

SYRIAN ARAB REPUBLIC

Joint Rapid Food Security Needs Assessment (JRFSNA)

Report



June 2012



Joint Rapid Food Security Needs Assessment (JRFSNA) Syrian Arab Republic

1. Summary of Findings

Crops and livestock sectors are the most affected by the ongoing crisis in the country. Table 1 summarizes the total damages and losses in the 9 governorates in the crop, irrigation and livestock sub-sectors.

Major affected crops are the strategic crops, such as wheat and barley; fruit and other trees (cherry, olive, other fruits, ornamental trees) and vegetables in the 9 governorates. Rise in fuel costs and unavailability of labor force have forced the farmers either to abandon farming or let the standing crops unattended. Migrant labors, mainly from the northeastern and eastern parts of the country, have left the agriculture producing areas due to insecurity, which has caused a severe shortage of labor. Labor wages have gone up sharply and the farmers are not able to hire the required number of labors due to lack of money. Harvesting of wheat has been delayed in Daará, Rural Damascus, Homs and Hama due to lack of labor and reluctance of the machineries owners to rent out their machineries due to insecurity, and hundreds of hectares of wheat are not harvested. There is thus a great risk of losing part of the crop if there is further delay. At the same time, the livelihood of the 'returnee' migrant labors in their places of origin is at serious threat due to lack of employment opportunities, and fast depletion of their resources. Selling of assets has become common among the most vulnerable in all the governorates as an immediate coping strategy. Insecurity has caused restriction in movements of farmers and extension workers that has seriously hampered the agriculture related activities. Pest and insect attacks are not properly addressed. Farmers are turning back to the forest for fire woods due to unavailability of cooking gas and fuel, and deforestation is on the rise.

Irrigation is affected as the electric pumps are not operating at their full capacity due to lack of diesel and high prices. Frequent electricity cuts do not allow the pump operation either in their full capacity, which is eventually affecting the crops and the fruit trees. In irrigated area some channels have been clogged and damaged due to lack of labor and inaccessibility. Lack of fuel and electricity cuts have affected water supply and distribution of water in the fields, which created chaos and social tension among the farmers. Canals in some areas have been reported breached by the farmers due to unavailability of sufficient irrigation water.

Livestock sector has been affected to a greater extent. The hike in fuel, fodder and concentrated feed prices has forced the herders and small families to sell a part of their flock at reduced price to meet their growing expenditures. Herders reported to have some of their livestock killed or stolen during the crisis. Insecurity has hindered the movement of animal health workers from the governorate capitals to the villages due to which proper animal health service is not being provided. Outbreak of any animal disease is however not reported so far. Insecurity has also hindered the movement of livestock for grazing, especially in the grazing land Zones 1, 2, 3, and 4, in particular in Homs, Idleb and Hama, and the Bedouins from Al Badia are moving to northern and north-eastern provinces putting more pressure on the pastures there. Furthermore, due to the prolonged drought Zone 5, Bedouins in Al Badia also reported to have affected livestock reproduction rate.

Poultry sector has been severely affected by the ongoing crisis. Import of mother chicks from abroad for the production of one-day chicks in the country is hampered due to restrictions in import. Lack of fuel, load shedding and rise in poultry feed price has increased the production costs of the eggs and chicks almost by double. In the meantime, major chicken producing farms in Homs, Hamah and Idleb have been closed due to which the supply of poultry meat is lower than the demand, and the price has significantly increased in the local market. Many of the poultry farms producing chicks have stopped their operation, in particular in Rural Damascus from where the one-day old chicks are supplied, and the running ones have

reduced their capacities by almost half. Workers, who mostly hailed from the northeastern and eastern part of the country, have been laid off. The ones currently operating at reduced capacity with resident labor families are making losses, but are hopeful that the situation would normalize and their business would pick up.

Inland fishery sub-sector, which provides protein as well as cash income to the local communities was affected to some extent by the crisis. Details of the damages and losses in fisheries could however not be obtained.

Department of Agriculture in different governorates reported to have lost their vehicles, farm machineries and some heavy equipment. Some of the extension service facilities in the areas have been burnt and robbed. The extension and animal health workers are also reported to be not in a position to travel to rural areas to support the farmers and herders due to growing insecurity. Forest monitors are unable to monitor their works, and deforestation is reported to be on the rise, also because of the lack of fuel, people are going to the forest for collecting firewood.

In general, the depreciation of the Syrian Pound (SYP) has been a severe blow to the purchasing power of Syrian citizens. Inflation has dramatically risen and the food prices have drastically gone up, and the prices of milk, meat and chicken have gone to as high as 300% in certain places. Though the rural population is able to get some food items from the local traders, the credit limit however they can have is up to SYP2000 for a maximum of two weeks. Since the rural traders are also small ones, it is difficult for the vulnerable people to ask for food and other commodities on credit for long time. Thanks to the support provided by the government, local bakeries are functioning and bread is still available in required quantities for about SYP9/kg; however lack of gas and fuel is slowly putting pressure on the supply of bread as well. Some directly crisis-hit areas, as reported in Aleppo, due to insecurity people are unable to go to the bakeries and queue up for bread. Instead, some intermediaries are supplying the bread at doorsteps at double price, which the poor and vulnerable farmers simply cannot afford.

Indebtedness among the rural families is on the rise, and the devaluation of the SYP has put additional pressure on the small farmers and herders. Almost 60% of the households visited in Palmyra in Eastern Homs and Daar'a reported to have loans from the relatives, and some of them as high as 60,000 SYP. In rural areas, where most of the people are at subsistence level, thanks to the existing social fabric and system, borrowing exists at no interest rate. However, the irony is that since the situation of one family compared to another is not much different, no one is in a real good position to lend money to others. Furthermore, in some of the agriculture production areas, such as Daará and Rural Damascus, the local merchants / money lenders are lending money in USD only, and the medium-sized farmers with 3-5 ha of land are entering into a vicious cycle of debt in hard currency. Since banking facilities and provision of soft loans have been suspended at the moment, the small and medium-sized farmers are facing more difficulty accessing cash to meet the higher production costs.

Among the most vulnerable rural population, which accounts for about 30% of the rural population, 5-10% of them is reported to be female-headed and is the most vulnerable. With less or no income and very little savings, high recurring expenses and many mouths to feed, their resources are fast depleting. Coping strategy for the small farmers and female-headed households is to cut the meals from three to two times, stop eating meat, eating lower quality food, reducing the size of meal, buying less expensive food, buying food on credit, taking children out of school, sending children and young daughters for work, selling livestock and other assets, and cutting back medical and education expenses. Even the richest family in a village during the mission visit in Al Hassake reported to have food stock for only one more month.

Most of the vulnerable families visited across the country reported less income and more expenditure, and their life is becoming difficult day by day. Some of the women interviewed confirmed to have sold their assets (including jewelries) to cope with the situation. One woman interviewed in Daará reported to have started begging in the street. Other women interviewed in Palmyra in Eastern Homs, Al Haasake, Al Raqqa and Aleppo confirmed deterioration of their living conditions from beginning of this year and their livelihood is just on the verge of collapse.

In some of the visited rural areas, seasonal migration of young boys and men to Lebanon and Saudi Arabia for works played important role at the household level, especially for the remittance. However, due to recent crisis in Lebanon and the insecurity in movement within Syria, people are afraid of moving out of their villages. Few families in Eastern Homs, mainly in Al Badia region with family size as big as 17, with almost no agriculture and very few heads of livestock, and largely dependent on remittance, feared a complete collapse of their livelihood system if the current situation continues for some more time. Few families reported having their men still in Lebanon, however unable to send any remittance due to unemployment there.

Daará governorate alone that hosted nearly 200,000 migrant labors reported the return of nearly 70% of its labor force. Since most of this labor force originated from the northeastern and northern governorates, the mission observed additional stress on the natural resources and food demand in these areas with the return. With fewer income-generating opportunities for the returnee families, most of their savings have already been consumed. This has caused extreme psychological pressure on these families, and some of them reported to be taking psychiatric medicines, which unfortunately was another financial burden for them. While visiting Al Hassake and Al Raqqa, the mission met some of these returnee families and found that these families are some of the most vulnerable ones. With no employment back in their native villages, large and extended families with almost no coping mechanism left, reported their livelihood just on the verge of collapse.

The mission concludes that the farming- and livestock-based livelihoods and household level food security of about 30% of the rural population and the internally displaced families currently living in the urban and peri-urban settings, which is about 3 million people¹ is at real threat and they need urgent assistance. For agriculture and livestock support, this totals to nearly 375,000 households. They are mainly subsistence farmers with less than 0.5 ha of land, herders with less than 30 heads of livestock and internally displaced families living with their relatives or in rented houses in urban and peri-urban areas. Their household level food security situation is rapidly deteriorating and the coping strategy is also getting gradually diminished. These people need urgent food assistance as life saving measure, and agriculture and livestock input assistance as life-sustaining intervention to restore their farming- and livestock-based livelihoods. Particular attention needs to be given to the 'returnee' migrant labors, female-headed households, small farmers, and small Bedouins and herders. Given the sense of urgency, this assistance is needed without any further delay. If the timely assistance is not provided, the livelihood system of these vulnerable people could simply collapse in few months time. Since the winter is approaching in few months time, urgent action is therefore necessary.

¹ This caseload figure is estimated based on the total population of about 20 million in the most affected 9 governorates of Daará, Rural Damascus, Homs, Hama, Idlib, Aleppo, Al Raqqa, Deir Ezzor and Al Hassake with 46% of population living in rural areas out of which 30% are considered as the most vulnerable rural farming and herder families. An additional caseload of around 300,000 people is estimated in urban and peri-urban areas displaced from the crisis-affected areas around the country based on the consultations carried out in the governorates.

The following table presents the summary of damages, losses and the overall short-term needs for the next 12 months.

Table 1: Summary of damages, losses and overall short-term needs² in food security sector

Sub-sector	Damages (SYP)	Losses (SYP)	Damages (USD)	Losses (USD)	Overall short-term Needs (USD)	Remarks
Crop	334,345,000	53,781,629,050	4,916,838	790,906,310	91,128,645	
Livestock	1,198,121,939	66,086,933,700	17,619,440	971,866,672	33,751,350	
Irrigation	371,280,000	-	5,460,000	-	2,730,000	
Food Assistance					350,000,000	For 3 million persons for 6 months
Total	1,903,746,939	119,868,562,750	27,996,279	1,762,772,982	477,609,995	

The following table presents the summary of most immediate short-term life-saving and life-sustaining needs³ in US Dollars for next 3 to 6 months to be provided to the most vulnerable families.

Table 2: Summary of most immediate short-term life-saving and life-sustaining needs in food security sector in USD

Subsector	Most Immediate Short-term Needs in USD	Remarks
Crops	19,687,500	
Livestock	16,537,500	
Livestock for vulnerable women-headed HH	1,687,500	
Food Assistance	177,000,000	1.5 million persons to be targeted during next 3 months
Total Immediate Needs	214,912,500	

2. Background

Large numbers of rural people of the central, coastal, eastern, northeastern and south governorates were reported to have lost their farming- and livestock-based livelihoods and business totally or partially due to the crisis and insecurity in the country, coupled with the prolonged drought. The United Nations System in Syria, including FAO and WFP, upon the request of the Government of Syria carried out a mission in March 2011 and came up with a conclusion that the lives and livelihoods of the rural population in Syria was severely affected.

In August 2011, further assessment by the UN system, including FAO in the country confirmed that there was no improvement in the livelihood situation compared with previous years. In fact, the poverty and the food insecurity was found to be increasing and spreading to other areas. The rural population was found to be severely affected by the crisis and civil unrest in addition to the effects of recurrent drought. They suffered from no income (due to lack of job opportunities), poor food intake, insufficient supplies of

² The overall short-term needs are for the total caseload of 3 million persons for a total period of 12 months.

³ The most immediate short-term needs for agriculture and livestock input assistance are for the caseload of 112,500 HH for next 6 months. For food assistance, WFP aims to provide food basket to 1.5 million people during the next 3 months for an average family size of 5 person, and eventually a total of 3 million people could be considered during next 6 months depending on the situation in the country.

potable water, increase in food price and inadequate health services. The needs assessment report also stated that 25% of population of Al Hassake, Deir Ezzor and Al Raqqa governorates and eastern parts of Homs and Hama were living on less than \$1 a day and eating mainly bread and sugared tea, while thousands of rural population who had lost their crops and livestock were suffering from depleted sources of livelihood, decreased resilience, and restricted mobility due to security resulted incidents.

In response to the ongoing situation in the country and following the agreement of the Syrian Government, which was expressed in a letter dated 8 March 2012, sent by the Syrian Ministry of Foreign Affairs to the UN Emergency Relief Coordinator, a Government-led humanitarian assessment mission, supported by a UN-OIC joint mission, gathered information from national sources, the Syrian Arab Red Crescent (SARC), local community leaders, religious figures, local Non-Governmental Organizations (NGO) and Community-Based Organizations (CBO), ordinary Syrians and professionals from all communities and political views between 18 and 26 March 2012 and came up with the Syria Humanitarian Assistance Response Plan. Both FAO and WFP participated in the mission in close collaboration with UN system and relevant line ministries and came up with their respective project profiles under the response plan. FAO appealed for a total of USD 8 million under the livelihood sector to restore livelihoods so as to avoid the exacerbation of existing humanitarian needs, assist affected poor rural population to restore and/or sustain their livelihood, and support families who have lost their primary income earner during the events. Similarly, WFP appealed for a total of USD71 million under the food sector to provide food to people affected by the ongoing events and support and strengthen SARC's capacity to assess and respond to food needs.

Meanwhile, FAO Regional Office for Near East (RNE) had proposed in December 2011 a mission to Syria to assess the impact of the ongoing crisis and rising food prices. A concept note was prepared by RNE and shared with FAO Syria. FAO then sent a letter to the Ministry of Agriculture and Agrarian Reform (Ref: Letter No. 018, 15 January 2012) informing HE the Minister about the proposed mission objectives and team composition and requesting for his approval. The approval from the Ministry was received on 19 January 2012 (Ref: Letter No. 133). The details of the mission was then discussed with WFP and another letter was sent by FAO to the Ministry on 6 May 2012 (Ref: Letter No. 275) confirming the mission and requesting the nomination of a Ministry focal point and 4 specialists to assist the field work. The Ministry positively replied to the request on 9 May 2012 (Ref: Letter No. 888).

The **FAO-led mission** finally kicked off in June 2012 comprised of an international FAO expert as Team Leader and experts from WFP and the Ministry of Agriculture and Agrarian Reform. The mission held consultations in Damascus, and visited Daará, Rural Damascus, Palmyra in Eastern Homs, Al Hassake, Al Raqqa and Aleppo governorates. The mission met with officials from the Directorate of Agriculture in different governorates, representatives from Peasants' Union, representatives from Al Badia Commission, small farming households, small herders, Bedouins, returnee families from crisis-affected areas, medium-sized farmers and herders, and poultry entrepreneurs. The mission also held focus group discussions and interviews with some of the most vulnerable small farmers, herders, widows and female-headed households. The mission meanwhile developed templates for the collection of secondary data on damages, losses and needs and shared with the Ministry. Some of the mission members had rigorous consultations with the officials in the Directorates of Agriculture in the visited governorates to complete the data templates. Telephone conferences were held with the Directorates in Homs and Hama for the situational update and secondary data collection. Despite all its efforts, the mission unfortunately could not arrive in Deir Ezzor due to deteriorated security situation, and had to return back to Damascus from Palmyra. Collection of information or secondary data from Deir Ezzor was also not possible either.

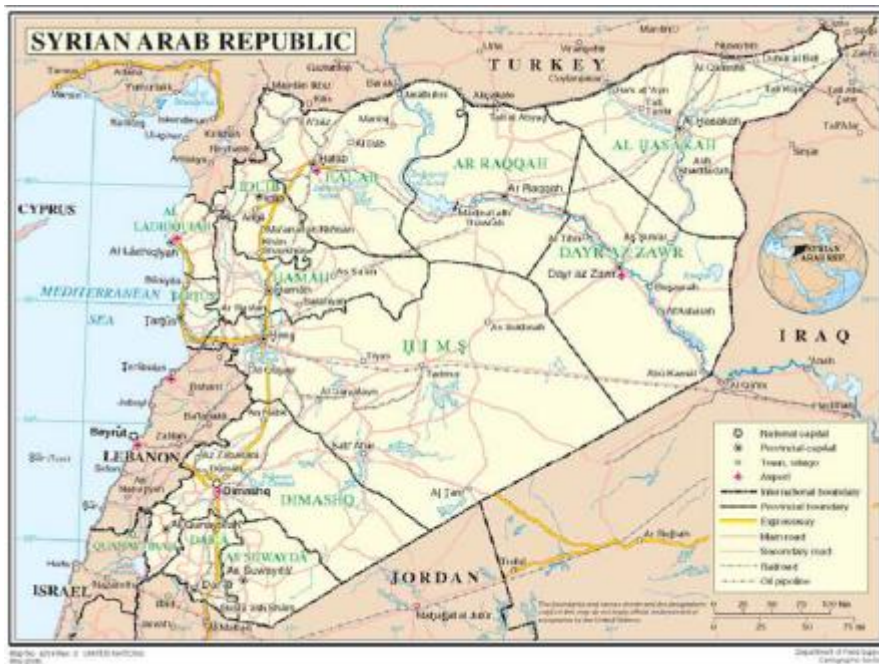
3. Introduction

The Syrian Arab Republic is a Middle Eastern country situated in West Asia on the Eastern coast of the Mediterranean Sea, with a total area of 185,180 km². It is bordered by Mediterranean Sea and Lebanon in the west, Turkey in the north, Iraq in the East and southeast, Jordan in the South and Palestine in the Southwest. Topographically it is primarily a semiarid and desert plateau with a narrow coastal plain and mountains in the west and is characterized by a Mediterranean type climate, i.e. cool and rainy during

winter and hot and dry during summer, with short autumn and spring seasons. The amount of rainfall varies from 800 - 1000 mm in the West at the coastal and mountain regions, to less than 200 mm in the steppe regions. In general term, Syria is considered as dry and semi-arid country, where the annual rainfall rate is less than 350 mm in more than 90% of the overall area.

The country is administratively divided into 14 governorates with a total population estimated at about 24 million with an annual growth rate of 2.4% during 2000- 2010. The rural population is about 46% of the total population. During 1960's, however the rural population was about 63% while at the beginning of 1990's this percentage decreased to 48% because of the migration from rural areas to the cities. About 62% of the rural population are reported to be below the poverty line.

The GDP in Syria grew at about 4.8% annually during the period 2000-2010, and the per capita GDP reached to 1510 US Dollar. Agriculture is of great importance to Syria where its share in the GDP ranged from 17% to 25% during 2000 to 2010 at constant prices of 2000. Agriculture is not only the mainstay of the rural economy, but also as a way of life and a means to achieve social stability, regional balance and national food security.



About 36% of the total 18.5 million hectares of land is considered productive (arable and forest areas), compared with 64% classified as steppe areas (Al Badia) and non-arable lands. Syria has been divided into five agro-climatic zones with most of the agricultural land concentrated in Zones 1, 2,

and 3. Aleppo, Al Raqqa, and Al Hassakeh governorates account for 60% of the total agriculture land. These three Zones together with the coastal intensive production systems make the fundamental backbone of Syrian agriculture. Zone 4 is considered as marginal land with a total area of 1.83 million hectare while Zone 5 is considered as rangeland (steppe / Al Badia) with a total area of 10.2 million hectare, which is 55% of the total area of Syria. The total forest area is estimated at 555,000 hectare which is 3% of the total area of the country. According to statistical data for 2000- 2010 the total area of natural pasture decreased annually by 0.2% while the area of forest decreased by 0.1%.

Agricultural water use is unsustainable. The surface water resource for Syria is estimated at 17.91 billion m³/year. Water resources generated from rains amount to 7 billion m³/year, while groundwater recharge is about 4.2 billion m³/year, of which 2 billion m³/year discharges into rivers as spring water. About 90% of water used in Syria goes to agriculture. The total renewable water per capita decreased from 3420 m³/inhabitant/year during the period 1958-1962 to 791.4 m³/inhabitant/year.

Agriculture labor force represented about 14% of the total labor force in 2010. Cereal production is almost fully mechanized and therefore its cultivation requires less labor force. Industrial crops such as cotton and vegetables crops such as potatoes and tomatoes are the largest providers of agricultural casual employment.

Women have an important role in Syrian agriculture where they usually take the responsibility of weeding and harvesting while their role in livestock raising is significant, especially in the Bedouin society, where women are normally responsible for important and difficult chores.

The current official credit system, which is provided by Agricultural Cooperative Bank (ACB), supports mainly the so-called strategic crops, in particular wheat, cotton, tobacco, and sugar-beet. Farmers who cultivate these crops have relatively easier access to credit provided in kind by the ACB in form of seeds and fertilizers. This encourages farmers to cultivate these crops. The procedure of accessing this credit is easier especially for those farmers who are members of a registered cooperative. The Government also provides farmers with extension, animal health and other research services. In addition, it also provides farmers with certified seeds and seedlings at subsidized prices.

Agriculture production in Syria is diverse and reflects the diversity of agro-ecological zones in the country. Five major crops are produced including the grains, industrial crops, vegetables, permanent crops and fodder crops. Cereals and fruits however are the dominating crops where they represent 18% and 32% of the total production respectively.

Livestock is an integral part of the rural economy and Syria has a significant number of cattle, sheep, goat and poultry. The main products are red meat, poultry meat, milk and eggs. Fish production however, decreased by 0.5% from 13.4 thousand metric tons in 2000 to 12.8 thousand metric tons in 2010. This production consists of marine fish, farm fish and fish from dam lakes, lakes and rivers. These fish resources are invested by the various sectors of the Syrian Economy (public, cooperative, joint and private sectors).

Concerning food and nutrition security, based on the Family Budget Survey of the Central Bureau of Statistics in 2009, the estimated average calorie intake amounted to 3,314 kcal/capita/day, protein intake to 91 g/capita/day and fat intake to 109 g/capita/day.

4. Pre-Crisis Situation

Agriculture (including livestock) is the mainstay of rural economy in Syria. About 80% of the rural population⁴ in Syria practice farming for their livelihoods. Average land holding size for small farmers mainly growing vegetable and fruits is 0.5 hectares whereas it is slightly higher for the cereal growing farmers. Farmers grow wheat and barley as main staple crop in winter, and cotton, sugar-beet and vegetables in summer, such as eggplant, tomatoes, potatoes, onions, water melon, etc. Farmers also grow fruit trees, such as olive, pears, apples, cherry, etc. Majority of the rainfed land areas are cropped once a year with main staple crop (wheat and barley). Two seasons of crops are practiced only in the irrigated land, which is rather limited however. Kitchen gardening is popular among small farmers, which is mainly for the family consumption. In addition to cropping, small farming families also keep a small flock of livestock, in particular cattle, goats, sheep, backyard poultry and pigeon. Livestock supplements not only household level food security and nutrition, but also generates cash for the families through sale of eggs, meat and milk products. The following tables represent pre-crisis agriculture situation in the provinces, which clearly illustrate the importance of agriculture sector for the farming communities in the governorates.

⁴ Out of 24 million populations, about 46% is believed to be living in the rural areas, which is roughly 11 million.

Table 3: Total crops planted in the affected governorates before the crisis⁵

S. No.	Governorates	Cultivated Area (ha)				
		Wheat and barley	Other crops (cumin, lentil, etc)	Vegetables	Trees (fruit and others)	Total
1	Daar'a	94,534	25,606	12,826	34,034	167,000
2	Damascus	18,021	12,320	6,652	77,591	114,584
3	Homs	91,997	13,299	12,686	188,858	306,840
4	Hama	198,842	28,130	15,280	93,653	335,905
5	Idleb	134,222	54,913	25,955	147,439	362,529
6	Aleppo	720,448	174,107	32,819	216,618	1,143,992
7	Al Raqqa	525,803	78,808	12,212	12,337	629,160
8	Deir Ezzor	127,337	76,207	12,893	2,224	218,661
9	Al Hassake	1,101,082	107,893	12,616	1,044	1,222,635
	Total	3,012,286	571,283	143,939	773,798	

Table 4: Total number of livestock in the affected governorates before the crisis

S. No.	Governorates	Shami Goats	Mountain Goats	Sheep	Cattle	Poultry	Camel	Buffalo-es	Other animals (mules, horses, etc)
1	Daar'a	2884	99960	551005	52198	1556000	300	39	2691
2	Damascus	39628	271880	1373816	187547	5605000	9661	0	8215
3	Homs	198	194395	1969326	101075	5710000	8370	0	12458
4	Hama	4852	198729	2125843	51695	1236000	1864	335	14482
5	Idleb	3048	178244	726479	56563	2007000	161	0	7671
6	Aleppo	632	310385	2606661	96173	2847000	434	0	13904
7	Al Raqqa	2703	215906	1825393	20519	421000	6513	117	13861
8	Deir Ezzor	480	163802	2143442	231202	522000	20050	0	19598
9	Al Hassake	5718	198866	1451055	77242	3876000	476	5655	14299
	Total	60143	1832167	14773020	874214	23780000	47829	6146	107179

⁵ Source: Agriculture Statistics, 2010

Table 5: Total irrigated land area in the affected governorates before the crisis

Grand Total	Traditionally Irrigated Area (ha)				Modern Irrigation Area (ha)			S. No.	
	Total	Pumped		Gravity From Rivers & Springs	Total	Sprinkler	Drip		
		Private Wells	Govt. Schemes						
56074	34067	13075	20992	-	22007	5116	16891	Daar'a	1
82599	61208	44543	-	16665	21391	3329	18062	Damascus	2
72323	52866	22655	27518	2693	19457	6198	13259	Homs	3
105045	68778	55798	7979	5001	36267	32464	3803	Hama	4
97908	58692	44515	11164	3013	39216	28839	10377	Idleb	5
267284	218303	101213	89358	27732	48981	34478	14503	Aleppo	6
194569	188503	51407	93128	43968	6066	4715	1351	Al Raqqa	7
151840	150560	25420	38173	86967	1280	137	1143	Deir Ezzor	8
414888	358551	313248	-	45303	56337	51925	4412	Al Hassake	9
1442530	1191528				251002			Total	

5. Major Observations and Findings

a) Observations and findings from the field visits

Crop (including fruit and vegetable production):

With the lack of diesel, high price in the market, and growing insecurity, price of transportation has drastically gone up, and that of fertilizer has gone almost two to three times higher. Furthermore, production of fertilizer is severely affected in Homs, and the fertilizer produced in Homs is also difficult to be transported to different governorates. In addition, timely supply of fertilizer to the farmers is crucial during the cycle of planting, and the insecurity is not guaranteeing the supply of fertilizer at most critical times. Similarly, price of herbicides and pesticides has gone up. This largely affected the production of cereal crops in the last season, and the situation is severely affecting the planting of cotton, sugar-beet and vegetables at present.

With the current scale of the crisis, marketing of crop produce has become a major challenge due to i) rise in diesel price resulting in the increased the transportation costs; ii) reluctance of transporters to transport the produce citing insecurity of their vehicles as the main reason; iii) lack of capability of the farmers

"I came to see you risking my life as there was fighting this morning in my village. My wife is worried and calling me every 15 minutes. I just came here to tell you that our livelihoods are at real risk and 60% of the families in my village of 400 households need immediate support" – a village Mukhtar in Aleppo while talking to the Mission Team Leader

to collectively transport and market their produce due to less frequency of their movement on the roads; iv) less number of traders and middlemen coming to the governorates to buy the produce and the ones coming offering lower price for the produce, and v) growing incidents of theft and hijacking of trucks and vehicles loaded with grain and vegetables. Local farmers are unable to fetch good price for their local surplus produce. Furthermore, produce are accumulated at local level and perishable items are always at risk of being spoiled due to inability of marketing in timely manner. Quality of perishable items (e.g., vegetables, fruits) degraded as the trucks had to wait at check posts sometimes for few hours under extreme heat. Traders are therefore reluctant to take risks of transporting the produce, as a result of which local produce are not sold, and income of the farmers has drastically reduced.

A large percentage of the rainfed areas in Zone 3 and 4 in Al Hassake, Al Raqqa and Aleppo, as high as 70% in some areas, had been abandoned during last few years due to severe and prolonged drought.

Many families from these governorates had left their villages for Daará, Rural Damascus and abroad (Lebanon, Saudi Arabia) in search of new livelihood opportunities and these families were a major residential agricultural labour force in the production areas. With the departure of nearly 70% of resident migrant labours from the agriculture production areas of Zone 1, 2 and 3 in particular in Daará, Idleb, and Rural Damascus to their area of origin, and lack of movement of other labours from Doum, human resource has become either scarce or simply very expensive. Daily labour wages have gone up from SYP 40/hour to SYP60-80/hour.

The ongoing crisis has further complicated the farming system as the costs of fuel, input, labour, and transportation have resulted into higher production costs, whereas the market price of the cereal has remained more or less the same. Renting costs of tractors and other farm machineries and equipment have also gone up and the owners are reluctant of renting their equipment and machineries out due to fear of theft or destruction. Farmers confirmed to have irrigated wheat crops with water only three times while some farmers irrigated once and others even did not irrigate at all due to lack and high price of diesel (*in normal conditions they irrigated five times*), and feared that this could reduce their harvest. Senior officials in the Directorate of Agriculture for instance in Al Hassake feared a reduction in production of wheat and barley as high as 30% due to the combination of the effects of drought, rising input and fuel price and insecurity. Almost 60% of the farmers and herders, who fall well below the poverty line, would be the most severely affected with this situation.

In many areas, farmers have stopped attending the crops as they are not able to spend the limited resources they have on expensive agriculture inputs since they need to feed their family first and meet other expenditures. Furthermore, due to growing insecurity and difficulty in transportation of produce, they have no assurance of good return for their produce. This is imposing a direct threat on household food security, family income and livelihoods as there is less hope for a good harvest from the standing crops as well as the crops to be planted during the next season, Farmers in Daará and Rural Damascus reported to have less germination (due to lack of quality inputs, fertilizer, human resources, etc) and they fear no or very less harvest from the land that are accessible. In some rainfed area, due to poor germination barley is reported to have failed and the farmers were forced to allow the livestock graze the semi-grown barleys against a very little payment.

Furthermore, local markets in many areas are either closed or functional for limited duration of the day. The mission witnessed almost all shops closed in Palmyra, Daará and many shops in Rural Damascus. The local communities reported to have less access to buy or sell food items. This has created monopoly of limited traders with better access in the local market, and the prices are determined by them. Food prices have gone up and the prices of sugar, meat, egg, tea, vegetables and other essential food items in many areas have become more than double and simply out of reach of many poor families.

At the same time, return of thousands of the migrant labor families to their places of origin has put further pressure on food demand and the existing natural resources in these areas, where resources are already extremely limited. These 'returnees' have no or very less job opportunities, and most of them are with extended families. The rate of unemployment has been further added due to laying off of workers from the industries, and many of these workers are residing in larger cities such as Aleppo and Damascus with very less or no incomes. Fear of 'social unrest' prevails in these governorates as well. The mission got reports of increasing theft and robberies in some of the areas during the visit. Level of remittance has sharply dropped and even those families with members in Lebanon reported to have received almost no remittance due to unemployment in Lebanon. Many farmer and herder households, including women-headed households in all the visited governorates, especially the most vulnerable ones, reported severe psychological stress they are undergoing through. Male members of some of the returnee families reported to have been taking psychiatric medicines regularly, which is another financial burden for them. The mission witnessed this situation.

Some farmers also reported to have their fruit trees affected by frost, and due to lack of diesel they could not take any action against the effects of frost. Farmers in Aleppo reported pest attacks in their crops in about 35,000 ha; however the Directorate was able to respond to only 40% of the total affected area. This has caused losses, and the fear is that if such matters are not timely addressed, the farmers will have

fewer yields and could also face the crop failure in worst case scenario. The household level food security and income of the farmers would therefore be further challenged.

Certified seed was reported to be available for the last planting season, and farmers complemented the Government-supplied seed (*i.e., normally 70% of the total*) with their own seed stock for strategic crops in both rainfed and irrigated areas. The Ministry of Agriculture and Agrarian Reform (MAAR) confirmed to have sufficient cereal seed available for the forthcoming planting season at subsidized price. However, with the current situation of depleting resources and lack of cash, the most vulnerable farmers might not be able to purchase the seed. At the same time, most of them also do not have the seed stock to complement, especially the returnee families. This could seriously hamper the next planting season starting mid-October, and production of cereals will be seriously affected in the country. Imported seed in the private stores have simply become too expensive.

No significant loss or damage has been reported to fruit trees except in Aleppo, Homs and Idleb, but lack of irrigation water is threatening the production of fruits in all the governorates. Farmers in Idleb and Homs are unable to timely pick their cherries and olives due to insecurity and they fear significant losses of these fruits. Nurseries producing mainly fruit trees and other ornamental trees have been seriously affected in Rural Damascus, Aleppo and Idleb. The mission visited a nursery in Zabadani district in Rural Damascus and observed that the capacity of the nursery has been reduced to less than half due to the crisis. The insecurity in the area created less demand of seedlings, which therefore provided less job opportunities for the migrant labour, and most of them left to their places of origin. Furthermore, lack of diesel provided less irrigation water for the preparation of seedlings and the use of farm machineries. Insecurity for transportation of the seedlings further dropped the demand, and the nursery was found to be in a very difficult state. Nurseries in Aleppo and Idleb also reported to have reduced their capacity as well as lost trucks, and other equipment. Insecurity has restricted movement of forest monitors and the Directorates are receiving information of felling of trees for fire woods as well as forest fires. They are however not in a position to send their field monitors to the areas. Furthermore, some areas of forest in Aleppo and Idleb are reported to have been burnt whereas some trees have been infected by some insects. Both the Directorates in Aleppo and Idleb however have not been able to address this matter properly.

Sick, hungry and thirsty returnee migrant workers need urgent support

Abu Ali Hussain Ibrahim, 47, lives in a small mud house in Abar Zara Khabatini village in Al Hassake governorate in North Eastern part of the country. The village has about 300 families, mainly subsistence farmers with few heads of livestock. Most of the families depend on daily wage labors in Al Hassake city. Abu Ali has a total of 9 in his family including 6 daughters and 1 son. Unfortunately 2 of his daughters are nearly blind, and one is disabled. The children have never seen a school.



Abu Ali left his village in 2008 after a prolonged drought due to which he could not cultivate anything in his land. His only 50 meter deep well dried up, and he did not have money to dig it further. He sold some of his possession and the few heads of livestock he had and decided to leave for Damascus in search of a new livelihood opportunity in 2008.

He ended up in an agriculture farm in Rural Damascus to work as farm labour. He lived in his tent, and moved from one place to the other wherever he got employment. He spent two years in Rural Damascus working mainly in vegetable farms, and then left for Daará with a hope for better employment opportunity.

His experience in farming allowed him to get employment as migrant labor in Daará. With meager salary as daily wage worker, he and his family were just making sufficient to feed the family and sustain their livelihood. However, things started getting worse day by day during the last few months, and insecurity grew to the extent that his movements were restricted and he had to fear for his family's lives. He was forced to leave Daará as he had no other option left. Insecurity did not allow him to work in the field and make his living, so he decided to move back to his native village. He sold his meager possessions in Daará at throw away prices to buy bus ticket, and he travelled to Al Hassake.

Abu Ali is back for last two months, however just with his family, nothing else. He manages to get temporary job as construction labour for two days a week maximum and earns around SYP250 a day. He had heart attack in the past, is still sick and needs medicines. With his three disabled daughters and few other small children to feed, his coping strategy has almost failed. He borrows money from here and there to buy food and other necessary items, and pays back the loan after earning some money. The local trader gives him food items on credit with a maximum limit of SYP2000. However, his level of income is extremely low compared to his expenses and he is entering into a vicious cycle of indebtedness. He has no livestock or any other asset to sell. He has only two ducks in his yard, who however do not have water to plunge in. His wife and children collect water from a nearby place, which is saline and not safe for human consumption, but he has no other choice. The family lives on reduced food intake and meat or chicken have become a memory now. His family is sick, hungry, and thirsty and the livelihood is just on the verge of collapse.

He however hopes that support would come through. He needs food ration for his family, mainly rice, milk, sugar and some protein. He has fewer hopes for returning back to Daará, but still feels that if provided with some livelihood opportunities, he can restart his livelihood in his own village. Small livestock ruminants is something he can immediately think of for improving his household food and nutrition security and livelihoods, as he considers himself experienced in raising livestock.

Farm machineries, such as hand tractors, threshers, etc had been lost or damaged in some of the governorates. Directorates in Aleppo, Idleb and Homs reported to have lost significant number of vehicles and equipment, which were forcefully taken away, and this has badly impacted on their service.

Irrigation

Though no significant damages were reported in irrigation infrastructure, during the field visits however, the families confirmed that fuel price increase has largely reduced their well irrigation capacity, which is mainly affecting the vegetable farming and fruit trees. Pumps are not operational to their full capacity due to lack of fuel and electricity cuts. Due to rise in insecurity some farmers reported cases of theft of water

pumps in some of the visited villages. In irrigated land areas, mainly in Aleppo and Idleb, due to insecurity regular maintenance of irrigation canals has been affected. The Government supported irrigation schemes distributed the water to the farmers on rotational basis in irrigated areas. Lack of fuel and electricity cuts however reduced the frequency of water distribution, which created chaos among the farmers as everyone hurried up for getting as much water as possible in her/his land. This also created social tension among the farmers as they became aggressive against each other during distribution. In some other areas, farmers have apparently breached the irrigation canals at some sections as well.

Al Raqqa governorate, in view of the current situation with the lack of diesel, listed agriculture as the topmost priority and allocated 70% of the total diesel supply in the governorate for agriculture purposes. Directorate of Agriculture prepared an inventory of irrigation water pumps across the governorate and prepared a plan and schedules to supply the diesel to the farmers through the nearest gas station. This helped the farmers for irrigating their wheat and cotton fields to some extent. However, the supply was less than the demand and the farmers still suffered. Similarly, Aleppo also decided to allocate 75% of the diesel available for agriculture, however since the governorate has industries consuming lot of diesel, it was not always possible.

Livestock (including poultry)

Livestock sector is facing threat as there is lack of fodder, compound feed, veterinary medicines and vaccines. Getting veterinary services from the department is also difficult due to growing insecurity and the Directorates of Agriculture are unable to send their animal health workers to the field and attend the livestock.

Livestock herders are facing serious shortage of fodder due to poor grazing land vegetation (in Zone 5) coupled with low crop residues (used to be the key source of animal feed) in Zones 2 and 3. In fact, rainfall in 2010/2011 was below average and this season rainfall in Zone 5 has been low (77 mm as of end of February 2012 compared to 127 mm last year and the normal average of 146 mm). The average rainfall in the month of May this year is also reported to be lower compared to the same time last year. Al Badia region reported to have frequent sandstorms affecting the herders and if it continues like this, the situation will be disastrous to the herders. Prolonged drought has also severely affected the rangeland, and the high fuel price has posed difficulty for the herders to transport fodder and water. The market price of fodder and concentrated feed has doubled. Some herders also reported to have their livestock 'stolen' in some areas.

"In my lifetime, I never experienced the combined effects of drought, unavailability and high fuel price, high food price, high fodder and concentrated feed price, and insecurity. With limited number of livestock to sell and very little savings I have, I am afraid that my livelihood would collapse soon if I get no immediate assistance" – a 80 years old Bedouin in Al Baidya, Palmyra, Eastern Homs with 13 family members and 18 sheep

During the field visit, the mission observed Bedouins with tents from Al Badia region in Al Hassake and Al Raqqa with their livestock. However, most of them were bigger herders that came for the residues for their livestock. Movement of these herders to Idleb, Hama and Homs was not possible due to insecurity and the pressure is therefore more on limited areas in certain governorates only. Small Bedouin families could not afford the vehicle rent and other expenses to travel to these governorates, and have moved within Al Badia on foot in groups in search of pasture. This has made their livelihoods more vulnerable than in the past as there is not much rangeland available in Al Badia. The Bedouins also reported that the reproduction of livestock has been affected due to lack of pastures in Al Badia.

Another challenge the Bedouins are facing is the depletion of rangeland in Al Badia. With prolonged drought, frequent sandstorms (25 days of continuous sandstorm in May alone were reported during the field visit), and lack of fodder have negatively affected their livestock-based livelihoods. Furthermore, due to unavailability and rise in fuel price they are forced to collect shrubs from the rangeland for cooking, which is exacerbating the situation further towards desertification.

Many herders are selling their livestock at low prices to the middlemen to feed their livestock and meet other expenses. This has however not helped reduce local meat price mainly because a) these herders are selling the livestock to other bigger herders; b) these livestock are sold to traders / middlemen who

have taken them out of the villages, mainly for 'illegal' export to Turkey, Iraq and Saudi Arabia, and c) the percentage sale of these livestock compared to the overall demand is still very low.

Wadha struggles as a widow to maintain her family

Wadha is a mother of 5 children, two of them are disabled. She lives at Al-Ramlah village, about 70 km from Al Raqqa city in a mud house. This village is one of the most affected villages by drought for last few years.

The life became very tough for them due to prolonged drought for more than three years. All her resources depleted and the coping mechanism failed. The family thus decided to migrate to Dara'a in search of work. Her family got works in one place or the other in the governorate in the vegetable fields, mainly picking tomatoes. She earned a meager wage SYP200 per day, and other family members supplemented the income to some extent. She could at least survive in Daará feeding her family and few sheep she had. On one unfortunate day however, her husband fell down in the tomato field and instantly passed away. Her hard days of labor started after the funeral, and survival became difficult as a widow. "I found myself alone with my children in a strange area and tasks and responsibilities were just coming on my shoulders", she expressed. She however continued working in Daará until the situation started really getting worse.



Wadha and her family were on constant psychological trauma of getting killed while working in the field as they could hear the shooting all the time. She thus decided to move back to her village with her family few months back. She returned back to her native village with almost nothing. "Here, I have nothing but the walls of my house as a shelter", Wadha continued pointing to her limited possessions in the house.

She was lucky to be selected for a grant with three sheep from the Women Empowerment Project of the Ministry of Agriculture and Agrarian Reform. However, with the rising food and fuel prices, unavailability of the fodder and absence of natural grazing areas in the surrounding, her sheep started losing weight. With the meager savings she had her priority was to feed her children. "How can I feed the animals when I barely find something to feed my children? I have no money to bring food and several times my children slept without having food to eat", she explains with tears rolling down her cheek.

Wadha needs immediate food support, and other livelihood support to survive. She looks at the sky and says, "if this situation continues till winter, only the Almighty can save us".

There are thousands of Wadha in rural areas of Syria, severely affected by the ongoing crisis, and they should be targeted with utmost priority as a matter of urgency.

Poultry sector has been severely affected by the ongoing crisis. Import of mother chicks from abroad for the production of one-day chicks in the country is hampered. Lack of fuel, load shedding and rise in poultry feed price has increased the production costs of the eggs and chicks almost by double. In the meantime, major chicken producing farms in Homs, Hamah and Idleb have been closed due to which the demand has increased and poultry meat price has significantly gone up in the local market. Many of the poultry farms producing chicks have stopped their operation, in particular in Rural Damascus from where the one-day old chicks are supplied to the rest of the country, and the running ones have reduced their capacities by almost half. Workers, who mostly hailed from the north eastern and eastern part of the country, have been laid off. The ones currently operating at reduced capacity with resident labour families are making losses, but are hopeful that the situation would normalize and their business would pick up.

Some chicken producing farms in Idleb and Homs reported loss of thousands of chickens and eggs due to the crisis. Some of the poultry farms are burnt. Meanwhile, prices of chicken meat and eggs for consumption have doubled in most of the markets.

Fisheries

Inland fishery (i.e. aquaculture) is another means of livelihood, which provides protein as well as cash income to the local communities. As per the telephone conversation with the Director of Fisheries based in Lattakia, inland fisheries have been affected in the coastal governorates, in particular in Tartous and Lattakia. Details of the damages and losses in the fishery sector could however not be collected by the mission.

Impact on Nutrition

The harsh climatic conditions, in particular the sand storms and the prolonged drought, as well as remoteness and lack of basic health needs have led to slow setting of malnutrition in Syria. The situation has worsened due to the ongoing crisis and the mission during the visits to the households observed slow deterioration of the health of the children due to cutting of expenses on health, reduction in the size of meal and lower quality food intake, especially among the children between 5 and 8 years. The visited families in the villages also informed the mission that due to the prevailing security situation they are unable to visit the local clinics and health centres. Staffs in the clinics in main affected areas were also found to be unable to go on duty and provide required support. If the current situation continues, this could largely have negative impact on the nutritional status of children in coming days, especially during winter when the current food reserves deplete.

b) Collection of secondary data on damages and losses

The mission also collected secondary data on losses and damages from the Governorates. Some of the mission members closely worked with the planning and other relevant officers in the Directorates of Agriculture and came up with the best possible estimates of damages and losses.

Damages refer to the direct damages to farm machineries, vehicles, equipment, office infrastructure, livestock shelters; poultry farm infrastructure, water pumps, etc. Losses refer to the direct and indirect losses in production due to burning of crop fields; lack of movement and unavailability of labour affecting the weeding of the farm land and picking the fruits and vegetables; unavailability of sufficient water for irrigation and thereby induced production losses; loss of livestock due to killing, theft and forced selling, etc.

Given the scope and nature of the rapid needs assessment mission, and difficulty in getting the accurate data due to restriction of movement, the mission has done its best to estimate the damages and losses for the year 2011-12. No macro-economic analysis on the effects of crisis has been done *per se* however. The following table illustrates the summary of the total damages and losses in 8 governorates.

Table 6: Summary of damages and losses in the most affected governorates⁶ in food security sector (crops, livestock, irrigation) in the governorates in SYP and US\$⁷

Governorates	Total Damages	Total Losses	Total Damages	Total Losses
	SYP (million)	SYP (million)	USD (million)	USD (million)
Daar'a	15,505,000	8,506,424,150	228,015	125,094,473
Damascus	731,700,000	26,183,615,500	10,760,294	385,053,169
Homs	535,420,000	26,017,720,000	7,873,824	382,613,529
Hama	52,200,000	7,521,691,000	767,647	110,613,103
Idleb	236,000,000	15,985,151,600	3,470,588	235,075,759
Aleppo	320,871,939	16,592,369,800	4,718,705	244,005,438
Al Raqqa	-	8,442,003,700	-	124,147,113
Deir Ezzor	-	-	-	-
Al Hassake	12,050,000	10,619,587,000	177,206	156,170,397
Total	1,903,746,939	119,868,562,750	27,996,279	1,762,772,982
Total (Damages and Losses)		121,772,309,689		1,790,769,260

As seen from the Table above, the total damages and losses in crops (including fruit and other trees, vegetables and secondary crops, infrastructure), livestock (including poultry, eggs and infrastructure) and irrigation (including damages to canals, pumps and others) is about **SYP122 billion** or about **USD 1.8 billion**.

6. Preliminary Recommendations

The rapid food security needs assessment team, based on the compilation of secondary data, and the field assessment and consultations carried out with the officials, farmers and herders recommend interventions in the following paragraphs. The mission concluded that the farming- and livestock-based livelihoods and household level food security of about 30% of the rural population and the internally displaced families currently living in the urban and peri-urban settings, which is about 3 million people⁸ or 375,000 households, is at real threat and they need urgent assistance.

The most immediate short-term interventions, mainly life saving and life sustaining during the next 6 months, are recommended to be implemented as soon as possible to support the most vulnerable 112,500 farming and herding communities, including the vulnerable returnee families, female-headed households and Bedouin families, and internally displaced population currently living in urban and peri-urban areas with food assistance, and crop and livestock inputs. The set of recommendations made should be implemented by all relevant stakeholders with the Government of Syria taking the lead. These urgent needs are estimated with due consideration to the existing security situation, availability of the inputs in the country, deteriorating nutrition situation of infants and children, logistics, forthcoming winter season, and time required and capacity needed for delivery.

The following table illustrates the details of the most immediate life-saving and life-sustaining needs in food security sector urgently required for the most vulnerable farming and herders families in next 6 months, including widows- and female-headed households.

⁶ Secondary data from Deir Ezzor could not be received due to the deteriorated security situation.

⁷ Exchange rate used is 68 SYP against 1 USD.

⁸ This caseload figure is estimated based on the total population of about 20 million in the most affected 9 governorates of Daará, Rural Damascus, Homs, Hama, Idleb, Aleppo, Al Raqqa, Deir Ezzor and Al Hassake with 46% of population living in rural areas out of which 30% are considered as the most vulnerable rural farming and herder families. An additional caseload of around 300,000 people is estimated in urban and peri-urban areas displaced from the crisis-affected areas around the country based on the consultations carried out in the governorates.

Table 7: Most immediate life-saving and life-sustaining needs in food security sector for 6 month

Sub-sector	Estimated Unit price of input package/HH (USD)	Estimated No of Beneficiary HH ⁹	Short-term Needs (USD)	Remarks
Crop	350	56,250	19,687,500	Estimated as 50% of the total vulnerable HH
Livestock	300	55,125	16,537,500	Estimated as 49% of the total vulnerable HH
Livestock specially targeting women	1500	1125	1,687,500	Estimated as 1% of the total vulnerable HH
Sub-sector	Estimated Unit price of food package/HH/month (USD)	Estimated No of beneficiary for food assistance	Short-term Needs (USD)	Remarks
Food Assistance		1,500,000	177,000,000 ¹⁰	1.5 million persons to be targeted during next 3 months
Total			214,912,500	

Further consultations will have to be made at the governorate, district and community as well as central level as a part of the broader recovery process in a more holistic way while implementing the medium-term intervention, also taking cross-cutting elements, such as environment, effects of climate change and disaster risk reduction into consideration.

“Safety and security of our family was the prime concern and we returned back, but our immediate priority is food security. We need food to survive and agriculture and livestock inputs to restore our livelihoods” – a 54 year old returnee in Al Hassake, who returned back from Daará two months back with 9 family members and picking garbage with his family for survival

The rapid food security needs assessment team would like to make the preliminary recommendations for short-

and medium-term as follows:

Short-term Needs (0-12 months):

- a) Provision of food ration for the most vulnerable population in the crisis-affected provinces for next three to six months, mainly rice, sugar, tea, milk powder and other protein products
- b) Provision of fuel, mainly diesel to the farmers, which should mainly come from the Government. Diesel also needs to be provided for the operation of water pumps for irrigation.
- c) Provision of certified wheat and barley seeds for the areas to be planted along with appropriate fertilizer for the next winter planting season in safer and accessible areas
- d) Provision of fodder, concentrated animal feed and female pregnant sheep for the most vulnerable households, with special emphasis to female-headed households and crisis-affected returnees in safer and accessible areas
- e) Repair / replacement of water pumps, wells and canals in accessible areas
- f) Veterinary medicines, equipment, and vaccines
- g) Access to soft loans for the local communities

⁹ With an average size of 8 per household, total estimated household for the 3 million caseload for agriculture and livestock input assistance is 375,000 HH

¹⁰ This requirement for 60% calorie intake through the provision of dry staples and fresh food.

- h) Injection of cash into the most affected communities possibly through employment generation or other form of safety net, especially in the villages where the migrant labors have returned back. Such actions need to be taken by the Government.
- i) Awareness-raising on the effects of climate change, disaster risk reduction, preparedness through training and extension services, including media messages on coping strategy against drought and mitigation techniques

Medium-term Needs (12-30 months):

- a) Refurbishment of office infrastructure in the severely affected Governorates, such as Homs, Idlib and Hama
- b) Diversification of livelihoods in the areas of Zones 4 and 5 where agriculture has been limited due to severe effects of drought
- c) Strengthening the capacity of farmers' groups in form of cooperatives for production and collective marketing of the agriculture produce and livestock products
- d) Strengthening of the existing extension support service with especial focus on food processing and packaging
- e) Strengthening of the existing animal health support with better linkages for marketing of meat and milk products
- f) Improved irrigation techniques for drought-affected areas
- g) Food for Work activities for small farmers and herders for i) fruit tree plantation and community-based forests; ii) water harvesting structures at farm level, and iii) income generation activities including small entrepreneurship development
- h) Initiatives to link the small farming and herder families with banking facilities through possible rural micro-financing
- i) Initiatives on cotton production with the use of less water to save the scarce water resources (*the current practice consumes lot of water as told by the farmers*)
- j) Improved animal breeds with improved animal health programs, including awareness on biosecurity measures
- k) Strengthening the capacity of extension and animal health workers and further training and capacity building of farmers and herders
- l) Income generation activities, especially targeting the women-headed households (e.g., mushroom farming, bee keeping, etc.)

Abbreviations

ACB	Agricultural Cooperative Bank
CBO	Community-Based Organization
FAO	Food and Agriculture Organization of the United Nations
HH	Household
MAAR	Ministry of Agriculture and Agrarian Reform
NGO	Non-Governmental Organization
OIC	Organization of Islamic Cooperation
RNE	Regional Office for Near East
SARC	Syrian Arab Red Crescent
SYP	Syrian Pound
UN	United Nations
USD	United States Dollars
WFP	World Food Programme

Annex 1 Summary of Damages, Losses and Needs

Summary of Damages and Losses						
Sub-sector	Damages	Losses	Damages	Losses	Short-term Needs	Medium-term Needs
	(SYP)	(SYP)	(US\$)	(US\$)	(US\$)	(US\$)
Crop	334,345,000	53,781,629,050	4,916,838	790,906,310	91,128,645	
Livestock	1,198,121,939	66,086,933,700	17,619,440	971,866,672	33,751,350	
Irrigation	371,280,000		5,460,000		2,730,000	
Total	1,903,746,939	119,868,562,750	27,996,279	1,762,772,982	127,609,995	
					350,000,000	WFP
Total Damages and Losses		121,772,309,689		1,790,769,260	477,609,995	Total

Note:

Short-term needs for the crops would be to support at least 90% of the vulnerable rural families with an input package of USD260/HH

Short-term needs for the livestock would be to support at least 10% of the vulnerable rural families with an input package of USD1000/HH

Short-term needs for the irrigation would be to repair / replace at least 50% of the damaged irrigation infrastructure

Governorates	Total Damages	Total Losses	Total Damages	Total Losses
	SYP (million)	SYP (million)	US\$ (million)	US\$ (million)
Daar'a	15,505,000	8,506,424,150	228,015	125,094,473
Rural Damascus	731,700,000	26,183,615,500	10,760,294	385,053,169
Homs	535,420,000	26,017,720,000	7,873,824	382,613,529
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Al Raqqah	0	8,442,003,700	-	124,147,113
Deir Ezzor	-	-	-	-
Al Hassake	12,050,000	10,619,587,000	177,206	156,170,397
Total	1,903,746,939	119,868,562,750	27,996,279	1,762,772,982
		121,772,309,689		1,790,769,260

Population Data		
S.No.	Governorates	Population
1	Sweida	486,000
2	Dar'a	1,126,000
3	Quneitra	489,000
4	Damascus	1,780,000
	Rif Damascus	1,877,000
4	Homs	2,147,000
5	Hama	2,113,000
6	Ghab	
7	Idleb	2,072,000
8	Tartous	954,000
9	Lattakia	1,229,000
10	Aleppo	5,927,000
11	Al-Raqqa	1,008,000
12	Dair-Ezzor	1,692,000
13	Al-Hassake	1,604,000
	Total	24,504,000

Affected Governorates					
S.No.	Governorates	Population	Rural Population	Most Vulnerable	No of Families
1	Dar'a	1,126,000	517,960	155,388	19424
2	Rif Damascus	1,877,000	863,420	259,026	32378
3	Homs	2,147,000	987,620	296,286	37036
4	Hama	2,113,000	971,980	291,594	36449
5	Idleb	2,072,000	953,120	285,936	35742
6	Aleppo	5,927,000	2,726,420	817,926	102241
7	Al-Raqqa	1,008,000	463,680	139,104	17388
8	Dair-Ezzor	1,692,000	778,320	233,496	29187
9	Al-Hassake	1,604,000	737,840	221,352	27669
	Total	19,566,000	9,000,360	2,700,108	337514
	Rural Population (46%)	9,000,360			
	30% vulnerable	2,700,108			
		299,892	Urban population		
	Total vulnerable people	3,000,000			
	Total Households	375,000			

Short-term Needs for next 6 months			
Description	No of HH	Unit Cost/Package (USD)	Total Needs (USD)
Total Case load of 3 million persons			
No of households (8 members/HH)	375000		
Most vulnerable HH (30%) for 6 months	112500		
Crops (50% of the most vulnerable HH)	56250	350	19,687,500
Livestock (49% of the most vulnerable HH)	55125	300	16,537,500
Women (1% of the most vulnerable HH)	1125	1500	1,687,500
Total most immediate needs			37,912,500
Total Food Assistance Needs			177,000,000
Total			214,912,500

Calculation logic:

$3,000,000 \div 8$ (average family size in rural areas) = 375,000 HH (House Holds)

$375,000 \times 0.30$ (the poorest) = 112,500 HH (House Hold)

$112,500 \times 0.01$ (the estimated percentage of Women Headed House Holds) = 1,125 WH/HH

$112,500 \times 0.49$ (the estimated percentage of livestock Headed House Holds) = 55,125 HH

$112,500 \times 0.50$ (the estimated percentage of Crops Headed House Holds) = 56,250 HH

$1,125 \text{ WH/HH} \times \text{USD } 1500 = \text{USD } 1,687,500$ to be allocated for women

$55,125 \text{ HH} \times \text{USD } 300 = \text{USD } 16,537,500$ to be allocated for livestock

$56,250 \text{ HH} \times \text{USD } 350 = \text{USD } 19,687,500$ to be allocated for crops

Annex 2 Photos



Wheat field waiting to get harvested in Daará



Poultry Farm with reduced production capacity in Rural Damascus



A 'returnee' from Daará in Al Hassake collecting garbage to sustain livelihood



Mission's discussion with a Bedouin family in the tent, Palmyrah, Eastern Homs



Joint FAO-WFP-MAAR Mission Members that participated in the mission from 10-19 June 2012



Dried up water well in a 'returnee' family's house, Al Raqqah



Interaction with the officials in the Directorate of Agriculture, Aleppo