

# LEBANON

## PLAN OF ACTION FOR RESILIENT LIVELIHOODS

Food Security Response and Stabilization of Rural Livelihoods  
Addressing the Impacts of the Syria Crisis

2014–2018



**SUMMARY**





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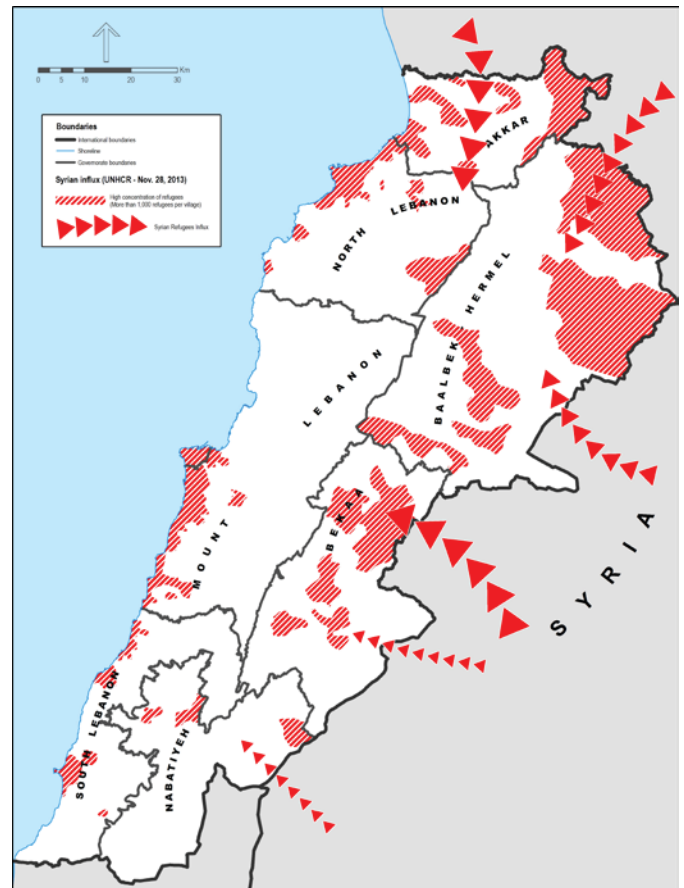
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SUMMARY

## INTRODUCTION

Since March 2011, the conflict in Syria has resulted in massive influxes of refugees across the region, primarily into neighbouring Iraq, Jordan, Lebanon and Turkey. Lebanon hosts the greatest number: 1.7 million people (including 1.2 million registered refugees), living in the poorest sections of Lebanese communities and in some cases outnumbering local citizens. Against a pre-crisis population of around 4 million, Lebanon now has the highest concentration of refugees in the world, with around one registered Syrian refugee for every three Lebanese.

This unprecedented number of refugees, combined with internal political and economic challenges, has contributed to increased instability throughout Lebanon. Refugees are competing with Lebanese citizens for jobs, access to public services and infrastructure and, in particular, for already scarce and fragile natural resources, such as land, water and forests. The situation threatens the country's delicate sectarian balance, institutional and political stability, and regional peace and security.



A 2013 World Bank-led Economic and Social Impact Assessment of the Syrian conflict on Lebanon projected that from 2012–2014 the crisis may push 170 000 Lebanese into poverty, reduce real gross domestic product (GDP) growth by 2.9 percentage points each year, double unemployment to over 20 percent (mostly among unskilled youth) and depress government revenue collection by USD 1.5 billion. Moreover, government expenditure were projected to increase by USD 1.1 billion due to the surge in demand for public services.

Although the role of agriculture in the national economy of Lebanon is declining in relative terms, it continues to play an important role in the rural economy and has a significant impact on rural livelihoods. In the areas most affected by the Syria crisis – northern Lebanon and the Bekaa – agriculture contributes up to 80 percent of local GDP. Together with its related subsectors (input supply, processing, marketing and transport of farming produce), agriculture represents by far the most important livelihood opportunity, especially in the poorest subgovernorates of Akkar and Baalbek-Hermel. It is in these poorest areas of Lebanon where most Syrian refugees are concentrated, and where agriculture is the primary source of income and employment.

Lebanon's economic decline and unstable security situation have had the greatest impact on agriculture and food production in northern and eastern Lebanon, particularly in the border areas of Hermel, Baalbek and Akkar, where most farmers cannot even access their land. Farmers who have traditionally relied on agricultural inputs and services at subsidized or inexpensive rates from Syria today face a rapid increase in input costs, and are struggling to maintain production. Furthermore, farmers and pastoralists are increasingly abandoning their livestock, as they are unable to cope with escalating feed prices and decreasing market prices of their animals and animal products. Farmers' income is also affected by the disruption to trade routes (e.g. the closure of border points) and increase in transportation costs.

At the request of the Government of Lebanon, the World Bank, United Nations, European Union and International Monetary Fund (IMF) undertook a rapid Economic and Social Impact Assessment of the Syrian conflict on Lebanon in September 2013, covering the period 2012–2014. A second phase of this World Bank-led process has begun – a Stabilization Plan, outlining key priorities for programmatic interventions at the national and regional levels, with focus on identifying policy recommendations, programmes and projects to mitigate the impact of the Syrian conflict.

Against this background, the Food and Agriculture Organization of the United Nations (FAO) convened specialists in Lebanon in November and December 2013 to formulate an FAO-led agriculture and food security programme that could feed into the Stabilization Plan and related Roadmap. The proposed Plan of Action, summarized herein, is part of FAO’s Subregional Strategy “Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas Affected by the Syria Crisis”. It aligns with existing regional frameworks for addressing the Syria crisis, such as the Syria Regional Response Plan, the Office for the Coordination of Humanitarian Affairs-led Regional Comprehensive Strategy, and the United Nations Development Group Position Paper “A Resilience-Based Development Response to the Syria Crisis”.



## BACKGROUND

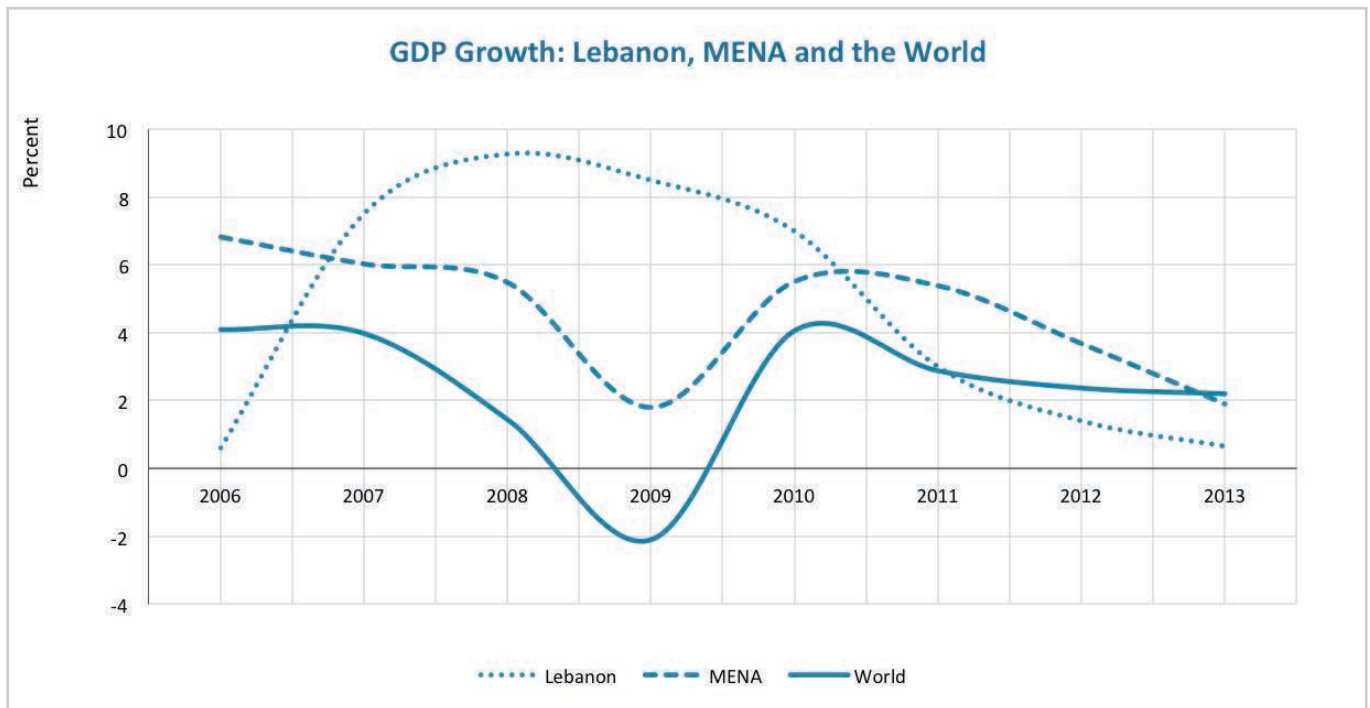
### Pre-crisis economic situation

Lebanon's economy was severely impacted by the assassination of former Prime Minister Rafic Hariri in 2005 and conflict with Israel in 2006. From 2007 to 2011, the economy recovered and GDP grew at an average annual rate of 7.1 percent, while the global economy experienced its worse growth performance since the Great Depression of the 1930s. Although Lebanon's economic growth in 2007 is due to the low baseline in 2006, the growth thereafter was supported by sustained regional demand for Lebanon's services, and large inflows of transfers and capital (World Bank, 2010).

In 2010–2011, economic activity suffered due in part to concerns regarding domestic political instability but also because of a relapse phase following years of record growth. Consumer and business confidence in 2011 was shaken by the increasingly strong polarization of political parties that resulted in the fall of a coalition government in January, and a long political vacuum before a new government was formed in June 2011.

Most economic forecasts made in early 2012 – prior to the escalation of the Syria crisis – projected GDP growth to expand at 4–4.5 percent, near its potential growth rate. However, this optimistic economic recovery predicted by the World Bank and IMF was undeniably prevented by the onset of the Syria crisis.

Instead of economic recovery, Lebanon is today facing a situation of extreme instability, which threatens the well-being of millions of people. With an actual GDP growth rate of less than 1 percent, the cumulative challenges affecting Lebanon's economy could push large areas of the country into poverty in the absence of timely, strategic support.



Source: World Bank Global Economic Prospects, January 2014

## *Agriculture sector overview*

Agriculture – including crop, livestock, fisheries and forestry production – represents a small portion of Lebanon’s economy: on average, about 6.4 percent of its annual GDP from 2001 to 2010. This is significantly less than neighbouring Arab countries and consistent with Lebanon’s higher level of per capita income, as well as its more urbanized and diversified economy. Agricultural value added per square kilometre is higher in Lebanon than in many nearby countries, reflecting a higher intensity of production and greater focus on higher value fruits and vegetables.

Lebanon is a net food importer. In 2011, Lebanon’s total agricultural and food imports amounted to USD 3.181 billion while agricultural and food exports were valued at USD 0.581 billion. The country is thus highly vulnerable to price volatility of food and other agricultural commodities, with a food import bill reaching USD 2.6 billion yearly (2011).

According to the most recent Agricultural Census (2010/11), Lebanon has an agricultural area estimated at 332 000 hectares (32 percent of its surface area). A total of 230 000 hectares is cultivated, of which half is irrigated. Land use has gradually shifted from production systems based on cereals toward high value-added crops (mainly fruits and vegetables). Total agricultural value production remained stable in the last few years.

Lebanon’s livestock sector contributes around 30 percent of the total value of production. Animal production is one of the major economic activities in the south and north of Lebanon, which have the highest poverty indicators in the country’s rural areas. The animal production sector is considered the core of the Southern, Northern and Beqaa rural economy, and has a key impact on household well-being and poverty alleviation. Almost 60 percent of livestock farmers depend on dairy as their main source of livelihood.

Approximately 20–25 percent of Lebanon’s active population is involved in the agriculture sector, including full-time and part-time workers as well as seasonal family labour. Female farmers constitute some 9 percent of the total farmers, involved mainly in the production of dairy products, food preserves and subsistence farming.

Many of Lebanon’s poorest families depend on agriculture as the primary source of income and employment. In many villages in the South as well as in Baalbeck and Hermel, which also are the poorest sections of the country, agriculture is reported to contribute up to 80 percent of the local GDP and represents the major income-earning and employment opportunity. Over 20 percent of heads of households engaged in the sector are very poor.

## **GENERAL CHALLENGES FACING AGRICULTURE**

Lebanon’s agriculture sector faces institutional, policy, technological and financial resource constraints, resulting in low performance. The interplay of these constraints results in:

- small, fragmented landholdings
- lack of access to infrastructure
- widespread use of foreign labour
- rural-urban migration
- high production costs due to high costs of inputs, labour and energy
- insufficient knowledge of modern techniques and environment-friendly practices
- excessive use of pesticides
- degradation of natural resources
- low competitiveness of agricultural products and a rising agricultural trade deficit

## AGRICULTURE AND LIVELIHOOD CHALLENGES ACCENTUATED BY THE SYRIA CRISIS



### *Labour force and wages.*

Before the Syria crisis, labour market conditions in Lebanon were already dire: high unemployment rates coexisted with mismatches in the labour market and a high prevalence of low-quality and low-productivity jobs. The massive and continuous influx of Syrian refugees is expected to further increase labour supply by between 30 and 50 percent (with the largest impacts on women, youth and unskilled workers) and to drive down agricultural wages substantially. In some villages of the Bekaa, daily wages of labourers have dropped by up to 60 percent. Syrian non-skilled labourers are gradually replacing the skilled Lebanese labour force.

### *Crop production.*

Lebanon's crop production had been affected by scarce and costly agricultural inputs, farmers abandoning or lacking access to their fields, and disrupted access to local and export markets.

### *Agricultural inputs and cost of production.*

In bordering areas, farmers used to import most of their agricultural inputs at low prices from Syria, where agricultural production inputs were largely subsidized by the government. Products crossed the border formally or informally, including pesticides, herbicides, local seed varieties, forage seeds and fodder, fertilizer, diesel to pump water for irrigation and transport goods, as well as machinery spare parts and equipment. Because of the conflict, most of these items are now difficult to find on the market; the price of those items still available for sale has increased dramatically. For example, the price of urea fertilizer has doubled (USD 600/tonne) and sulphur used for pest control increased more than fivefold (from USD 0.18–USD 1.0/kg). As a result of these factors, Lebanese farmers are increasingly unable to maintain and invest in their livelihoods.

### *Agriculture trade and commodity/food prices.*

Agricultural trade with Syria and other trading partners (mainly neighbouring countries) has been partially disrupted, as Syria is a major destination and transit route for agricultural and food products. There was a sharp decrease in agricultural and food exports from Syria into Lebanon (USD 266 million in 2012; nearly a 49 percent decrease between 2010 and 2012), whereas agricultural imports into Syria increased by almost 12 percent over the same period. The increased demand for staple products in Lebanon (by Syrian refugees), coupled with the inability to import cheaper foods from Syria, have pushed prices upward, resulting in the increase of household food expenditures. The agriculture sector is expected to decline further due to the crisis, causing additional losses in agricultural outputs, wages, profits and investments.

### *Food safety.*

Fresh and processed products in Syria informally sold in Lebanon do not follow food handling standards during processing or transport. Moreover, inspection and quality control that should take place at the border is not performed.



### **Plant health and diseases.**

The risk of pest and disease outbreaks has increased due to under capacitated Lebanese quarantine and border control units. The limited capacity to inspect plant imports and to secure the production of healthy plant material locally at competitive prices will increase the risk of pest and disease transfer from Syria. Consequently, in the medium and long terms, crops will be more vulnerable to diseases affecting crop yield and quality.

### **Livestock production.**

Herders face enormous obstacles, including dwindling feed supplies; increased market prices for both roughage and concentrate (over 25 percent); higher grazing rents in rangelands; and high costs of veterinary visits and drug supplies, compounded by shortages in veterinary services. The price of animal feed (previously purchased at subsidized prices from Syria) has almost doubled. The number of animals estimated to have crossed from Syria into Lebanon since the crisis began is equivalent to roughly 10 percent of Lebanon's dairy cattle and 30 percent of its small ruminants (FAO, September 2013). The situation has forced many smallholder farmers to sell a portion of their animals, in most cases at about 40–50 percent of their normal market price.

### **Transboundary animal diseases (TADs) and zoonoses.**

Veterinary services inside Syria (e.g. animal disease surveillance, vaccination programmes and quarantine facilities) collapsed in early 2012. Syrian livestock have not been vaccinated against TADs and zoonoses for at least 12 to 18 months. Consequently, Syrian refugees (and Lebanese returnees) have brought unvaccinated sheep, goats and cattle to Lebanon. This threatens the health of livestock and people in those regions, particularly as the veterinary services in Lebanon are unable to cope with the increased threat of TADs. Therefore, there is an elevated risk of diseases breaking out in Syria and spreading across the region, including foot-and-mouth disease, brucellosis, *peste des petits ruminants* and lumpy skin disease.



### **Natural resources.**

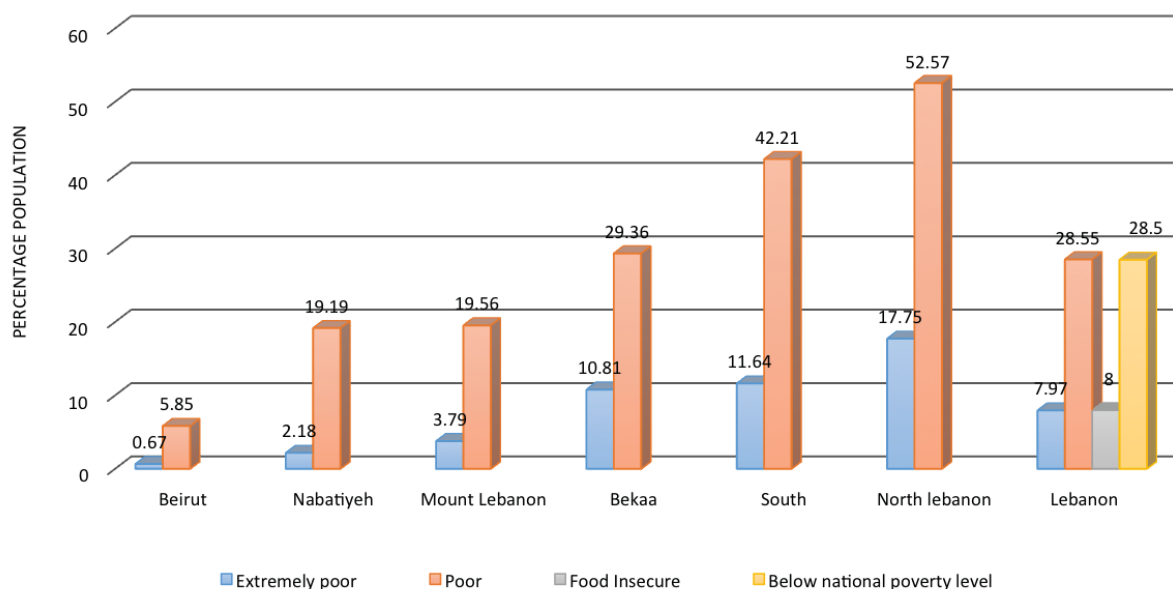
Especially in those areas where large refugee settlements are established, such as the northern coast of Akkar, there is evidence of natural resource depletion, water pollution, land degradation and the habitat destruction of indigenous fauna and flora. Refugees' livestock are depleting the already degraded rangelands of northern Bekaa. In addition, the presence of refugees stimulates a higher demand for fuel wood, particularly in the winter. The influx of refugees has also accelerated the degradation of water resources. For example, there has been a dramatic increase of solid waste along the rivers and coastlines, and a deterioration of both potable and irrigation water quality. The amount of water used has increased as well, due to both the refugees' consumption and the Lebanese potato and vegetable growers trying to meet higher local demand for food commodities. This increased water use has intensified the depletion of underground aquifers. Farmers in Al Qaa confirmed that the water table has dropped by 10 to 20 metres.

## Poverty and vulnerability.

According to the Economic and Social Impact Assessment report (World Bank, 2013), the Syrian conflict is expected to force an additional 170 000 Lebanese individuals into poverty by the end of 2014 (in addition to the 1 million currently living below the poverty line). Small-scale farmers and herders across Lebanon and particularly in the directorates of North and Bekaa are among the most vulnerable groups. The absence of effective social safety nets contributes to the vulnerability of these groups in the affected areas. Moreover, the high number of Syrian refugees has impacted the limited access of host communities to social services and scarce resources, and has increased competition for jobs. This has resulted in social tensions and fragile relations between refugees and Lebanese communities. Agriculture-based livelihoods have suffered both from loss of income and increased food expenditures. Rising food prices have increased the proportion of food expenditures in the budgets of low-income households, making them even more vulnerable to accelerating food prices. The few alternative coping mechanisms available to host communities include reduced savings, increasing debt or reducing the number of meals.

## Data availability.

One of the most significant obstacles to planning for emergency and recovery interventions is the absence of comprehensive and reliable information (especially quantitative data) to assess the impact of the Syria crisis on Lebanon's agriculture sector and rural socio-economic situation. As a result, it has not been possible to gauge Lebanon's food security status and natural resource use in the affected areas, which presents a major problem for informed decision-making. In addition, there is a need for a food security, agriculture and natural resources information and analysis network to continuously monitor and assess the changing situation, and to anticipate potential threats and crises.



Source: Government of Lebanon, 2010  
UNICEF, 2011

# KEY IMPACT AREAS AND CHALLENGES TO BE ADDRESSED

## 1. Insufficient capacity for preparedness and response to disaster:

- a. Increased risk of pests and disease outbreaks (weak border and trade inspections, and inadequate crop practices).
- b. Poor public sector capacity for crisis monitoring, preparedness and mitigation.
- c. Reduced food safety and phytosanitary control (poor handling, processing and border/trade inspection).

## 2. Reduced livelihood and food security levels:

- a. Reduction in household income from agriculture and increased poverty levels.
- b. Reduction in jobs and wages in agriculture and increased competition.
- c. Temporary or permanent abandonment of farmland in bordering areas (due to hostilities and insecurity).
- d. Reduction in household food and nutrition security.

## 3. Threats to livestock health and production:

- a. Increasing numbers of livestock being moved into Lebanon.
- b. High numbers of animals being sold/liquidated.
- c. Weak or absent veterinarian services – increased risk of TAD outbreaks.
- d. Increased cost of production (productive inputs and services).
- e. Reduced and weakened livestock production (including the dairy sector).

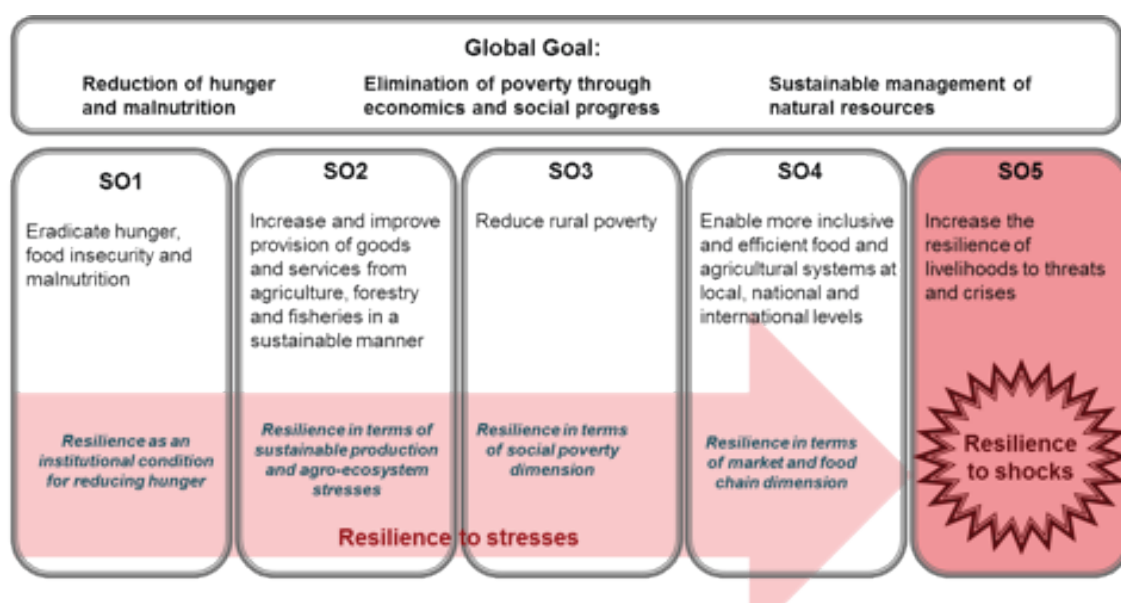
## 4. Agricultural production reduced and natural resources depleted:

- a. Reduction in agricultural productivity and profitability (input/output constellation).
- b. Increased cost of production (productive inputs and services).
- c. Depletion of rangelands and grazing areas (overgrazing).
- d. Depletion and degradation of wood and forest resources (illegal cutting, grazing and fires).
- e. Increased depletion of water resources (lowering of water tables, drought and contamination).
- f. Affected water management practices (inadequate irrigation, increasing costs for pumping and pollution).
- g. Increasing conflicts over natural resources between the Lebanese and refugees.
- h. Discouragement of farmers to invest in or apply good practices (due to high production costs and insecurity) and weak or absent crop advisory and extension systems.

## FAO APPROACH TO RESILIENT LIVELIHOODS

FAO's corporate Strategic Objective 5 – *Increase the resilience of livelihoods to threats and crises* – encompasses and strongly connects emergency and development interventions aiming to ensure a continuum of short-term and longer-term actions in support of the most vulnerable groups around the world.

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 crisis in Syria and its spillover into neighbouring countries.



In the complex context of the Syria crisis, with expected long-lasting impacts on both Syria and 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.

The Plan of Action for Lebanon, outlined below, is a key element of FAO's Subregional Strategy and Action Plan for “Resilient Livelihoods for Agriculture and Food and Nutrition Security in Areas Affected by the Syria Crisis”. Both the Subregional Strategy and the Action Plan for Lebanon are articulated around four key mutually reinforcing areas for agriculture, food and nutrition (including crops, livestock, fish, forests and other natural resources), which are pillars of FAO's corporate resilience strategy.

### Resilience: thematic pillars

1. “Prepare and respond”	Support vulnerable and affected people coping with the impact of the crisis and protect their livelihood asset base for future self-reliance
2. “Apply risk and vulnerability reduction measures”	Promote prevention and impact mitigation measures
3. “Watch to safeguard”	Support information, monitoring and analysis networks on food and nutrition security
4. “Govern risk and crisis”	Institution strengthening for building regional, national and local capacities, as well as related policy frameworks to scale up and sustain risk management and crisis recovery efforts

# PLAN OF ACTION

APPROACH AND PROPOSED INTERVENTIONS



## STRATEGIC APPROACH

The influx of Syrian refugees and returnees into Lebanon threatens to increase poverty levels and food insecurity. In order to prevent this, it is crucial to strengthen the agriculture sector, which provides livelihoods for the vast majority of the local population.

Communities in the main affected areas in the north of Lebanon and Bekaa Valley depend directly or indirectly on agriculture for their livelihoods. The populations in these rural communities most affected by the Syria crisis are among the poorest communities of Lebanon.

Based on the experience of other countries, agriculture-related GDP growth is twice as effective at reducing poverty as compared with GDP growth in other sectors. Increased agricultural production will also increase demand for related sectors, such as rural services, agroprocessing, agribusiness and the transport and communication sectors, thus contributing to employment creation.

Funding and assistance should therefore be directed to help crisis-affected crop and livestock farmers meet their minimum needs to sustain food production, and to catalyse the desperately needed income- and employment-generating capacity of the sector, in particular for the Lebanese host communities. This is necessary in order for these communities to feed themselves and strengthen their potential to assist the refugees. Furthermore, creating income-generating opportunities for refugees will help them meet their basic needs of food and other necessities, and will minimize pressure on local communities.

Support to resource-poor and crisis-affected communities should also provide for the socio-economic development of the agriculture sector, strengthening the resilience of livelihood systems (including individuals, households, communities, institutions and agro-ecosystems) to cope with and recover in a sustainable way from the impacts of the Syria crisis, reduce risks and mitigate future effects on their food and nutrition security and agro-ecosystems.

When households, communities and networks for goods and services are resilient, people realize positive livelihood outcomes (e.g. sufficient income, food security, proper nutrition and good health), and ecosystems are preserved and protected for future generations. Strengthening resilience at all levels will contribute to increased levels of food security, reduced poverty, enhanced social cohesion and peaceful coexistence.



## OVERALL GOAL

Strengthen the resilience of livelihood systems (including individuals, households, communities, institutions and agro-ecosystems) to absorb, cope with and recover in a sustainable way from the impacts of the Syria crisis; reduce risks; and mitigate future effects on their food and nutrition security and agro-ecosystems.

## THREE MAIN OBJECTIVES

- 1. Optimize the utilization of resource endowments through sustainable natural resource management** (water, land and forest) for increased productivity in agriculture and related income and employment on a cost-effective and sustainable basis.
- 2. Overcome stagnating production levels, giving farming communities the means to increase production volumes**, in order to benefit from existing and new markets inside and outside of their region (taking advantage of a value chain approach).
- 3. Ensure that emergency/short-term initiatives and medium-term rehabilitation/stabilization efforts are rationally combined**, in order to form a sound basis for the long-term development of the sector (with focus on institutional building and human resources to develop the capacity and lasting sustainability of public sector service provision for crisis prevention, preparedness and mitigation).

## THREE INTERLOCKING TIMETRACKS

SHORT TERM (0-18 months)	MEDIUM TERM (1-3 years)	LONG TERM (2-5 years)
<p><b>Food and agriculture emergency relief and stakeholder agricultural policy development</b></p> <p><i>Food and nutrition security and agriculture-based livelihood subprogrammes and projects having an immediate impact on families and communities directly affected by the crisis</i></p>	<p><b>Recovery of agricultural livelihoods and agro-ecosystems</b></p> <p><i>Medium-sized subprogrammes and projects requiring longer preparation and implementation, as well as short-term track interventions further scaled up in crisis-affected areas</i></p>	<p><b>Risk-sensitive development of the agriculture and rural sectors</b></p> <p><i>Subprogrammes and projects mitigating the impact of the crisis at governorate/provincial and national levels, strengthening livelihood resilience and institutional capacities nested in national government development strategies</i></p>

## BENEFICIARIES

- **Small-scale farming (host) communities** in areas most affected by the influx of Syrian refugees.
- **Lebanese returnees and Syrian refugees** with no significant income opportunities, seeking employment in North and Bekaa Regions.
- **Resource-poor Syrian herders** struggling to save minimum assets.
- **Public sector and governmental entities** having to address the impact of the Syria crisis in the related agricultural and rural setting.



Supporting poor, food-insecure people in rural areas most impacted by the crisis

## INTERVENTIONS AND BUDGET ESTIMATE

The total cost of FAO's Plan of Action for Lebanon is estimated at approximately **USD 57 million** over a period of five years to safeguard and stabilize the livelihoods of the poorest and most vulnerable farming communities in those geographical areas hardest hit by the repercussions of the Syria crisis.

INTERVENTION AREA		Months	USD million
<b>1. Capacity development in Disaster Risk Management</b>			
1.1	<b>S</b> Coordination and monitoring food security and agriculture livelihoods	18	1.17
1.2	<b>M</b> Improved disaster and crisis management	24	1.87
1.3	<b>M</b> Improved food chain quality control services	30	2.72
1.4	<b>M</b> Policy and strategy to protect and reinforce the domestic and export marketing of key commodities	36	2.6
<b>2. Livelihood and food security support</b>			
2.1	<b>S</b> Improved food nutrition in host communities	12	1.59
2.2	<b>M</b> Increased resilience of vulnerable farmers through post-harvest management	36	4.04
2.3	<b>M</b> Upgraded input supply regulatory systems	36	3.90
2.4	<b>L</b> Smallholder value chain development	48	12.50
<b>3. Control of transboundary animal diseases and restored livestock production</b>			
3.1	<b>S</b> Emergency vaccination	12	3.00
3.2	<b>S</b> Emergency rehabilitation of the dairy subsector	18	3.00
3.3	<b>M</b> Promoted sustainable livestock production	36	6.12
<b>4. Climate-smart agriculture and natural resource management</b>			
4.1	<b>S</b> Emergency relief through the restoration of smallholder production	12	3.80
4.2	<b>S</b> Livelihood Improvement through forest fire risk management	12	3.5
4.3	<b>M</b> Water scarcity initiative	24	3.3
4.4	<b>M</b> Protection and recovery of vital natural resources	36	4.08
		<b>TOTAL</b>	<b>57.19</b>

**Short term: <18 months**

**Medium term: 18-36 months**

**Long term: >36 months**