



Food and Agriculture Organization
of the United Nations

FAO Representation in Syria

PLAN OF ACTION FOR SYRIA

Towards Resilient Livelihoods for Sustainable
Agriculture, Food Security and Nutrition

2016–2017





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ABBREVIATIONS AND ACRONYMS

ACSAD	Arab Center for the Studies of Arid Zones and Dry Lands
CFSAM	Crop and Food Security Assessment Mission
DRM	Disaster risk management
DRR	Disaster risk reduction
EMPRES	Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer field school
GDP	Gross domestic product
GOSM	General Organization for Seed Multiplication
HRP	Humanitarian Response Plan
ICARDA	International Center for Agricultural Research in the Dry Areas
IDP	Internally displaced person
IPM	Integrated pest and disease management
MAAR	Ministry of Agriculture and Agrarian Reform
MoE	Ministry of Economy
MWR	Ministry of Water Resources
NENA	Near East and North Africa
NGO	Non-governmental organization
PoA	Plan of Action
RFSAN	Regional Food Security and Analysis Network
RNE	Regional Office for the Near East and North Africa
SYP	Syrian Pound
TAD	Transboundary animal disease
UN	United Nations
UNICEF	United Nations Children's Fund
WFP	World Food Programme

EXECUTIVE SUMMARY

Impact of the Conflict on Agriculture and the Food Security Situation in Syria

With the conflict now approaching its sixth year, the humanitarian situation in Syria continues to deteriorate. As of December 2015, some 6.5 million people are estimated to be internally displaced, whilst a further 4.3 million Syrians have taken refuge in Egypt, Iraq, Jordan, Lebanon, Turkey and North Africa. The number of food insecure people inside Syria has reached 8.7 million. Three in four Syrians are considered to live in poverty.

Widespread violence and the protracted political crisis are the main drivers of the tragic social and humanitarian situation inside Syria. They have resulted in a massive deterioration of the national economy, the progressive and broad disintegration of social structures and the weakening of the institutions.

Agriculture and the rural sector have been particularly affected by the conflict. Prior to the crisis, the agriculture sector was a major pillar of the productive economy, accounting for some 18 percent of the gross domestic product (GDP) and providing employment and livelihood opportunities to roughly half of the population in Syria. The cumulative impacts of almost six years of conflict in the aftermath of a prolonged wave of droughts from 2006 to 2009 have resulted in the erosion of the agriculture sector's productive capacity with dire consequences for the rural and peri-urban population engaged in agriculture-based activities.

The effects of the conflict on agriculture and the rural livelihoods of people in Syria are multiform. They include the disruption in the supply of agriculture inputs (notably seeds and fertilizer); sharp decrease in crop production; significant reduction in livestock numbers; and damage and sometimes irreversible destruction of physical assets, such as irrigation structures, farm machinery and storage and processing facilities. Violence, widespread insecurity and the destruction of infrastructure (roads, electricity networks) are restricting access of farmers to their fields, and have brought the previously flourishing trade of agricultural products inside the country and within the region to a standstill.

Displacements and migration of rural populations are progressively depriving the rural sector of its human capital and much needed skills, contributing to a vicious circle where the lack of protection, erosion of livelihoods base and loss of economic opportunities become intricately linked.

The agriculture sector, though weakened, has proven to be more resilient compared to other productive sectors and remains the backbone of rural livelihoods in Syria. The sector still sustains 50 percent of the food supply in Syria and provides a critical economic safety net for poor households in rural and peri-urban areas.

FAO's Resilience Vision for Syria

The Food and Agriculture Organization of the United Nations (FAO) has made resilience a corporate priority. Its approach inside Syria builds on the knowledge and insights accumulated during several decades of the Organization's work in the country and in the region and, in particular, during the last years of the conflict. It builds upon the following considerations:

- The tragic humanitarian and socio-economic situation in Syria and its spillover effects onto the neighbouring countries and beyond are likely to continue to worsen unless the trends of collapse of the productive sectors and the erosion of the livelihoods base are reversed and the foundation for their recovery laid.
- The agriculture sector, besides its demonstrated resilience during the conflict phase, tends to recover fast when stability returns. Furthermore, because of its strong local dimension, the

agriculture sector provides a solid foundation upon which to build resilience and base the recovery of livelihoods for rural and peri-urban populations.

- Investing in agriculture, especially when coupled with other measures such as protection, health and education, can help mitigate distress migration and keep rural populations on their land.
- Investing in capacity building is essential even during the conflict phase in order to maintain the capacity of state and non-state actors to provide critical public goods and collective services.

The FAO Plan of Action for Syria 2016–2017

The FAO Plan of Action (PoA) for Syria 2016–2017 aims to contribute to building the resilience of the rural and peri-urban populations, the institutions and the ecosystems in Syria to strengthen their capacity to absorb, adapt to and recover in a sustainable way from the impacts of the conflict; reduce risks; and anticipate and mitigate future shocks affecting food security and nutrition in the country.

The resilience interventions proposed under the PoA integrate a multi-hazard, vulnerability and risk-based approach which seeks to understand the country-specific context, the dynamics of the conflict and the protracted crisis along with its short- and long-term consequences. The PoA adopts a holistic “Whole of Syria” approach ensuring that not only communities in conflict-affected areas are assisted in establishing small-scale subsistence farming enterprises, but also farmers and pastoralists in the more secure parts of the country, most of whom host internally displaced person (IDPs), are supported to maximize their crop and livestock production in the longer term. It promotes an integrated approach in addressing both the humanitarian and developmental needs of the vulnerable and conflict-affected individuals and communities in Syria.

The PoA includes a mix of interventions comprising emergency life-saving agricultural response, livelihood protection and recovery, including support to value chains, risk-sensitive agricultural and natural resource management and capacity-building interventions. The interventions factor in the conflict intensity and reflect the accessibility of input supply, the needs and the absorption capacity of farmers and pastoralists and the capacity development needs of beneficiaries as well. They also take into account the overriding local natural hazards stemming from prolonged dry spells, droughts, sand storms and land degradation, much of which are associated with climate change and variability.

The PoA is fully aligned with the Syria Humanitarian Response Plan 2016 and the United Nations (UN) Strategic Framework 2016–2017 and has a duration of two years (2016–2017), with funding requirements totalling USD 152 million. Spread across three interlocking timeframes, the PoA activities are articulated around four priority focus areas detailed below:

- 1. Improvement of household food security and nutrition through support to local smallholder crop and livestock production.** This includes support to cereal crops and backyard food production, provision and protection of livestock assets through restocking, provision of animal healthcare and feed, and repair and maintenance of critical rural infrastructure through cash-based interventions.
- 2. Promotion of sustainable livelihood and employment opportunities for households and communities.** This includes support to integrated homestead/family farming, promotion of income-generation activities and improvement of agriculture value chains (post-harvest management, food processing and preservation and marketing).
- 3. Enhancement of sustainable use of natural resources** (food security–water–energy nexus). This includes supporting households and communities through introduction of more efficient water management and energy saving technologies and practices, i.e. climate change adaptation, agricultural intensification and diversification and environmental protection.

- 4. Strengthening the capacity of targeted institutions, civil society organizations and other stakeholders** to develop implement and monitor policies, strategies and resilience programmes. This includes: enhanced food security sector coordination, data collection, analysis and information sharing; development of disaster risk management strategies; animal disease surveillance; drought early warning; and emergency preparedness and response.

Primary beneficiaries include vulnerable, food-insecure and resource-poor rural and peri-urban farming and pastoral communities directly or indirectly affected by the crisis, including IDPs, their host communities and government and non-governmental agricultural support service providers.

Collaboration with Partners

Building resilience requires complementary actions by multiple actors that bring together their respective mandates and comparative advantages in efforts to address the needs of beneficiaries from different angles. In this context, FAO, through the PoA, will facilitate partnerships around food security, nutrition and agricultural development involving national institutions and local authorities, civil society organizations, humanitarian and development partners and the private sector.

PoA Cost Estimate per Priority Focus Area

Focus Area	Cost (USD)
1. Improvement of household food security and nutrition status	72 000 000
2. Promotion of sustainable livelihood and employment opportunities for households and communities	42 760 000
3. Enhancement of sustainable use of natural resources	29 000 000
4. Strengthening capacity of targeted institutions, civil society organizations and other stakeholders	8 620 000
Total	152 380 000

PoA Cost Estimate per Track

Track	Cost (USD)
Quick impact/Short term (up to 1 year)	70 460 000
Medium term (1–2 years)	81 920 000
Total	152 380 000

1. INTRODUCTION



1. INTRODUCTION

1.1 Protracted Crisis in Syria

The Syria crisis is now in its sixth year. The United Nations (UN) estimates that the number of people in need of humanitarian assistance in the Syrian Arab Republic has now reached 13.5 million, of whom 8.7 million have been classified as food insecure across all 14 governorates of the country. Some 6.5 million people are estimated to be internally displaced (representing nearly 30 percent of the total pre-crisis population and a 13 percent increase since May 2014) and more than four million have sought refuge in Egypt, Iraq, Jordan, Lebanon and Turkey and across North Africa and Europe. With the intensification of the crisis, food insecurity and rural poverty have drastically increased in all governorates.

The assistance provided by the Food and Agriculture Organization of the United Nations (FAO), the World Food Programme (WFP) and their “Food Security and Agriculture Sector” partners in Syria since 2011 has contributed significantly to mitigating the needs of the people. The number of “people in need” would have been much higher without such assistance. FAO’s support has provided key agricultural inputs (i.e. cereal and vegetable seeds, livestock, veterinary supplies and others) allowing more than 324 323 resource-poor farming households to improve their food security and nutrition status and reinforce, primarily, their absorptive capacity to the crisis (Section 4.4).

1.2 Importance of the Agriculture Sector in Syria

Prior to the beginning of the current crisis in 2011, agriculture played a very important part in Syria’s economy, contributing some 18 percent to its gross domestic product (GDP), and involving 17 percent of its labour force in agricultural production. Some 46 percent of Syrians (i.e. 10 million, including children and others not actually working in agriculture) were rural dwellers and, of those, about 80 percent were sustained by income from agricultural work (Section 2.2).

Despite all the challenges generated by the protracted crisis, coupled with the impact of years of drought from 2006 to 2009 and in 2014, and the increasing pressure on the country’s scarce natural resources, the agriculture sector is still the second largest contributor to GDP (after government services) and continues to play an essential role in Syria, where it is a productive pillar of the economy, a key source of livelihoods and a critical economic safety net for poor households in rural and peri-urban areas. The agricultural system, though severely weakened, is still in operation and it provides a platform on which to build recovery and resilience, and to mitigate some drivers of distress migration. A sustainable and resilience-based approach is essential if the efforts of humanitarian and development agencies are to be more than just palliative in the short-term. Agriculture in Syria has a meaningful and critical part to play in improving food security and nutrition status and maximizing livelihood opportunities for crisis-affected people and host communities.

1.3 “Whole of Syria” Approach to Response Frameworks and Plans

Although much of its land is semi-arid, Syria was, until 2011, a country with a strong agricultural base and an important exporter of both crop and animal products to other countries in the Near East region. Despite the poor rainfall between 2006 and 2009 and in 2014, and the conflict-related depredation in the last five years, agricultural production still plays a vital role in the country’s greatly diminished internal economy and in the survival of its population. As the crisis continues, much of Syria’s rural and peri-urban populations become increasingly dependent on food aid because of the abandonment of farmlands, destruction of farming assets and unavailability of agricultural inputs. FAO will therefore continue to strengthen its agriculture-based response to address the food and nutrition security needs of the affected populations by adopting a holistic approach, ensuring that communities in conflict-affected areas are assisted in establishing small-scale subsistence farming enterprises, and also that farmers and pastoralists in the more secure parts of the country, most of

which play host to internally displaced persons (IDPs), are supported to maximize their crop and livestock production.

If productive farming areas are neglected at this critical juncture in favour of concentrating exclusively on the most conflict-affected areas, Syria will be in danger of emerging from the conflict as a country of subsistence farmers with most of its commercial agricultural base eroded. If, on the other hand, support is provided to the currently productive areas, not only will these areas continue to contribute to the country's food basket and economic growth (and, in turn, to household food and nutrition security, income generation and poverty reduction), but they will also act as the germ for the regeneration of Syria's food and agriculture in a more peaceful future. The latter is of vital importance in the long term and is in line with the UN's 2016–2017 Strategic Framework and the 2016 Syria Humanitarian Response Plan (HRP) based on its "Whole of Syria" approach (Chapter 6).

1.4 Resilience-based Approach to Agricultural Livelihoods, Food Security and Nutrition

FAO's interventions proposed under this Plan of Action (PoA) for Syria (2016–2017) will use a resilience-based approach that focuses on multi-hazards, livelihood vulnerabilities and risk analysis, reflecting, not only the intensity of the conflict, accessibility for input supply and capacity development interventions and the needs and absorption capacity of beneficiary farmers and pastoralists, but also the overriding natural hazards of prolonged dry spells, droughts, sandstorms and land degradation, much of which are associated with climate change and variability.

As the conflict continues to escalate, with increasing numbers of IDPs moving from insecure areas to relatively secure locations inside the country, there is mounting pressure on the scarce natural resources and current farming systems to produce more food for the crisis-affected people and their host communities. FAO will therefore build on its four years of experience in humanitarian response across Syria, as well as the cumulative knowledge and expertise gained during decades of technical assistance provided in the country before the crisis, in partnership with concerned stakeholders (i.e. government institutions, civil society organizations, private sector organizations, UN agencies, international development partners, etc.). It will follow a full resilience agenda – that incorporates disaster risk management (DRM) policies, early warning systems and disaster risk reduction (DRR) measures, particularly in relation to drought, with emergency preparation and response – to further strengthen the peoples' absorptive, adaptive and transformative capacities to the multidimensional shocks that they face (Section 4.1).

As any one of the hazard risks and livelihood vulnerabilities change as a consequence of the security situation, drought and/or seasonality (e.g. from "severe" to "major" to "moderate" to "minor" as peace or rainfall returns, or vice versa as conflict escalates and droughts worsen) in any given agro-ecological zone, FAO's "quick impact/short-term" and "medium-term" interventions would adapt in response to the changing circumstances. In light of the disrupted trade routes across Syria, international embargos placed on various agricultural imports and the large amounts of food aid distributed by humanitarian organizations, FAO will also support supply and value chains to ensure that required agricultural inputs and support services would be readily available to target groups (e.g. voucher systems, trade fairs and cash transfers) and any surplus production would be marketed appropriately – to maximize household food and nutrition security and income-generating opportunities. Details of FAO's proposed resilience-based interventions are provided in Section 5.2 and Annex 1 and the relationship between the levels of security risk and access and intervention type and duration can be summarized as in the table below.

Security Risk	Access	Intervention	
		Duration	Type (Example)
Severe	Area under siege		- Remote (satellite imagery) food security and livelihood information systems.
Major	Hard to reach	Quick impact/ Short term (up to 1 year)	- Emergency support to crop and livestock production through provision of agricultural inputs and small livestock, support to animal health services, vaccination campaigns and “cash for work” for repairing irrigation systems.
Moderate	Moderately accessible		- Integrated homestead/family farming, household and community-based food processing and marketing, and improved food nutrition. - Rehabilitation of on-farm and community-based water harvesting structures and promotion of efficient water management systems.
Minor	Secure and accessible	Medium term (1 to 2 years)	- Value chain development, i.e. input supply, agroprocessing and produce marketing. - Promotion of climate-smart agriculture and community-based DRR technologies and practices through strengthened participatory extension services. - Promotion of community-based natural resource management, i.e. water harvesting, range management and reforestation and protection.

2. PRE-CRISIS SITUATION



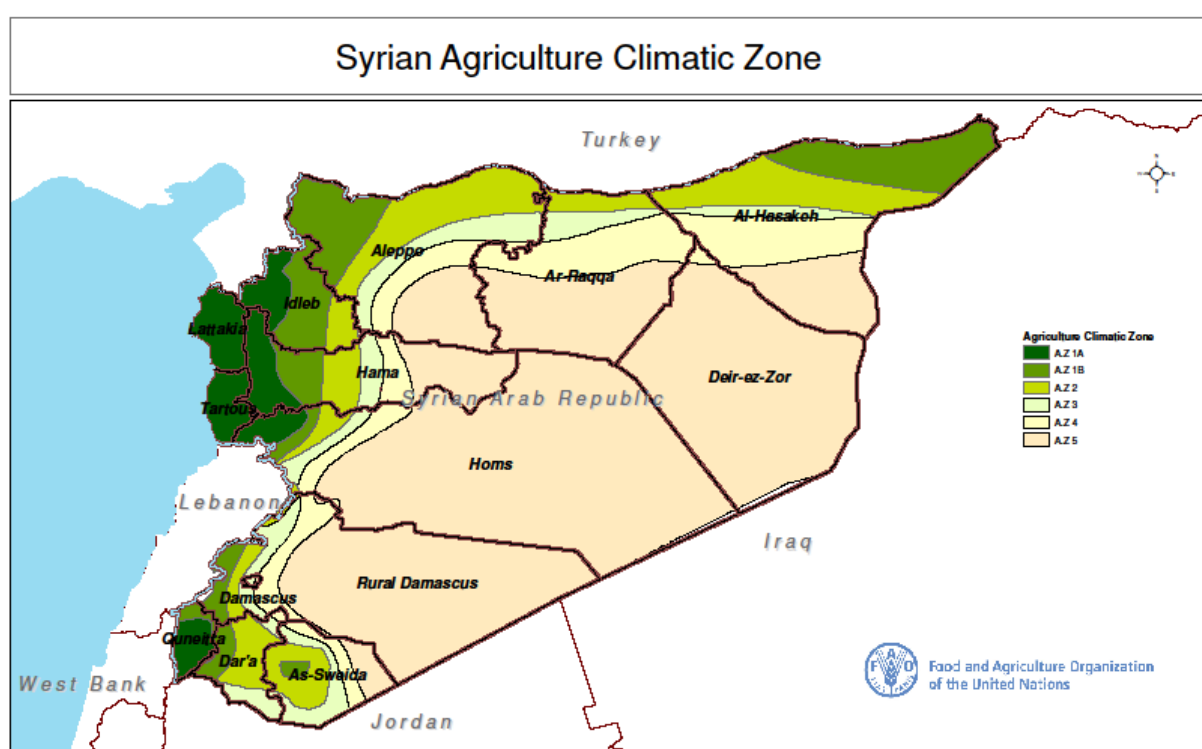
2. PRE-CRISIS SITUATION

2.1 Farming Systems

Syria is distinguished by five agro-ecological zones/farming systems (Map 1), namely:

- i. coastal intensive irrigated farming (1 percent of the country)– including the cities of Latakia and Tartous: smallholder citrus (in particular), olive and field and greenhouse vegetable production (e.g. tomato);
- ii. hilly and mountainous farming (6 percent of the country): smallholder tree crops (e.g. apple, cherry and olive) and tobacco production, and high off-farm incomes;
- iii. northern and northeastern plains (25 percent of the country) – especially of the Euphrates and Al Khabour rivers: medium and large-scale rainfed and irrigated wheat (in particular) and barley, cotton, lentil, sugar beet and field vegetables (e.g. dried onion and potato) production;
- iv. southern semi-arid mountains and plains (6 percent of the country): small and medium-scale rainfed wheat and barley, legumes, chickpea, tree crops (e.g. apricot, apple and grape) and field vegetables (e.g. tomato) production (with easy access to the national market of Damascus and international markets of neighbouring countries); and
- v. pastoral and agropastoral (55 percent of the country) – including the Badia rangelands shared with northern Iraq and northeastern Jordan: nomadic, semi-nomadic/transhumance and settled/semi-extensive sheep rearing, high-risk cereal cultivation and oasis irrigation of cotton and wheat.

Map 1. Agro-ecological zones of Syria



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The country is divided into the following five agroclimatic zones based on the level of annual precipitation received:

- *Zone I covers some 2.7 million hectares and has an average annual rainfall of 300 - 600 mm.
- *Zone II covers about 2.5 million hectares and has an average annual rainfall of 250 - 350 mm.
- *Zone III covers about 1.3 million hectares and has an average annual rainfall of approximately 250 mm.
- *Zone IV is agriculturally marginal, with a total area of around 1.8 million hectares and an average annual rainfall of 200 - 250 mm.
- *Zone V is the 'Badia' or steppe; it has a total area of approximately 8.3 million hectares and an average annual rainfall of less than 200 mm.

2.2 Performance of Syria's Agriculture Sector Prior to the Crisis

Immediately prior to the current crisis in 2011, agriculture contributed some 18 percent to Syria's GDP, and involved 17 percent of its labour force. Some 46 percent of Syrians (i.e. 10 million people) were rural dwellers and, of those, about 80 percent derived their livelihoods from agriculture¹. Livestock used to account for 35–40 percent of agricultural production and one-third of agricultural exports. Most livestock husbandry is carried out on smallholdings and is the activity most preferred by small-scale producers, landless farmers and rural women. The country's main agricultural exports included cotton, sugar, tomatoes, potatoes, oranges, apples, olive oil, sheep, cattle, poultry meat and eggs. Although crop production was largely rainfed, especially in the northern cereal belt, there were approximately 1.5 million hectares under irrigation.

Between 2001 and 2010, the Syrian economy grew at an average annual rate of about 4.5 percent. Over the same period, GDP per capita grew at a lower annual rate of 2 percent due to an increased annual population growth rate of 2.45 percent. The decade was characterised by a relatively stable economy with low levels of inflation, public debt and fiscal deficit, and healthy trade and current-account balances. In 2010, for instance, fiscal deficit was estimated at less than 5 percent of GDP; inflation was below 5 percent; the external current-account balance was only slightly in deficit; public debt was estimated at about 23 percent of GDP; and international reserves amounted to almost USD 20 billion.

The real economic growth experienced by the country during that decade was driven mainly by the transport, communications, manufacturing, finance, real-estate and construction sectors, while agriculture's contribution, especially towards the end of the decade, was relatively small. By 2009, poor climatic conditions and consecutive years of severe drought had resulted in an estimated 18.2 percent of the population, mostly in rural areas, falling below the food-poverty line, with the governorates of Idleb, Rural Damascus, Homs, Dara'a, Sweida and Hama being the worst affected. Undoubtedly, this contributed in part to the unrest that rapidly developed into civil conflict in 2011.

During the 1960s, the State was heavily involved in the production of "strategic" crops – such as wheat, cotton, sugar-beet and tobacco – and animal products, including milk, meat, poultry and eggs; these being produced on a small number of large state-owned and state-managed farms. This involvement diminished in subsequent years until, by the mid-2000s, agricultural production was almost totally privately based, carried out mainly by a large number of relatively small farm units. However, the State still played a significant role in subsidising agricultural inputs, purchasing crops from producers and subsequently either marketing the commodities to consumers or exporting them abroad. The State was also the main channel for the distribution of seeds and fertilizers and for the provision of veterinary support to the livestock subsector, and it played a part in the management of irrigation schemes for private producers.

Despite the fact that agriculture suffered climatically in the years leading up to 2011, the country continued to export agricultural products, and farmers stayed on their land. Indeed, one of the most important long-term roles played by agriculture during that period of climatically induced low productivity was that of sustaining rural livelihoods, albeit at a low level when rainfall was unfavourable, and of keeping people on the land. This was to change with the advent of conflict.

¹ Crop and Food Security Assessment Missions (CFSAM), 2013 and 2015.

3. IMPACT OF THE PROTRACTED CRISIS ON FOOD SECURITY AND AGRICULTURE



3. IMPACT OF THE PROTRACTED CRISIS ON FOOD SECURITY AND AGRICULTURE

3.1 General Context

The protracted conflict has caused a deep economic crisis, greatly impacting the well-being of the Syrian people. Economic woes have been further aggravated by economic and financial sanctions, soaring food and fuel prices and disrupted markets, contributing to the extreme vulnerability of people from all walks of life. In addition, despite knowing where the most vulnerable are located, aid actors such as FAO and its partners are not able to obtain sustained, unimpeded access to millions of people, including hundreds of thousands living under siege. The danger and unpredictability of everyday life fuels the forced displacement of huge numbers of people. Pending a solution to end the conflict, humanitarian actors continue to work together to extend a lifeline to the most vulnerable people in Syria while aiming to strengthen individual and community-level resilience across the country. In an environment of increasing volatility and insecurity, access remains the primary impediment to humanitarian response.

3.2 Sectoral Context

Sector assessments conducted in 2015 show that food insecurity has reached alarming levels in Syria. Key factors contributing to this include, but are not limited to: conflict; displacements; depletion of (productive) assets; shortages of agriculture inputs; dampened purchasing power; fragmented markets and infrastructure; lack of employment opportunities; rising prices of food, fuel and agricultural inputs; and soaring inflation.

An estimated 8.7 million people are in need of a range of food-security-related assistance. The most vulnerable groups are IDPs, returnees, households dependant on gifts and assistance, unskilled labour, small-scale farmers and herders, female-headed households, people with disabilities and Palestinian refugees. Rural households exhibit a higher prevalence of food insecurity compared to urban households (however, in urban locations there is more concentration of displaced people reflecting vast challenges), and one in three Syrians has fallen into debt as a consequence of his/her inability to purchase food. Of the 8.7 million people in need, at least 6.3 million (“category one”) have food consumption gaps, suffer from significant loss of livelihood assets and are resorting to negative or sometimes irreversible coping strategies (for example: selling of assets such as productive livestock). The remaining 2.4 million people (“category two”) are able to maintain minimally adequate food consumption only by engaging in negative coping strategies, and if not assisted will quickly slip into “category one”.

Since 2011, the ongoing conflict has had a profound negative effect on Syria’s crop and livestock production and on the movement of agricultural produce within the country. The consequences of conflict-related destruction within the country have been further exacerbated by the international embargo placed on various imports such as granular fertilizer and veterinary medicines.

Box 1 provides the results of FAO’s and WFPs’ latest assessment of Syria’s agriculture sector and food security situation.

Box 1. FAO and WFP Crop and Food Security Assessment (2015)

In July 2015, FAO and WFP conducted a Crop and Food Security Assessment Mission (CFSAM) in Syria in order to evaluate agricultural production and food availability, access and utilization. The main findings of CFSAM are presented below.

Crop Production:

- Although 40 percent lower than the pre-conflict levels, wheat production in 2015, estimated at 2.445 million tonnes, is significantly better than the very poor harvest of 2014 and slightly better than that of 2013. This is mainly due to seasonal rainfall in 2014/15 that was the best in many years in terms of both quantity and distribution and, to some extent, helped mitigate the devastating impact of the conflict on the agriculture sector as a whole. Although the 2015 wheat crop is foreseen to be better than the drought-stricken 2014 harvest, it is not expected to lead to significant improvements in the household food security situation. There is an estimated shortfall of about 800 000 tonnes in the country's national wheat requirement of 4.854 million tonnes.
- There were indications of changing cropping patterns away from wheat and towards cash crops (such as herbs) in response to the small profit margin for wheat production.

Livestock Production:

- The livestock subsector, once important in Syria's domestic economy and in its external trade, has suffered substantially since 2011 with reductions in terms of herd and flock numbers of 30 percent for cattle and 40 percent for sheep and goats, while poultry, the usual main and most affordable source of protein of animal origin, has shrunk by 50 percent. The condition of the remaining livestock is relatively good in the rainy season but deteriorates with the drying up of pastures in July. Access to pasture has been limited by security concerns, and livestock feed is increasingly expensive and scarce, largely as a result of poor rainfall in 2013/14.
- The country's veterinary services are rapidly running out of veterinary vaccines and routine drugs, with the number of unreliable veterinary drugs sold on the open market increasing over the past year.

Household Food Consumption:

- After being relatively stable in 2014, food prices began increasing sharply in early 2015 as government subsidies were curtailed and as the currency depreciated. Prices of many critical goods spiralled in the past year, such as bread (by 66 percent in private bakeries and 87 percent in public bakeries).
- Overall, households spend 55 percent of their incomes on food compared to 45-47 percent in 2011 and less previously. People devote more than two-thirds of their incomes to food in Aleppo, Dara'a, Hama and Sweida governorates, where households are prioritizing food purchases over other basic needs.
- A majority of WFP beneficiary households were consuming a "poor" or "borderline" diet, with limited consumption of fresh, vitamin-rich foods such as eggs, dairy products, fruits, vegetables and pulses. People in the conflict-affected governorates of Deir Ezzor, Al-Hassakeh, Aleppo and Hama have the worst food consumption and coping indicators.
- The United Nations Children's Fund's (UNICEF's) Standardized Monitoring and Assessment of Relief and Transitions (SMART) survey suggests that three governorates (Hama, Al-Hassakeh and Deir Ezzor) appear to have global acute malnutrition (GAM) rates above 10 percent.

3.2.1 Effects on Crop Production

In the conflict-affected areas, crop production on anything but a subsistence level has been seriously compromised. Standing cereal crops are at times burnt by opposing factions. In areas that have been worst affected by the conflict, some farmers have abandoned their land. Others have reduced their areas of cultivation because of the risk to life. In 2014 it was estimated that only 71 percent and 81 percent of the areas planned for wheat and barley, respectively, were actually planted – the smallest since the 1960s. Although the shortage of inputs and poor rainfall were partly responsible for this reduction, abandonment of land also contributed significantly. There are also reports of

agricultural land being heavily polluted by spills of crude oil and other toxins associated with oil extraction and primitive refining methods around wells that had been seized by rebel factions.

Irrigation canals and pumps have been damaged or stolen, with the result that the area of irrigated crops has contracted. In 2014, the area under irrigation was estimated at 606 000 hectares, compared with the 1.5 million hectares irrigated prior to the crisis. Because of the damage to irrigation systems, crops often receive an inadequate supply of irrigation water. Several power stations, essential for the running of electrified irrigation pumping stations as well as factories and food processing units, have been destroyed. In 2014, the Ministry of Agriculture and Agrarian Reform (MAAR) estimated that irrigated cereals received on average only 65 to 70 percent of the irrigation water they required. Under such conditions not only is crop performance compromised but the danger of soil salinization increases.

Much of Syria's farm machinery has also been stolen, damaged or destroyed. Farm machinery maintenance is minimal in many parts of the country as a result of the departure of qualified technicians from insecure agricultural areas and the difficulty and expense of obtaining replacement parts. Fuel for operating farm machinery is in short supply and often prohibitively expensive. Mechanised farmers are consequently limited in the area of land that they can cultivate and therefore on the amount of crops they can produce.

Certified seed is in short supply, with the result that yields are often lower than they could be. Shortage of seed may also encourage the use of suboptimal seed rates. Syria used to produce much of its own fertilizer. With the destruction of fertilizer factories, production is now minimal with the result that fertilizer application rates are often inadequate at best.

With the displacement or emigration of large sections of the population from insecure areas, farm labour has become scarce and expensive.

3.2.2 Effects on Livestock Production

Generally, livestock numbers and livestock prices have fallen because of the difficulty and cost of maintaining herds. Shortages and the high cost of concentrates have resulted in many cattle owners selling off their cows for meat because of the difficulty of providing for them, thereby reducing their ability to maintain their herd numbers. Syria used to be a very significant exporter of sheep (especially of the *Awassi* breed) to the Kingdom of Saudi Arabia and the Gulf States. Sheep numbers peaked in 2007 at 22.9 million, but had dropped back to levels of around 18 million by 2011, the year of the last livestock census. Since then, numbers are thought to have declined by a further 40 percent to 10.8 million. The country's goat population is much smaller than that of sheep. From about 2.3 million in 2011, with a reduction of about 40 percent, the number of goats has fallen to less than 1.4 million. The country's cattle population has declined by 30 percent from 1.1 million in 2011 to about 778 000. Poultry, which is the main source of animal protein in Syria, has suffered the greatest reduction in numbers since 2011. With the destruction or abandonment of farm units, the number of chicken is now estimated at 13.1 million, which is 50 percent of the 2011 level of 26.2 million.

The veterinary services provided by the Government are severely compromised by the lack of access to many parts of the country; by the damage to, or destruction of, production laboratories; and by international restrictions on the importation of veterinary medicines. Although there have as yet been no serious outbreaks of livestock diseases, an outbreak is an ever-present threat. The breakdown of veterinary services in many parts of the country and the discontinuation of therapeutic and prophylactic campaigns put the remaining livestock in danger of infectious disease outbreaks, such as avian influenza, brucellosis, foot-and-mouth disease, lumpy skin disease, *peste des petits ruminants*, rabies and many parasitic diseases. Some these diseases can be transmitted to humans causing significant public health threats.

The continuing uncontrolled movement of livestock out of Syria into neighbouring countries of Iraq, Jordan, Lebanon and Turkey, either with refugees or smuggled out to more lucrative markets, gives rise to increasing concern about the spread of transboundary animal diseases (TADs), some of which could be zoonotic. Particularly attractive for smuggling are female animals in the reproductive age, which further compromises the sector. The influx of large numbers of Syrian livestock into neighbouring countries, where rangelands are often already over-stocked, has increased the threat of land degradation and water depletion in those countries. In some very insecure areas distant from the national border, livestock herds have simply been abandoned by their owners.

3.2.3 Effects on Natural Resources

The rapid depletion of forests, rangelands, soils, water and other natural resources due the prolonged drought between 2006 and 2009, coupled with increasing pressure from the high numbers of IDPs, is leading to potentially irreversible degradation – and increasing the threat of desertification of the arid and semi-arid plains and rangelands which cover more than 80 percent of the country – affecting the agricultural production systems and the food and nutrition security and livelihoods of rural people who depend on them.

3.2.4 Effects on Agricultural Supply, Market Chains and Trade

Syria's farmers face increasingly serious transport problems with the loss of government control of arterial highways to opposition groups. Producers, transporters and traders are facing extremely high transaction costs and security risks. For example, the cost of transporting fruit and vegetables from Tartous to Al-Hassakeh in refrigerated lorries is now ten times more than in 2011, making it economically unviable. As a result, supply and market chains have fragmented. This has caused bottlenecks in the movement of produce from production areas to main markets. Civil conflict and the danger of attack have made road transport risky so that less produce is brought to market and, because it is risky, road transport has become very expensive (ranging from five- to tenfold that of 2011, depending on the route and level of insecurity). The presence of numerous military checkpoints on roads between farms and markets, often with a lengthy search at each one, can result in serious damage to agricultural, especially horticultural, produce. The high cost of transport and the bottlenecks in the movement of produce have especially led to increased wastage of high value, nutritious but perishable fruit, vegetables and dairy produce in their respective production areas.

A large number of the Government's 140 grain collection points have either been seized by opposition forces or been so damaged as to be unusable. By late 2014, only 31 grain collection points remained under government control. Grain producers are often loath to deliver their crops to what may be a very distant collection point at the end of a dangerous road. With high fuel prices, delivery to a grain collection point or to market can be prohibitively expensive. In certain parts of the country, marketplaces have been repeatedly destroyed or have become too dangerous to operate, and have been repeatedly re-established elsewhere. The transfers of wheat surpluses from northeastern parts of the country to the food deficit areas of the west have slowed down, and there are indications that some farmers are developing informal wheat trade with retailers at the border with Turkey.

As mentioned above, Syria was a significant exporter of agricultural products, including cash crops, fruits, vegetables and animal products. According to the Syrian Chamber of Agriculture and National Agriculture Policy Center, agriculture exports in 2011 were estimated at USD 2 billion and have now decreased drastically to USD 119 million in 2015.

3.2.5 Effects on Consumer Purchasing Powers

Employment levels have plummeted during the years of conflict due to the closure of factories and other businesses and the exodus from the land in the worst-affected areas. The UN Economic and Social Commission for Western Asia (ESCWA) has reported that the overall unemployment rate (male and female) in Syria stood at 57 percent as of the fourth quarter of 2014, compared to 10

percent in 2011, and up from 49 percent in the first quarter of 2014. Casual labour markets are also reeling in conflict-affected areas of the country.

Consumer purchasing power has therefore fallen dramatically, while, at the same time, food prices have escalated. WFP price-monitoring data indicate that by September 2014, the cost of wheat flour and rice had increased by 300 percent compared with pre-crisis levels, and that it continued to rise in the fourth quarter of the year in response both to poor rainfall in the west of the country and to the continuing conflict. In addition, the value of the Syrian pound (SYP) has fallen since 2010 when SYP 1 000 would buy more than USD 21; now SYP 1 000 buys less than USD 3. As a result of these factors, a significant proportion of families have reduced their food consumption on the grounds of unaffordability, and this has further limited the market for producers. With a limited and impoverished market, producers, estimating that market returns may no longer justify their increasing costs of production, may be inclined to under-produce.

3.2.6 Effects on Trade and Natural Resources of Neighbouring Countries

The lack of agricultural exports from Syria has also had a negative impact on the trade and food balances of neighbouring importing countries such as Iraq, Jordan and Lebanon. Such countries now find themselves with increased populations as a result of their hosting of Syrian refugees, but they are no longer able to import food (and subsidised agricultural inputs) from Syria. Consequently, food (and agricultural input) prices and levels of malnutrition have increased in neighbouring host countries.

The influx of refugees and animals into the host countries has also accelerated the degradation of their forests, rangelands and water resources due to firewood, pasture and domestic and irrigation water use, respectively, and increased the risk of TADs.

4. FAO'S APPROACH TO RESILIENT AGRICULTURE-BASED LIVELIHOODS



4. FAO'S APPROACH TO RESILIENT AGRICULTURE-BASED LIVELIHOODS

4.1 FAO's Resilience Agenda

FAO's current Strategic Framework includes a dedicated Strategic Objective to increase the resilience of livelihoods to threats and crises. 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 (including individuals, households, communities, institutions and agro-ecosystems) in the face of threats that impact agriculture, food security and nutrition (and related public health) in situations such as the protracted Syria crisis.

FAO's resilience agenda encompasses strategic partnerships and direct action in four key, mutually reinforcing areas for agriculture, food security and nutrition (i.e. 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 DRM in mainstream development and national DRM strategies that promote community-based DRR actions)².
- **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 levels, i.e. natural resource management, livelihood diversification, risk-proof infrastructure and plantation (e.g. reforestation, rangeland restoration and soil conservation measures) and climate-smart agriculture technologies and practices (e.g. agroforestry, conservation agriculture, integrated fish farming, integrated livestock management, integrated pest and disease management [IPM], integrated soil fertility management, on-farm water management and rainwater harvesting).
- **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 and fodder banks, issuing of mitigation and preparedness best-practice guidelines for conflict, droughts, earthquakes, floods, landslides, transboundary plant and animal pests and diseases, etc.).

In response to natural disasters (e.g. droughts, earthquakes, floods, storms and tsunamis) – where access is secured – FAO is able to apply all four pillars of its resilience agenda, e.g. overlapping/interlocking interventions for the provision of emergency seeds, fertilizers and animal feed; medicines and vaccination campaigns; hazard, livelihood and vulnerability assessments; food security and natural resources information systems and TAD surveillance; mainstreaming of DRR, climate-smart agriculture and natural resource management into agricultural research and extension services; and capacity and policy development in agriculture and natural resource-based DRM.

In response to manmade disasters (e.g. conflicts, sharp rises in the price of agricultural inputs and food, and other complex and/or protracted socio-economic crises) – where access is often determined by the level of conflict intensity and insecurity – FAO may only be able to apply one or two of its resilience pillars in unsafe and inaccessible areas, e.g. focussing on emergency seeds, fertilizers and animal feed; medicines and vaccination campaigns; and (remotely) food security information assessment and mapping, while applying three or all four pillars in more safe and accessible pockets.

² In many countries crops, livestock, fisheries and forestry subsectors and natural resources are often not part of the DRR/DRM debate – unlike infrastructure.

As normality returns, FAO is therefore in a position to effectively evolve and spread its agriculture, food security and natural resource management interventions into a fully-fledged and sustainable resilience agenda for the respective country.

4.2 FAO's Regional Initiatives

Similarly, this PoA for Syria is expected to make a contribution towards achieving objectives of FAO's Regional Initiative for **"Building Resilience for Food Security and Nutrition in the Near East and North Africa"**. The primary emphasis of the Regional Initiative is to improve food security policy and governance for food security and nutrition and building resilient food security and nutrition institutions, markets and production systems through improved coordination and integration of actions at the subnational, national and regional levels. Within this framework, five areas of actions are considered crucial for the focus of the initiative:

- i. Strengthening of capacities for developing coherent policy frameworks and investment programme for sustainable food security and nutrition at the national and regional levels.
- ii. Developing efficient evidence-based food security information and knowledge exchange for decision support systems.
- iii. Promoting the development of efficient and sustainable food systems with specific attention to reducing food losses and waste.
- iv. Promoting sustainable access of households to safe, nutritious and diversified food.
- v. Building the resilience of households and communities and agro-ecosystems to anticipate, absorb and recover from the negative impacts of the manmade and natural shocks.

4.3 FAO's Work in Syria

Syria has been a member of FAO since the Organization's establishment in 1945. For decades until the start of the crisis, FAO provided support to the Government of Syria – through MAAR, Ministry of Water Resources (MWR) and Ministry of Environment – with national, regional and global agricultural development, food security and natural resource management programmes and projects in line with the country's Five-Year (economic development) Plans, the last of which (the tenth) ended in 2010.

Under a "Whole of Syria" approach, FAO is assisting people inside Syria from two operational hubs: Damascus, Syria (targeting inside Syria and cross-line distributions), and Gaziantep, Turkey (targeting cross-border activities in northern Syria). FAO is currently operating in 13 governorates: Aleppo, Al-Hassakeh, Ar-Raqqa, Dara'a, Deir-Ezzor, Hama, Homs, Idleb, Latakia, Rural Damascus, Sweida, Tartous and Quneitra. In governorates where UN staff presence is not permitted under UN security regulations, FAO operates through government line departments, private sector, national experts and non-governmental organizations (NGOs).

Since 2011, FAO has assisted approximately 1.9 million vulnerable people (324 323 rural and peri-urban households) with agricultural inputs for crop production (Map 2). Of this total, some 102 477 vulnerable households have been supported with quality wheat and barley seed to produce an estimated 174 210 tonnes of cereals – enough to ensure the yearly grain consumption of 614 862 people based on a ratio of 170–200 kg of grain per capita per year. Usually, the production surplus of cereal obtained from households through FAO-supported interventions is partly used in the next planting season and partly sold on local markets for additional revenue which is used for other household needs. FAO has also provided veterinary supplies and technical expertise to protect 9.1 million livestock, the main productive asset of 157 301 households, against animal diseases. The local market value of these livestock is more than USD 2 billion – not only a significant contribution to stabilizing local economies but also allowing farmers and pastoralists and their families to protect their income source and improve their food and nutrition security situation.

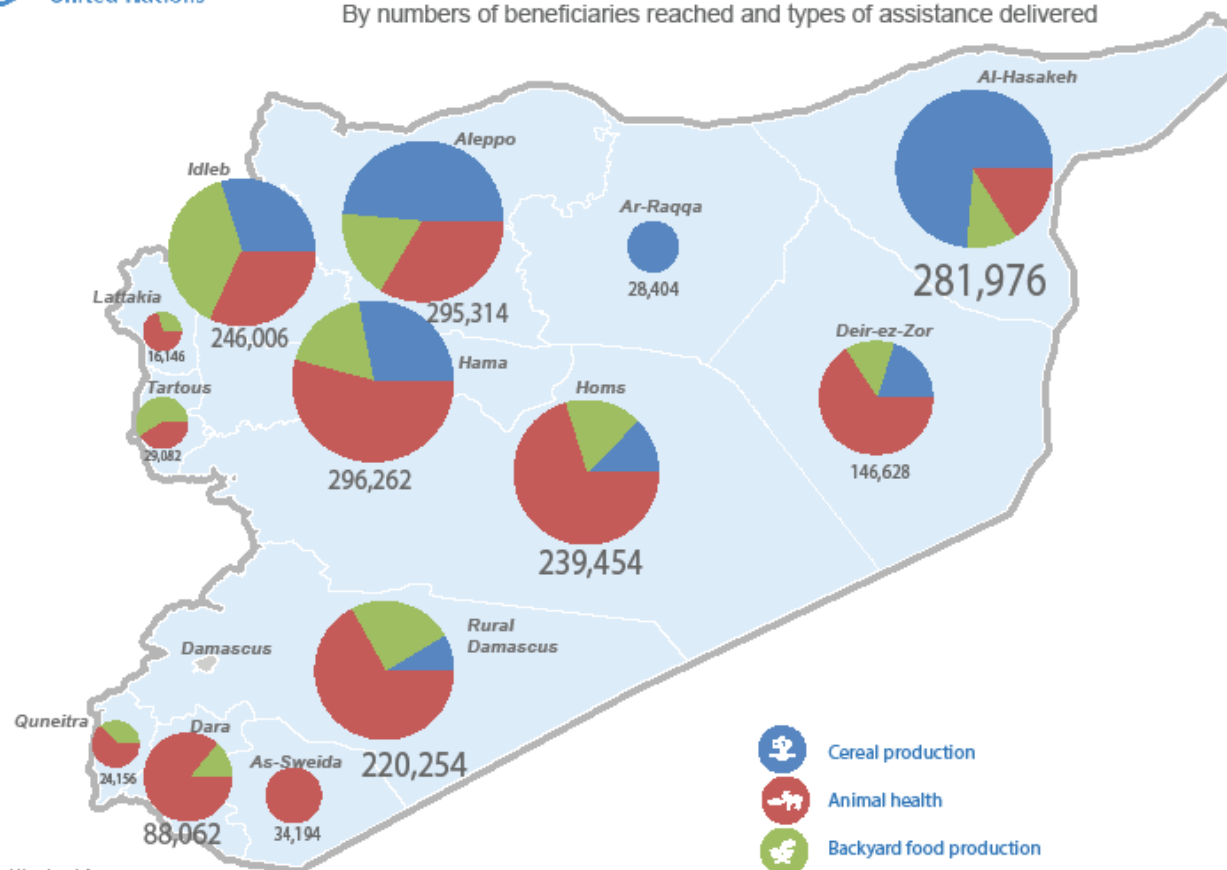
Map 2. FAO's Support to Syria's Agriculture Sector, 2011–2015



Food and Agriculture
Organization of the
United Nations

Input Distribution Summary

FAO support to agriculture in the Syrian Arab Republic since 2011*
By numbers of beneficiaries reached and types of assistance delivered



*Based on data available at the end of Dec. 2015

Disclaimer:

Humanitarian reach to a district or subdistrict level does not imply full geographical coverage. The boundaries and names shown and the designation used on this map do not imply official endorsement or acceptance by the United Nations.

Since 2011, FAO's main resource partners have been the governments of Belgium, Italy, South Africa, Sweden, Switzerland, United Kingdom, United States of America and the United Nations Central Emergency Response Fund (UN/CERF), as well as the Organization's own (Emergency) Technical Cooperation Programme (TCP).

FAO's current response to humanitarian relief in Syria is built on a holistic approach in which emergency support is part of the resilience-building process to addresses the most pressing needs of the country's agricultural sector and food security situation through the following areas of intervention:

- **Emergency support to household crop production** (wheat, barley and vegetable seeds, fertilizers and hand tools) – contributing to increased food production.
- **“Backyard” food production**³ (poultry restocking and vegetable seeds) – facilitating access to fresh and nutrient-rich foods at home and in local communities.
- **Emergency support to small-scale herders** (animal restocking, provision of animal feed and medicines, carrying out vaccination campaigns and technical support) – helping families maintain their livestock assets and levels of animal production, strengthening veterinary services and reducing the risk of spread of TADs.
- **Restoration and stabilization of agricultural livelihoods** – supporting the rehabilitation of critical agricultural infrastructure, such as irrigation systems.
- **Coordination of agriculture food security activities**, including food security data collection and analysis, information management and knowledge sharing.

FAO addresses the current, complex situation related to the Syria crisis through technical and administrative resources at multiple national, regional and global levels, drawing on offices in:

- Damascus, Syria – currently **FAO Representation in Syria** manages emergency operations under a resilience agenda and takes a broader perspective on food security, agricultural development and natural resource management, e.g. working with the UN Syria Country Team on implementing the Syria Strategic Framework for 2016–2017 (Section 5.1).
- Gaziantep, southern Turkey – **FAO cross-border humanitarian operations hub** with technical and operational expertise was established in 2014 (following United Nations Security Council Resolution 2165) to access farming families in northern Syria.
- Amman, Jordan – **FAO Representation in Jordan** is the current location of the Syria-wide **Food Security Cluster**, co-led by FAO and WFP, and of the USAID-funded and FAO-led **Regional Food Security Analysis Network (RFSAN)** which aims at better understanding of intraregional food security dynamics.
- Cairo, Egypt – **FAO Regional Office for the Near East and North Africa (RNE)** provides country support through a multidisciplinary team of operational, technical and administrative personnel.
- Ankara, Turkey – **FAO Subregional Office for Central Asia** provides operational and administrative support to the cross-border operations hub in Gaziantep.
- Rome, Italy – **FAO Headquarters** is the originator of agriculture, food and natural resources information management and knowledge sharing, policy programming and technical backstopping for demand-driven country support.

³ Henceforth referred to as “integrated homestead/family farming”.

5. PLAN OF ACTION FRAMEWORK (2016–2017)



5. PLAN OF ACTION FRAMEWORK (2016–2017)

5.1 Overall Objective

The FAO Plan of Action (PoA) for Syria 2016–2017 aims to contribute to building the resilience of the rural and peri-urban populations, the institutions and the ecosystems in Syria to strengthen their capacity to absorb, adapt to and recover in a sustainable way from the impacts of the conflict; reduce risks; and anticipate and mitigate future shocks affecting the food security and nutrition in the country.

5.2 Priority Focus Areas

The PoA is fully aligned with the Syria Humanitarian Response Plan 2016 and the UN Strategic Framework 2016–2017. Spread across two timeframes (quick impact/short-term and medium-term interventions), the PoA activities are articulated around four priority focus areas detailed below:

1. **Improvement of household food security and nutrition through support to local smallholder crop and livestock production.** This includes support to cereal crop and backyard food production, protection of livestock assets through restocking, provision of animal healthcare and feed, and repair and maintenance of critical rural infrastructure through cash-based interventions.
2. **Promotion of sustainable livelihood and employment opportunities for households and communities.** This includes support to integrated homestead/ family farming, promotion of income-generation activities and improvement of agriculture value chains (post-harvest management, food processing and preservation and marketing).
3. **Enhancement of sustainable use of natural resources** (food security–water–energy nexus) This includes supporting households and communities through introduction of more efficient water management and energy saving technologies and practices, i.e. climate change adaptation, agricultural intensification and diversification and environmental protection.
4. **Strengthening capacity of targeted institutions, civil society organizations and other stakeholders** to develop, implement and monitor policies, strategies and resilience programmes; this includes: enhanced food security sector coordination, data collection, analysis and information sharing; development of disaster risk management strategies; animal disease surveillance; drought early warning; and emergency preparedness and response.

5.3 Beneficiaries

In Syria, the primary beneficiaries of FAO's interventions are vulnerable, food-insecure and resource-poor rural and peri-urban farming and pastoral communities directly or indirectly affected by the protracted crisis, including IDPs, their host populations and government and non-governmental agricultural support service providers. FAO's beneficiary selection criteria are gender sensitive and much of FAO's support is targeted at affected rural and peri-urban women (e.g. integrated homestead farming and full participation in farmer field schools (FFSs), agropastoral field schools and water users' associations). As the crisis intensifies, drawing men into the battlefield, women are not only the worst affected in terms of food and nutrition security shortfalls, but also increasingly the driving force behind the agriculture sector performance and therefore deserving of particular attention. Further details of PoA beneficiaries are as follows:

- Vulnerable, food-insecure and resource-poor landless, marginal and smallholder men and women farmers and pastoralists from rural and peri-urban communities (including women-headed households and unemployed youth) who have been: (i) directly affected by the protracted crisis

through loss of their crops and/or animals and/or are unable to properly tend to their farms due to the ongoing crisis; or (ii) directly affected by the protracted crisis through the hosting of IDPs on their lands or in their communities.

- Vulnerable and food-insecure IDPs, i.e. former landless, marginal and smallholder men and women farmers, agropastoralists and pastoralists with sufficient land resources to benefit from short-term interventions (including women-headed households and unemployed youth).
- Food-insecure and resource-poor landless, marginal and smallholder men and women farmers, pastoralists, fishers and forest/range users from *moderately accessible* and *secure* and *accessible* areas who rely on agriculture as their main source of income and are not engaged in any other income-generating activity (and willing to contribute to the medium-term interventions).
- Agricultural support service providers – including government and non-governmental research institutions, academic institutions, extension services, NGOs, cooperatives and private sector input suppliers, traders, agroprocessors and food wholesalers and retailers.

Key government institutions of line ministries, such as MAAR, MWR and Ministry of Economy (MoE) responsible to deliver valuable services important for agricultural production and food and nutrition security would also be targeted and strengthened to improve and maintain their capacities to respond to the crisis in a resilient manner.

5.4 Timeframes

The Syria PoA has a duration of two years (2016 and 2017) and is spread across two timeframes: quick impact/short term and medium term. However, under a “Whole of Syria” approach, the duration of PoA interventions is dependent on the security status/accessibility of a target area and the nature/complexity of the intervention itself.

➤ Quick impact/short term (up to 1 year)

- *Hard to reach areas*: e.g. distribution of agricultural inputs for crop and livestock production and integrated homestead farming, animal vaccination campaigns and related training/field days (if possible) in *hard to reach* areas.
- *Moderately accessible* areas: e.g. rehabilitation of water harvesting and irrigation systems, community-based food processing and marketing and related training/field days.

➤ Medium term (1 to 2 years) – e.g. promotion of climate-smart agriculture, strengthening of agricultural research and extension services, development of value chains and related FFS/farmer business school programmes in *secure and accessible* areas.

As peace and stability return to any given conflict area, the timeframes and nature of interventions can be extended/expanded from quick impact/short term to medium term as an “evolving/interlocking” process in order to accommodate additional investment towards food and nutrition security, income generation and capacity development – as precursors to long-term investment programming for agricultural development and natural resource management in Syria.

5.5 Cost Estimate

The total cost of FAO’s Plan of Action for Syria (2016–2017) is estimated at **USD 152.38 million**. More details of costs per priority intervention area and accessibility/timeframe (i.e. “track”) are provided in Tables 1 and 2 and Annex 1.

Table 1. PoA Cost Estimate per Priority Focus Area

Focus Area	Cost (USD)
1. Improvement of household food security and nutrition status	72 000 000
2. Promotion of sustainable livelihood and employment opportunities for households and communities	42 760 000
3. Enhancement of sustainable use of natural resources	29 000 000
4. Strengthening capacity of targeted institutions, civil society organizations and other stakeholders	8 620 000
Total	152 380 000

Table 2. PoA Cost Estimate per Track

Track	Cost (USD)
Quick Impact/Short term (up to 1 year)	70 460 000
Medium term (1–2 years)	81 920 000
Total	152 380 000

Table 3. Syria Plan of Action Framework

Impact: Contribute to building the resilience of the rural and peri-urban populations, the institutions and the ecosystems in Syria to strengthen their capacity to absorb, adapt to and recover in a sustainable way from the impacts of the conflict; reduce risks; and anticipate and mitigate future shocks affecting food security and nutrition in the country			
Outcome 1: Improved food security, nutrition status and livelihood opportunities of targeted vulnerable households and communities			
		Accessibility and Track	Cost (USD)
Output 1.1	Improved crop and livestock production capacity of vulnerable households		72 000 000
Activity 1.1.1	Emergency provision of agricultural inputs and “cash-for-work” to vulnerable food-insecure farmers	Hard to reach areas; quick impact/short term (up to 1 year)	34 000 000
Activity 1.1.2	Support to local seed system (community-based seed multiplication)	Secure and accessible areas; 2 years	10 000 000
Activity 1.1.3	Provide emergency support to food-insecure and vulnerable smallholder pastoralists and agropastoralists in order to protect their livestock assets	Hard to reach areas; quick impact/short term (up to 1 year)	15 000 000
Activity 1.1.4	Provide effective support to veterinary services for the reduction of the risk and control of TADs	Whole of Syria; 2 years	10 000 000
Activity 1.1.5	Improve performance of local <i>Awassi</i> sheep breeds leading to increased milk and meat production	Secure and accessible areas; 2 years	3 000 000
Output 1.2	Increased income and employment opportunities for crisis-affected households through support to integrated homestead farming, agroprocessing and produce marketing		42 760 000
Activity 1.2.1	Emergency provision of horticultural inputs and small livestock to vulnerable food-insecure and undernourished farm families in Syria to ensure that target populations improve food consumption and nutritional status and increase income through the sale of surplus production	Hard to reach areas; quick impact/short term (up to 1 year)	21 460 000
Activity 1.2.2	Provide support to rural and peri-urban households through the promotion of integrated homestead farming, household and community-based agroprocessing and produce marketing and increase awareness of the need for dietary diversity and food consumption and nutrition	Moderately accessible areas; 1-2 years	15 000 000
Activity 1.2.3	Enhance the capacity of government and non-governmental agricultural support service providers and rural and peri-urban producer organizations to develop supply and value chains and increase income-generation opportunities	Secure and accessible areas; 2 years	6 300 000

Output 1.3	Agricultural productivity and local food production are sustainably increased through support to the promotion of climate-smart agriculture, natural resource management, drought management and improvement of research and extension services		29 000 000
Activity 1.3.1	Promote new/improved climate-smart agriculture, natural resource management and drought management technologies and practices	Secure and accessible areas; 2 years	13 000 000
Activity 1.3.2	Improve access of vulnerable rural and peri-urban populations to biogas as a clean source of energy and organic fertilizer	Moderately accessible and secure and accessible areas; 2 years	6 000 000
Activity 1.3.3	Introduce more efficient water management systems through the rehabilitation of farmer-managed irrigation systems and capacity development of water users' associations	Secure and accessible areas; 2 years	10 000 000
Outcome 2.	<u>Capacities of targeted institutions and other stakeholders to develop, implement and monitor policies, strategies and resilience programmes are strengthened</u>		
Output 2.1	Food and agriculture information systems, cluster/sector coordination and drought early warning systems are supported and strengthened		8 620 000
Activity 2.1.1	Enhance national capacity for food and agriculture livelihood data collection and analysis, information management and sharing	Whole of Syria (including under siege areas); 2 years	3 500 000
Activity 2.1.2	Support development of DRM strategies; animal disease surveillance; drought early warning and emergency preparedness and response	Moderately accessible and secure and accessible areas; 2 years	3 000 000
Activity 2.1.3	Enhance international and national capacity for efficient and effective "Whole of Syria" food security cluster/sector coordination	Whole of Syria (including under siege areas); 2 years	2 120 000
Total			152 380 000

6. STRATEGIC FIT WITH UNITED NATIONS' FRAMEWORKS AND RESPONSE PLANS



6. STRATEGIC FIT WITH UNITED NATIONS' FRAMEWORKS AND RESPONSE PLANS

6.1 United Nations' Syria Strategic Framework (2016–2017)

The two-year UN Syria Strategic Framework (that is currently being finalized) is a plan for cooperation between the Government of Syria and the UN centred on resilience-building in response to prevailing conditions. The Strategic Framework will adopt a holistic approach and bring together existing, dispersed early efforts toward resilience in a more coherent fashion in an effort to assist individuals, communities and institutions to better cope with the risks and shocks, which continue to affect them.

The Strategic Framework will contribute to resilience building through the achievement of specific goals within three broad priority areas, namely: (1) capacity development and support for institutions of all kinds; (2) restoring and expanding more responsive essential services and infrastructure; and (3) improving livelihood opportunities, including economic recovery and social inclusion. Partial or total objectives of the Outcomes and Outputs in the areas of FAO's mandate are provided in Box 2.

Box 2. FAO's Mandate for Outcomes and Outputs of the UN's Syria Strategic Framework (2016–2017)

Outcome 1: Targeted institutions have mechanisms to develop, implement and monitor evidence-based policies, strategies, plans and resilience programmes

Output 1.1 Targeted institutions systematically collect and use quality and disaggregated data to inform and monitor policies and strategies (e.g. *FAO food and nutrition security, assessments of crops, rural and peri-urban livelihoods and natural resources*)

Output 1.2 Targeted institutions formulate policies, strategies, plans and resilience programmes that are responsive to people's needs, particularly the most vulnerable groups (e.g. *FAO Plan of Action*)

Outcome 2: Basic and social services and infrastructure restored, improved and sustained to enhance community resilience

Output 2.1 People have equitable access to quality health and nutrition services with a focus on vulnerable groups

Output 2.2 School-age girls and boys and adults have equitable access to inclusive pre-primary, basic, secondary and alternative education with a focus on vulnerable groups

Output 2.4 Housing and essential infrastructure rehabilitated in priority urban and rural areas (including *irrigation supply and drainage systems, community-based and on-farm irrigation channels, grain and crop storage and processing facilities*)

Outcome 3: Households and communities benefit from sustainable livelihood opportunities, including economic recovery and social inclusion

Output 3.1 Income, sustainable livelihoods opportunities and inclusive local economic development are restored and maintained

"In rural and peri-urban areas, the United Nations – through agencies such as FAO – will support livelihood interventions with particular emphasis on food-insecure households, including income generation through agricultural inputs and food production, skills training and social safety nets for vulnerable groups (e.g. cash or voucher transfers).

Several ongoing resilience-based programmes – aimed at restoring livelihoods for rural

communities, including for IDPs and those hosting the displaced – will be expanded, including support for vegetable production in greenhouses, sheep breeding, integrated homestead farming/family farms, support to cereal crop production of vulnerable food-insecure farmers through agricultural inputs distribution, a strengthened drought early warning system and emergency support to small-scale herders affected by the crisis. Local markets and services will be strengthened through enhancement of food value chains and post-harvest management, and technical support to small and medium-size food producers. Moreover, Output 3.1 will support the improvement of household revenues through household income-generation activities and assisting small-scale farming enterprises to boost their production and access to markets”.

Output 3.2 Social and economic needs of the most vulnerable groups are identified and addressed

e.g. building skills and capacities of young people and women through vocational training.

Output 3.3 Environmental and natural resources are restored and sustainably managed

“The United Nations – through agencies such as FAO – will provide support towards restoring and expanding key environmental assets; in particular, supporting the restoration of nearly half of the protected forest areas and more than a third of the rangelands that have been damaged. Moreover, the United Nations will enhance support to the protection of endangered plant and animal genetic resources, in part by more than doubling the number of communities participating in managing and implementing projects reducing environmental hazards and the degradation of natural resources. In the restoration and management of environmental resources and assets, an immediate focus will be on those affecting livelihoods of people (i.e. income, health and safety)”.

6.2 The 2016 United Nations’ Syria Humanitarian Response Plan

The 2016 United Nations’ Global Humanitarian Overview presents an appeal of some USD 3.2 billion for Syria, targeting some 13.5 million people in need.

The Food and Agriculture Sector of the draft 2016 United Nations’ Syria HRP targets a total of 7.5 million people (of 8.7 million in need) at a total estimated cost of USD 1.24 billion. The sector aims to “ensure adequate food consumption for the most affected populations, reducing the number of people adopting negative coping mechanisms while supporting early and medium-term recovery of critical agricultural/livelihood assets and essential services related to food security” – with specific objectives, namely: (1) provide emergency response capacity, lifesaving and life-sustaining assistance to the most vulnerable crisis-affected people, including people with specific needs; (2) support livelihoods of affected communities and households by increasing agricultural production, protection of productive assets and restoring or creating income-generating activities to prevent negative or irreversible coping mechanisms; (3) improve the capacity to deliver essential services to local communities and support the rehabilitation of productive infrastructures; and (4) improve the quality of the response based on evidence, capacity building and strong coordination within the Food Security and Agriculture Sector and cross-sectors.

FAO has proposed six key intervention areas that should benefit some 2.88 million people at a total estimated cost of USD 86.57 million (Box 3).

Box 3. FAO's Proposed Intervention Areas under UN Syria HRP

- i. **Emergency provision of agricultural inputs to vulnerable food-insecure farmers in Syria to ensure that cereal sufficiency of the target population is reached** through increased wheat, barley and pulses production (targeting 130 000 food-insecure and vulnerable rural households; USD 34 million)
- ii. **Strengthening the resilience of vulnerable households by improving the food security and nutrition situation and protecting and gradually restoring agriculture-based livelihoods** through support to backyard food production for increased backyard vegetable and poultry production, improved food consumption and dietary diversity and increased income through the sale of surplus production (targeting 70 000 food-insecure households; USD 21.46 million)
- iii. **Building resilience and restoring livelihoods of IDPs and host communities in Syria** through: (i) increased revenues and access to alternative income sources by promoting income-generating activities; (ii) increased crop production; (iii) diversification of diet and improving the nutritional status, especially for women and children; (iv) repair and maintenance of essential rural infrastructure; and (v) strengthening of agricultural extension services (targeting 30 000 crisis-affected households; USD 15 million)
- iv. **Emergency support to food-insecure and vulnerable small-scale animal herders to protect their livestock assets** through restocking and provision of animal feed (targeting 50 000 households of animal herders and farmers who depend on livestock [with small herd sizes and at risk of engaging in negative coping mechanisms as a response to losing their assets to stress selling because of lack of animal feed and other household needs]; USD 10 million)
- v. **Protecting the livestock assets of vulnerable herders** through the provision of animal healthcare and vaccination campaigns (targeting 200 000 families of animal herders and farmers who depend on livestock [those with small herd sizes and at risk of engaging in negative coping mechanisms as a response to losing their assets because of animal diseases]; USD 5 million)
- vi. **Effective coordination of UN Food Security and Agriculture Sector/Cluster actors** under the “Whole of Syria” framework and provision of an inclusive common platform to humanitarian actors for coordination for food security, livelihoods and agriculture-related activities (USD 1.11 million)

ANNEX 1. PLAN OF ACTION FOR SYRIA (2016–2017)



ANNEX 1. PLAN OF ACTION FOR SYRIA (2016–2017)

Impact: Contribute to building the resilience of the rural and peri-urban populations, the institutions and ecosystems in Syria to strengthen their capacity to absorb, adapt to and recover in a sustainable way from the impacts of the conflict; reduce risks; and anticipate and mitigate future shocks affecting food security and nutrition in the country.

Outcome 1: Food production and natural resource management capacities and access to livelihood opportunities and income sources of the targeted populations are strengthened

Output 1.1: Increased crop production capacity of vulnerable households

Activities:

Activity 1.1.1: Emergency provision of agricultural inputs (e.g. quality seeds, fertilizers and farm tools) and support to “cash-for-work” activities (e.g. repair of irrigation infrastructure) for vulnerable food insecure farmers (*quick impact/short term – hard to reach areas; USD 34 000 000*).

Activity 1.1.2: Support to local seeds supply systems (community based seed multiplication) (*2 years – secure and accessible areas; USD 10 000 000*).

Rationale:

In 2012, the General Organization for Seed Multiplication (GOSM) purchased some 280 000 tonnes of wheat seed from out-growers. By 2014, this amount had fallen to 45 000 tonnes. Since the national wheat seed demands are, under normal circumstances, of the order of 450 000 tonnes, it follows that only a relatively small proportion of farmers receive cereal seed from GOSM. Most farmers either use seed from their previous harvest or purchase seed from traders. Seed purchased from the open market can be expensive and is frequently of poor quality.

FAO is seeking to provide technical assistance and engage with all concerned stakeholders to strengthen the country’s input supply systems (in particular the production and supply of quality seed) and reinforce local food production for improved food security of the crisis-affected people and their host communities. The use of high-quality cereal seed varieties will enable an increase in the productivity and overall production of the crops subsector. FAO’s strategy for promoting the use of high-quality seeds focuses on: (i) development of local production capacities and introduction and maintenance of improved varieties; and (ii) improvement of the marketing and use of commercial seeds and related inputs. FAO would empower local seed growers and farming communities while working with key stakeholders in the seed subsector and strengthening the linkages of input supply and marketing chains.

Key Activities:

- Provide emergency support to food-insecure and vulnerable farm families through provision of quality wheat, barley and pulses seeds, fertilizers and farm tools.
- Damage assessment and implementation of “cash-for-work” programmes to repair damaged water-harvesting structures, soil conservation measures, irrigation channels and related infrastructure.
- Capacity development of seed growers regarding post-harvest seed treatment methods (e.g. drying, grading and storage) using FFS approach.
- Provide agricultural inputs to seed growers (e.g. quality foundation wheat, barley and pulse seeds, fertilizers, hand tools and seed processing equipment).
- Build/rehabilitate post-harvest and storage facilities for seeds from seed growers’ associations.

- Capacity development of seed growers' associations regarding seed marketing and agri-business management.
- Support to seed value chains by facilitating the relationship between producers and users through the small packaging of seeds, implementation of seed fairs and development of public-private-community partnerships.
- Capacity development of GOSM and specialist NGOs regarding basic seed production and dissemination of improved seed varieties.

Target Areas:

Accessible areas of cereal production governorates of Aleppo, Dara'a, Deir Ezzor, Hama, Al-Hassakeh, Homs, Idlleb, Raqqa and Rural Damascus.

Target Beneficiaries:

- 95 000 food-insecure and vulnerable rural households receiving emergency agricultural inputs;
- 200 farmers' associations that will multiply quality seeds; and 20 000 households participating in the improved seed supply system; and
- researchers, subject matter specialists and extension workers of government and non-governmental agricultural support services (including NGOs, input suppliers and produce buyers).

Implementing Partners:

MAAR, GOSM, Federation Syrian Chamber of Agriculture and NGOs.

Duration (twin-track):

- Emergency provision of agricultural inputs – quick impact/short term (up to 1 year)
- Rehabilitation of seed system – 2 years

FAO Strategic Objective: SO5 – Increase the resilience of livelihoods to threats and crises; *Corporate output indicators: 5.4.3, “Percentage of countries affected by a crisis impacting agriculture in which FAO provided timely and gender-responsive crisis response” and 5.3.2, “Number of countries with improved application of measures that reduce vulnerability and strengthen resilience of communities at risk of threats and crisis as a result of FAO support”.*

FAO Regional Initiative: “Building Resilience for Enhanced Food Security and Nutrition” in the Near East and North Africa (NENA) region

Output 1.1: Increased livestock production capacity of vulnerable pastoralist households

Activities:

Activity 1.1.3: Provide emergency support (e.g. animal feed, healthcare and vaccination campaigns) to food insecure and vulnerable smallholder pastoralists and agropastoralists in order to protect their livestock assets (*quick impact/short term – hard to reach areas; USD 15 000 000*).

Activity 1.1.4: Provide effective support to veterinary services for the reduction of the risk and the control of TADs (*2 years – Whole of Syria; USD 10 000 000*).

Activity 1.1.5: Improve performance of local *Awassi* sheep breeds leading to increased milk and meat production (*2 years – secure and accessible areas; USD 3 000 000*).

Rationale:

The livestock subsector is particularly important in Syria. It accounted for 35 percent of the economy before the crisis. Production ownership is largely dominated by vulnerable smallholder pastoralist and agropastoralist households. This type of agriculture is an important source of nutrition, job opportunities and incomes for the crisis-affected people in Syria. Smallholder households affected by the ongoing crisis need urgent support to protect their livestock, which is a key asset for securing their income and food and nutrition security.

In addition, the animal vaccine production facilities have been damaged, which has resulted in a shortage of vaccines. Consequently, livestock are left without immunity against contagious diseases and subjected to higher risks of infection. The continuing movement of livestock out of Syria into the neighbouring countries, either with refugees or smuggled out to more lucrative markets, gives rise to increasing concerns about the spread of TADs and zoonosis. Being in the same epidemiological unit and considering the frequent movements of animals between countries, the risk of diseases spreading across the Near East region is high. This will also threaten the health of livestock in Syria over time. The country's veterinary service is rapidly exhausting its supply of vaccines and drugs for routine administration, and losing the capacity to provide technical and material support to livestock owners. The TADs and infections of highest concern to animal health and livestock production and public health are: foot-and-mouth disease, *peste des petits ruminants*, enterotoxaemia, lumpy skin disease and ecto- and endoparasites.

Due to the importance of livestock to the Syrian economy, especially for the rural poor, the improvement in production efficiency based on market demand will have a direct impact on pastoral and agropastoral household incomes and food and nutrition security. In this context, the *Awassi* sheep, a local breed known to Syria and very much in demand for local consumption and in the Near East region as a whole, presents potential to generate income for livestock owners if limiting factors to its production and performance are addressed. In general, constraints to the production and performance of *Awassi* sheep include: (i) limited and low quality of local animal feed; (ii) inefficient range and pasture management; and (iii) limited technical capacity of research and extension services for developing local breeds.

FAO will strengthen the capacity of MAAR and key stakeholders in the livestock subsector to strengthen the livestock production and disease control and improve the breeding and marketing of *Awassi* sheep and their products.

Key Activities:

- Provide emergency support to food-insecure and vulnerable smallholder pastoralists and agropastoralists to protect their livestock assets through restocking, provision of animal feed, animal healthcare and vaccination campaigns.
- Re-establish protocols and measures to enhance epidemiologic surveillance, reporting and early warning systems; rehabilitate animal disease diagnostic laboratories; and restore animal vaccine production – all for the prevention and control of TADs and zoonotic diseases.
- Develop an integrated livestock sectoral approach to assess the constraints and opportunities along the value chains of major animal products (including *Awassi* sheep); develop appropriate technologies and practices to improve the performance and productivity of livestock and animal products; and strengthen the capacity of relevant government and non-governmental institutions to improve access by the rural poor to livestock and small agribusiness development knowledge and skills through the implementation of pastoral field schools.
- Strengthen and support private enterprises along the value chains of animal products with a focus on processing/added value and produce marketing through public-private-community partnerships.
- Increase awareness of social protection, gender equality, women and youth empowerment within pastoral and agropastoral communities and access to microfinance and insurance for high value animals.
- Test, demonstrate and replicate new and improved community-based range management and pasture improvement practices to vulnerable smallholder pastoralists and agropastoralists through pastoral field schools.

Target Areas:

Accessible areas of all governorates of Syria.

Target Beneficiaries:

- 500 000 vulnerable pastoral and agropastoral households depending on livestock (with small herd sizes and at risk of engaging in negative coping mechanisms as a response to losing their assets to stress selling); and
- government and private sector veterinarians, subject matter specialists, extension workers and community animal health workers.

Implementing Partners:

MAAR, Syrian Veterinary Association, University of Hama and NGOs.

Duration:

- Emergency provision of livestock inputs and vaccination campaigns – quick impact/short term
- Capacity development of veterinary services – 2 years
- Increased productivity and production of *Awassi* sheep – 2 years

FAO Strategic Objective: SO5 – Increase the resilience of livelihoods to threats and crises; *Corporate output indicators:* 5.3.1, “Number of countries with improved application of integrated and/or sector-specific standards, technologies and practices for risk prevention and mitigation as a result of FAO support” and 5.4.3, “Percentage of countries affected by a crisis impacting agriculture in which FAO provided timely and gender-responsive crisis response”.

FAO Regional Initiative: “Building Resilience for Enhanced Food Security and Nutrition” in the NENA region

Output 1.2: Increased income and employment opportunities for crisis-affected households through support to integrated homestead farming, agroprocessing and produce marketing

Activities:

Activity 1.2.1: Provide horticultural inputs (e.g. vegetable seeds, fertilizers and hand tools) and small livestock (e.g. chicken) to vulnerable food insecure and undernourished farm families in Syria to ensure that target populations improve food consumption and nutritional status and increase income through the sale of surplus production (*quick impact/short term – hard to reach areas; USD 21 460 000*).

Activity 1.2.2: Provide support to rural and peri-urban households through the promotion of integrated homestead farming (i.e. microgardens, micro-irrigation systems and poultry inputs), household and community-based agroprocessing (e.g. produce cleaning and grading and food processing, packaging, storage and marketing), increasing awareness in need for dietary diversity and food consumption and nutrition (*1-2 years – moderately accessible areas; USD 15 000 000*).

Activity 1.2.3: Enhance the capacity of government and non-governmental agricultural support service providers and rural and peri-urban producer organizations to develop supply and value chains and increase income-generation opportunities for smallholder producers (*2 years – secure and accessible areas; USD 6 300 000*).

Rationale:

The protracted crisis has caused massive economic loss across Syria, estimated at the end of 2014 to be over USD 200 billion in key productive sectors. Over 60 percent of the population is extremely poor and over 50 percent of the labour force is currently unemployed. By the end of 2014, around 82.5 percent of the population was living beneath the poverty line with the large majority of the people living in rural areas and depending on the agriculture sector for their income sources and basic livelihoods. The crisis has reversed development gains for Syria that was posed to achieve the Millennium Development Goals. Malnutrition among children is of great concern and needs to be addressed now to avoid it becoming a forgotten case as what happened in other crisis countries.

The main objective of income-generating activities is to support the crisis-affected people and their host communities to have access to additional revenues in order to strengthen their food security and livelihoods. In general, women and IDPs would largely be targeted by this intervention linked to integrated homestead farming and agroprocessing activities. The identification of income-generating activities (such as horticulture, tree and vegetable nurseries, medicinal herbs, mushrooms, poultry, milk processing and silkworm rearing), would come from a participatory approach. In this context, FAO would conduct a preliminary analysis focusing on technical feasibility of proposed activities, and a market survey to identify potentials based on real demand and profitability of proposed activities rather than provide a list of activities for which agricultural inputs would be provided (other than emergency support). However, following preliminary surveys on the ground and the lessons learned during the implementation of previous livelihood support projects, FAO is convinced that the activities illustrated below will have the potential to be adopted by beneficiaries in the selected (accessible) geographical locations.

In close collaboration with UNICEF and WFP, FAO envisages the use of schools and FFSs, pastoral field schools and junior farmer field and life schools as entry points to create synergies around direct and indirect nutrition interventions and education and agricultural production. FAO recognizes school children as a priority for nutrition interventions and views the schools as an ideal setting for teaching basic skills in food, nutrition and health. In many communities, schools may be the only place where children acquire these important life skills. Schools reach children at an age when food and health habits are being formed; they also reach families, and the school community can be a channel for wider community participation. Promoting nutrition through schools can create benefits that extend

beyond the classroom and playground to improve the health and nutritional well-being of households and communities. Knowledge transfer for optimal nutrition practices, good agricultural practices and good hygienic practices would be woven into education modules of women-focused FFSs, pastoral field schools and junior farmer field and life schools implemented to promote sustainable integrated homestead farming and post-harvest management.

Key Activities:

- Provide emergency support to vulnerable and food-insecure smallholder farm families (poultry restocking, chicken feed, vegetable seeds, fertilizers and/or hand tools).
- Increase the availability of nutrient-rich food through support to smallholder integrated homestead/family farming, including horticultural and small livestock production, including:
 - capacity of government and non-governmental agricultural support service providers developed to effectively promote integrated homestead farming technologies and practices through adaptive research and participatory extension approaches (such as FFSs and junior farmer field and life schools);
 - implementation of men and women FFSs to demonstrate, replicate and upscale improved fruit tree, vegetable and poultry production practices; and
 - provision of integrated homestead farming packages (e.g. quality fruit tree seedlings, vegetable seeds and hand tools, micro-irrigation equipment and cocks and hens [of improved breeds], feeders, drinkers and materials for chicken houses) to the participants of FFSs.
- Reduce post-harvest losses, improve homestead and community-based post-harvest management and increase household cash income from horticultural, mushroom, poultry and silkworm production, establishment of vegetable and tree seedling nurseries, milk processing, growing/collection and processing of medicinal herbs and enhanced agribusiness skills, including:
 - developing the capacity of government and private sector agricultural service providers to effectively promote post-harvest management technologies and practices through adaptive research and participatory extension approaches (such as farmer business schools);
 - establishing men and women's farmer business schools ("graduating" from successful FFSs, junior farmer field and life schools or networks of FFSs and junior farmer field and life schools) to demonstrate, replicate and upscale improved cleaning, grading, processing, packaging, storage and marketing of horticultural, mushroom, poultry, dairy medicinal herbs and silkworm products produced at the household and community levels;
 - provision of cleaning, grading, processing, packaging and storage equipment and materials and refurbishment of community-based storage and marketing facilities for the participants of farmer business schools; and
 - establishment (i.e. formation and capacity development) of producer marketing groups from "graduated" farmer business schools or networks of "graduated" farmer business schools.
- Undertake a nutritional assessment of target areas and identify malnourished men, women and children; and enhance household knowledge and adaptation of optimal nutrition practices (i.e. nutrient-rich foods and diversified diets), good agricultural practices and good hygienic practices through awareness campaigns (particularly targeting women and children) on family health and nutrition, and training in and provision of basic equipment and containers for household food preparation and storage – woven into education modules of women FFSs and farmer business schools.
- Support to the strengthening of supply and value chains for high-value commodities through the development of public-private-community partnerships, including value chain analyses, linkages for collective purchasing and marketing, input supply and market intelligence, brokering of contracts, and credit, microfinance and agribusiness support services – all targeting the aforementioned producer marketing groups.

Target Areas:

Accessible areas of all governorates of Syria (in particular horticulture producing areas of Aleppo, Daara, Hama, Homs, Idleb, Latakia, Rural Damascus, Quneitra, Sweida and Tartous Governorates).

Target Beneficiaries:

- 70 000 vulnerable food-insecure rural and peri-urban households, with access to sufficient land to undertake integrated homestead gardening activities; priority will be given to women-headed households;
- researchers, subject matter specialists and extension workers of government and non-governmental agricultural support services (including NGOs, input suppliers and produce buyers).

Implementing Partners:

MAAR, Federation Syrian Chamber of Agriculture, Ministry of Health and Ministry of Education, as well as UNICEF, WFP, United Nations High Commissioner for Refugees (UNHCR) and the World Health Organization.

Duration:

- Emergency provision of horticultural inputs and small livestock – quick impact/short term
- Support women-headed households through integrated homestead gardening, agroprocessing and marketing – 1-2 years
- Value chain development – 2 years

FAO Strategic Objectives: SO5 – Increase the resilience of livelihoods to threats and crises; *Corporate output indicators: 5.4.3, “Percentage of countries affected by a crisis impacting agriculture in which FAO provided timely and gender-responsive crisis response” and 5.3.2, “Number of countries with improved application of measures that reduce vulnerability and strengthen resilience of communities at risk of threats and crisis as a result of FAO support”.*

SO4 – Enable more inclusive and efficient agricultural and food systems at local, national and international levels; *Corporate output indicator: 4.2.3, “Value chain actors are provided with technical and managerial support to promote inclusive, efficient and sustainable agrifood chains”*

FAO Regional Initiatives: “Building Resilience for Enhanced Food Security and Nutrition” and “Small-scale Agriculture for Inclusive Development” in the NENA region.

Output 1.3: Agricultural productivity and local food production sustainably increased through support to promotion of climate-smart agriculture, natural resource management and drought management and improvement of research and extension services

Activities:

Activity 1.3.1: Promote new and improved climate-smart agriculture, natural resource management and drought management technologies and practices (*2 years – secure and accessible areas; USD 13 000 000*).

Activity 1.3.2: Improve access of vulnerable rural and peri-urban populations to biogas as a clean source of energy and organic fertilizer (*2 years – moderately accessible and secure and accessible areas; USD 6 000 000*).

Activity 1.3.3: Introduce more efficient water management systems through the rehabilitation of farmer-managed irrigation systems and capacity development of water users' associations, for a sustainable increase in irrigated areas (*2 years – secure and accessible areas; USD 10 000 000*).

Rationale:

The prevailing agricultural production systems in Syria are not sustainable. A number of constraints linked to climate change and variability, drought, scarce rain and poor restoration of soil organic matter, combined with intensive tillage, has resulted in the destruction of soil structure, decrease of soil water storage capacity and increased soil erosion and land degradation. It is important to support innovative farming practices and low cost technologies adapted to local conditions to reverse the low productivity and production of the agriculture sector and build the resilience for food and nutrition security. FAO will therefore support the promotion of climate-smart agriculture and community-based natural resource management and drought management as pathways towards sustainable agriculture (including new and improved technologies in **agroforestry, conservation agriculture, drought-tolerant seeds, integrated fish farming, integrated livestock management, IPM, integrated soil fertility management, on-farm water management, range management, renewable energy sources, soil conservation and water harvesting**).

Water scarcity is recognized as a serious development constraint for agriculture production in the Near East region, including Syria. Access to water for agricultural production has been exacerbated due the ongoing crisis. According to the Ministry of Water Resources, Syria requires 17.7 billion cubic metres of water annually for agricultural, industrial and domestic purposes, of which 16.2 billion cubic metres are available, leaving a deficit of 1.5 billion cubic metres. However, field irrigation efficiency for wheat production was estimated to be between 40 and 70 percent before the crisis period. Since 2011, irrigation canals, pumping stations, small pumps and generators have suffered extensive damage and/or theft. High fuel prices and electricity outages have affected farmers in all areas where irrigation is normally carried out.

Syria's capacity to adapt to the impacts of climate change and drought, at both national and local levels, is low; this can be attributed to the current crisis situation but is also due to many other factors as the limited options for livelihoods, lack of support to climate change adaptation actions (including policies and programme implementation), limited knowledge on climate change adaptation options and limited planning based on current climate change impacts. Since 2006, the country has been exposed to extreme weather patterns, resulting in extended dry spells and drought, cited as one of the triggers of the current crisis. This negatively affects crop production and rangelands, and has a direct negative impact on the livelihoods and food security of the rural population, especially within the governorates of Dara'a, Hama, Homs, Idleb, Rural Damascus and Sweida. If no measures are taken, the rapid depletion of water, soils, forests, range and other natural resources will lead to irreversible

degradation affecting the agricultural production systems and the livelihoods of people who depend on them.

Key Activities:

- Mapping and assessment of current farming systems in Syria and climate-smart agriculture, natural resource management and drought-management technologies and practices available to Syrian smallholder farmers and pastoralists; and development of policies for agricultural climate change adaptation and DRM and strategies for improving agricultural productivity in line with international best practices for climate-smart agriculture and community-based natural resource management and drought management.
- Mapping and assessment of government and private sector agricultural service providers, with recommendations for institutional strengthening at all levels (especially for updating knowledge in agricultural climate change adaptation and DRM and modern applied research and participatory extension methods).
- Capacity of government and private sector agricultural support service providers (including MAAR, NGOs, research and academic institutions and input supply and marketing companies) developed to effectively promote new and improved climate-smart agriculture, natural resource management and drought management technologies and practices through applied research and participatory extension approaches (e.g. FFSs and pastoral field schools), including:
 - design of FFS/pastoral field school programmes to promote climate-smart agriculture, natural resource management and drought management;
 - development of curricula for training master trainers and FFS facilitators;
 - training of master trainers (selected from government and non-governmental “subject matter specialists”) and FFS facilitators (selected from local extension workers and “lead” men and women farmers and pastoralists) in new and improved climate-smart agriculture, natural resource management and drought management technologies and practices and adaptive research and participatory learning methodologies; and
 - preparation, publication and dissemination of quality training and extension materials.
- Implementation of FFS/pastoral field school programmes whereby rural and peri-urban communities and smallholder farmers adopt and practise new and improved climate-smart agriculture, natural resource management and drought management technologies and practices through adaptive research and participatory learning methodologies and participation in FFSs and pastoral field schools, including:
 - demonstration, testing, validation, replication and upscaling of techniques on group-managed plots and participating farmers’ fields;
 - exchange visits between FFSs/pastoral field schools;
 - open days and farmers’ forums with senior policy makers, researchers, extension officers, etc.;
 - FFS/pastoral field school graduation ceremonies to reward successful participants (and select future lead farmers/FFS facilitators); and
 - participatory monitoring systems.
- Damage assessment, redesign and rehabilitation of farmer-managed irrigation systems through labour-based technologies – in line with the abovementioned climate-smart agriculture, natural resource management and drought management strategies; and re-establishment and/or strengthening of water users’ associations for those farmers participating in and graduating from FFSs focusing on promoting new and improved water harvesting, irrigation management and/or on-farm water management technologies and practices (including solar-powered pumps and more efficient irrigation conveyance and delivery systems).

Target Areas:

Accessible areas of all governorates of Syria

Target Beneficiaries:

- 120 000 resource-poor farm families; and
- researchers, subject matter specialists and extension workers of government and non-governmental agricultural support services (including NGOs, input suppliers and produce buyers).

Implementing Partners:

MAAR, MoE, MWR, General Commission for Scientific Agricultural Research, Federation Syrian Chamber of Agriculture, as well as the International Center for Agricultural Research in the Dry Areas (ICARDA) and the Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD)

Duration:

2 years

FAO Strategic Objective: SO2 – Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner; *Corporate output indicator: 2.1.3, "Number of public and private knowledge organizations and institutions, management agencies and networks that received organizational, institutional and/or technical capacity development support from FAO on the basis of assessed needs".*

FAO Regional Initiative: "Small-scale Agriculture for Inclusive Development" in the NENA region

Outcome 2: Capacities of targeted institutions, civil society organizations and other sector stakeholders to develop, implement and monitor policies, strategies and resilience programmes are strengthened

Output 2.1: Food and agriculture information systems, cluster/sector coordination and drought early warning systems are supported and strengthened

Activities:

Activity 2.1.1: Enhance national capacity for food security and agriculture livelihood data collection and analysis and information management and sharing (*2 years - Whole of Syria; USD 3 500 000*)

Activity 2.1.2: Support development of disaster risk management strategies, animal disease surveillance, drought early warning and emergency preparedness and response (*2 years – moderately accessible and secure and accessible areas; USD 3 000 000*)

Activity 2.1.3: Enhance international and national capacity for efficient and effective “Whole of Syria” food security and agriculture sector coordination (*2 years - Whole of Syria [including under siege areas]; USD 2 120 000*)

Rationale:

Across Syria and its subregion, the quality and quantity of credible, timely and decision-focused food security and agriculture-based livelihoods’ information remains extremely variable in terms of coverage and frequency. Limited information and inability to provide systematic analysis at the sectoral level continue to hinder evidence-based programming. With vast amounts of financial resources input by development partners, it is increasingly important to ensure that programming is results-oriented and evidence-based. In order to achieve this, it is imperative that a comprehensive and more regular sectoral analysis be made available at national and regional levels through frequent reports that can guide programming needs.

The food security and agriculture sector continues to receive considerable funding for the protracted crisis. However, systematic food security and livelihood analysis is crucial for a resilience-based response. Without a systematic food security and livelihood information system in the region, it is challenging to assess the regional and national food security and rural poverty situations and their evolution, making it difficult to identify the severity and magnitude of food insecurity and poverty and their causes, and to develop sound response plans together with proper impact evaluation within the humanitarian and development communities. As resources for responding to the crisis are limited in relation to the needs, it is imperative for governments, UN agencies and NGOs to strategically target assistance with consideration for severity, scale and underlying causes of hazard risk and vulnerability. Timely food security, livelihood and hazard-risk information products are essential to guide this effort and will assist in the creation of solid evidence for decision making regarding the level and type of action required to respond to those needs.

Prolonged dry spells and droughts add an extra layer of vulnerability to the already fragile context in Syria, compounding and exacerbating the underlying issues of weak basic services, dilapidated infrastructure, difficult access to markets due to security issues and food insecurity. Since 2009, extreme weather patterns have increased in the Near East region, resulting in extended dry spells every second or third year. It is projected that climate variability will continue to manifest itself through extreme weather conditions, affecting crop production and pasture for livestock, thus having a direct negative effect on the livelihoods of the rural population in the region. Information and knowledge management – crucial tools in decision-making, particularly in the context of a crisis with a high level of uncertainty – are inadequate in the country. Rainfall patterns are becoming increasingly unpredictable, and there are no location-specific forecasts to assist farmers and pastoral communities in decision making. Recent progress made toward developing an early drought warning

system in Syria as part of the National Drought Management Strategy adopted in 2010 through FAO support, requires additional technical support in order to inform decisions in an increasingly complex environment.

Key Activities:

- Continued support to FAO-implemented RFSAN for:
 - Strengthening the capacity of government and non-governmental food security and early warning units in Syria through context-specific trainings, technical support and mentoring.
 - Food security and agriculture-based livelihood information produced and disseminated on a regular basis.
 - Fostering of a technical consensus with government and development partners through a regular and thematic situational analysis of relevant food security and agricultural livelihood drivers across the country.
 - Ensuring timeliness and quality of food security and agricultural livelihood information through rigorous analysis and consensus as well as the dissemination and use of best practices and lessons learned.
- Enhancement of a national drought early warning system with a focus on high risk areas, including:
 - Review of existing early warning systems and identification of gaps and needs for improvement.
 - Evaluation of risks at national and local levels and preparation of drought maps.
 - Creation of an index system on drought threats and most vulnerable spots at national and local levels.
 - Recording, analysis, reporting and dissemination of statistical data on the frequency of drought incidence, effects and losses endured.
 - Regular publication of food security bulletins and drought early warning information.
 - Development of stakeholder capacities, including: (a) training of government and non-governmental institutions; (b) awareness raising for drought-prone rural and peri-urban communities and farmers' and pastoralists' associations (and water users' associations) on the drought phenomena and mitigation measures through inclusion in FFS and pastoral field school curricula; and (c) empowerment of rural and peri-urban women from drought-prone areas.
- Strengthening the capacity of government and non-governmental veterinary services and community-based animal health services for livestock development and protection against threats of TADs.
- Continued support to the coordination of UN Food Security and Agriculture Sector/Cluster actors under the "Whole of Syria" framework and provision of an inclusive common platform to humanitarian actors for coordination for food security, livelihoods and agriculture-related activities.

Target Areas:

Whole of Syria (in particular conflict-affected and drought-prone areas)

Target Beneficiaries:

- Data managers and processors and decision and policy makers of relevant government institutions and NGOs (e.g. MAAR, MoE, MWR and Syrian Arab Red Crescent);
- 1.7 million drought-prone rural and peri-urban households; and
- country directors, programme coordinators and project managers of international development partners (e.g. United Nations Development Programme [UNDP], WFP, ICARDA and ACSAD).

Implementing Partners:

MAAR, MoE, MWR, WFP and NGOs

Duration:

2 years

FAO Strategic Objective: SO5 – Increase the resilience of livelihoods to threats and crises;
Corporate output indicators: 5.2.2, “Number of countries that improved resilience/vulnerability mapping and analysis as a result of FAO support” and 5.4.2, “Strengthened coordination capacities for better preparedness and response to crises”

FAO Regional Initiative: “Building Resilience for Enhanced Food Security and Nutrition” in the NENA region



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