 1. United Nations' Sixth Regional Response Plan, 2014

United Nations' agencies are in the final stages of preparing the Sixth Syria Regional Response Plan for the period January to December 2014 (RRP6). The objectives of the food security response for Jordan are to save lives and protect livelihoods in emergencies in order to: (i) maintain food security and improve food availability, access and utilization for Syrian refugees in Jordan through appropriate and consistent food assistance; (ii) improve food security including food availability, access and utilization for vulnerable Jordanian populations through targeted food production and livelihood interventions; (iii) improve the nutritional status of Syrian refugees; and (iv) ensure effective and coordinated sectoral response through evidence-based food security and livelihood interventions.

FAO submitted four project proposals to the Food Security Chapter of RRP6 under the umbrella of "Food Working for Jordan", viz:

- i. Enhanced food security conditions of the population affected by the ongoing crisis by reducing the threat of TADs (12 months; USD 2.6 million)<sup>26</sup>; (Table 5; Subprogramme J.1.1).
- ii. Understanding of food security and livelihood conditions and needs of vulnerable families affected by the Syria crisis by stakeholders of the food security sector have improved (12 months; USD 752,500)<sup>27</sup>; (Table 5; Subprogramme J.2.1).
- iii. Improved food security and livelihood conditions of vulnerable Jordanian families living in high refugee populated areas through the provision of horticultural and poultry inputs and food nutrition training (12 months; USD 2.1 million); (Table 5; Subprogramme J.3.1).
- iv. Contribute towards improved food and nutritional knowledge of the vulnerable Syrian refugee households living in north Jordan (12 months; USD 870,000); (Table 5; Subprogramme J.7.1).

### 2. Draft OCHA-led Comprehensive Regional Strategy – Dealing with the Effects of the Syria Crisis (December 2014)

The purpose of the OCHA-led Comprehensive Regional Strategy is to *provide strategic direction to the design, implementation and monitoring of interventions across the humanitarian-development spectrum*, through a robust "aid sustainability" lens for greater coherence, effectiveness, efficiency and accountability. *It will do so on the basis of a shared understanding of the needs and vulnerabilities across the Subregion, which will, in turn, support, in each country, a common, government-led process of policy making, programme prioritization and reporting.*

The Comprehensive Regional Strategy aims to provide a platform through which neighbouring governments, donors, the United Nations, NGOs, and private actors where relevant, can harmonise their respective interventions throughout the Subregion. This will allow for programming and resource allocation on the basis of a common understanding of the impact of the crisis and the effects and implications of potential responses. While the analysis is designed to be used by all actors, the strategy does not aim to replace government and/or partner plans and strategies. It is envisioned however that its strategic and operational implications will directly guide the development, implementation and monitoring of United Nations' responses such as Syria Humanitarian Assistance Response Plan (SHARP), RRP6 and forthcoming United Nations' contributions to government led stabilization and resilience efforts.

<sup>26</sup> Partially funded by FAO/TCP project (Annex 1, Section 2.4)

<sup>27</sup> Partially funded by FAO/TCP(F) project (Annex 1, Section 2.4)

In support of its purpose and objectives, the core components of the draft Comprehensive Regional Strategy include:

- A set of strategic and operational principles designed to guide the engagement of the international community behind nationally led efforts.
- The development of a *joint analytical framework* to assess needs and vulnerabilities through country specific and regional dashboards, conduct gap analysis and precise costing calculations, and draw policy and programming options/implications.
- The establishment of, or support to, mechanisms to *strengthen national leadership* in policy making, and coordination of responses.
- The establishment of *robust monitoring and reporting systems* for humanitarian, development and structural assistance.

While the “detailed country chapters” of the draft Comprehensive Regional Strategy tend to focus on refugees, host community, economic and socio-political impacts and a gap analysis of education, health and shelter/housing sectors, FAO has submitted to OCHA a contribution summarising “food and nutrition options for intervention for the Syria crisis” for inclusion in the Comprehensive Regional Strategy (November 2013). *All short and medium-term subprogrammes of the FAO Action Plan for Jordan were included in this submission (Table 5).*

### **3. UNDP-led (Regional) Resilience-based Development Response to the Syria Crisis and National Resilience Plan for Jordan**

The working draft of the **UNDP-led regional Resilience-based Development Response (November 2013)** aims to: (i) provide national and international development partners with a set of parameters and guidelines for the preparation of the proposed resilience-based development response for each host country; (ii) define common areas within and across countries to facilitate coordination of humanitarian and development responses to the Syria crisis, and (iii) optimize partnerships and funding mechanisms to support resilience-based development responses.

The proposed UNDP-led regional resilience-based response aims to achieve three (interrelated) strategic objectives, viz: (i) coping – the resilience of local governance, housing supply mechanisms, infrastructures and basic services are bolstered to respond to increased demand; (ii) recovery – vulnerable households (both refugees and affected communities) recover from the socio-economic impact of the conflict and consequent dislocation (in particular, stabilization of livelihoods and employment, supporting local economic revitalization and addressing needs for food and water); and (iii) sustainability – macro-economic, social and political institutions are strengthened in all host countries for sustainability (in particular, natural resource management).

The UNDP-led regional resilience-based response acknowledges the importance of achieving coherence in the two mutually reinforcing responses, i.e. “humanitarian” and “development” and, in doing so, proposes a resilience-based framework of eight indicative elements – two of which are relevant to FAO’s role in an agricultural and food approach to building resilience, viz:

- i. food and nutrition security, control of transboundary threats, sustainable livelihoods, and economic recovery complement the provision of food aid, agricultural inputs and assets and non-food items; and
- ii. natural resources management and innovative solutions that save water, land and forests are cornerstones of a resilience-based approach to development.

The **Government of Jordan/Ministry of Planning and International Cooperation’s Host Community Support Platform and UNDP-led National Resilience Plan, 2014-2016 (January 2014)** provides a three-year programme of high priority investments by the Government in response to the impact of the Syrian refugee crisis on Jordanian host communities – the first national resilience plan of the UNDP-led “resilience-based development response” in the region. The guiding principle of resilience suggests that all interventions be formulated with a continuum lens with a focus on

longer term action for building national and local capacity to scale up and sustain recovery efforts and development gains.

The total cost of these response interventions is estimated at USD 1.94 billion (respectively USD 590.1 in 2014, USD 772.4 million in 2015, and USD 574.8 million in 2016). It is further estimated that investments are needed in: water and sanitation (USD 750.7 million); social protection (USD 357.7 million); health (USD 339.5 million); municipal services (USD 187.3 million); livelihoods and employment (USD 161.6 million); energy (USD 105.3 million); education (USD 28.8 million); housing (USD 7.2 million); and USD 899 million for supplementary budgetary support to compensate for additional subsidies born by the Government as a direct result of the Syria crisis.

FAO, ILO, UNDP and WFP were responsible for preparing the “investment response for livelihoods and employment”, which has an overall objective of “the capacity of poor and vulnerable households in host communities is strengthened to cope with and recover in a sustainable way from the impact of the Syria crisis, and mitigate future effects on their employment and livelihoods” and four specific objectives, viz: (i) create more and better job opportunities for the poor and the vulnerable (women and youth); (ii) revive the local economies of the most-affected areas through support to existing and new micro and small enterprises for poor and vulnerable households (women and youth); (iii) restore and preserve pastoral livelihoods, rangeland and natural resources; and (iv) improve food security for poor and vulnerable households. The livelihoods and employment response includes 14 interventions, six of which reflect *the short and medium-term (and pilot and preparatory activities of some long-term) subprogrammes of the FAO Action Plan for Jordan (Table 5) at a total estimated cost of USD 37.65 million.*