

Northwest Syria

Integrated Market Monitoring Initiative (IMMI)

Bulletin Quarter 3, 2021

Price Monitoring for Agriculture Inputs and Food Items



Introduction

Prices are an overarching indicator that provides key information for many Food Security and Livelihood (FSL) activities. As an outcome of supply and demand forces, price monitoring can give a timely insight into many different drivers that influence the functioning of a market and that are relevant for food assistance and ago-based livelihood programming. The scope of this initiative is based on qualitative and quantitative data collection that is used to monitor the price, availability, and affordability of agriculture (crops and livestock) inputs and food commodities across the targeted geographical locations on seasonal basis. Monitoring prices and trends of the cost value of selected agricultural inputs and food items, provide evidence to inform the FSL Cluster, humanitarian partners/agency members in deciding on Cash Transfer Values for respective agricultural inputs/kits distributions over time and space to support crop and livestock farmers in improved agriculture production, the same way the standard food basket and survival minimum expenditure basket (SMEB) values inform cash transfer values for Food assistance programming.

Study Objectives

This initiative aims to monitor the agricultural markets in Northwest Syria (NWS) to assess the availability, country of origin, and prices of agricultural inputs. Furthermore, the initiative incorporates consolidated data of food item prices collected across NWS by two different sources namely, REACH and Syria WFP VAM. This food items price data is analyzed to highlight the price fluctuation and monthly trends of the Survival Minimum Expenditure Basket (SMEB). The analysis provides an understanding on how food price fluctuations in Syria are impacting the food security of households.

Key Highlights

- Recorded improvement in the availability of selected agricultural inputs
- Improved availability of local sources of agricultural inputs
- Price of locally sourced agricultural inputs were generally higher than the imported inputs as expected
- An **interactive dashboard** was developed to present the study outputs and allow a better use of data by FSL members ([Link](#)).

Study Methodology and Geographical Coverage

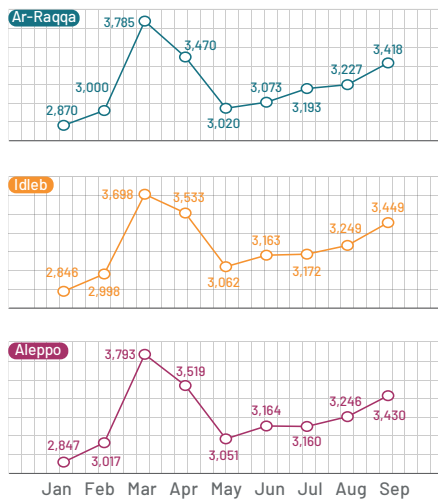
Humanitarian partners implementing FSL projects collected agricultural inputs price data for the selected agriculture inputs (33 crop input types, 9 livestock input types) across the 10 districts in the governorates of Aleppo, Idleb and Al-Raqqa in NW Syria. Data set on agricultural inputs price was then validated through discussions with the technical and field expertise from INGOs, SNGOs, ATWG, LTWG and FSL Cluster members in NWS. The outliers' data were excluded based on the identified acceptable price range that was created via the validation process. In addition, specifications on different types of the assessed agricultural inputs were added in line with the context of local market in NWS. Following sections discuss agricultural input price findings at item level using the average price.

Exchange Rate

The Syrian Pound was weakest against the U.S. Dollar and the Turkish Lira in the months of March and April 2021, compared to the months of January, February, and May in 2021. The exchange rate started rising again in August through September 2021.

Figure 1. Average SYP Exchange Rate Against Foreign Currencies

(a) Average SYP against USD Value by Governorate



(b) Average SYP against TRY Value by Governorate



Key Findings - Agriculture Inputs

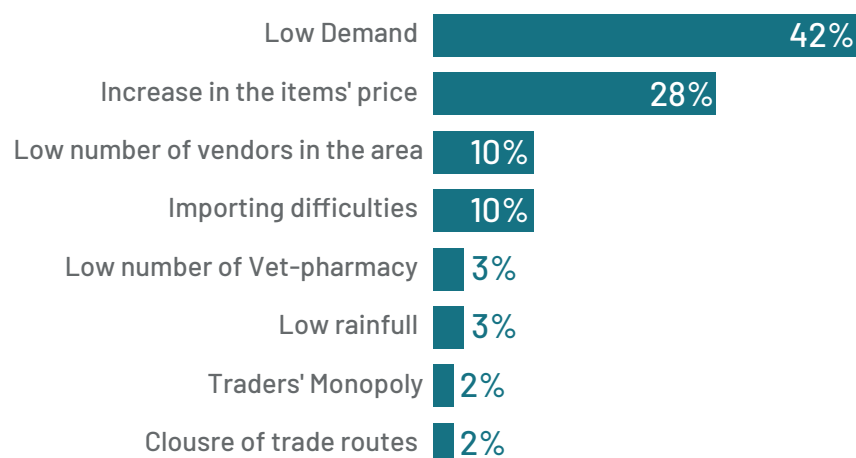
This study looked at different crops inputs that included Seeds, Fertilizer, Pesticide, and Lands' services. The following sections present the reported input prices for the assessed crop inputs. The assessed seeds were grouped into two main groups; winter and cash crops seeds, and winter vegetables seeds. Across the two groups, 20 crop seed types were assessed. Twelve crop seed types of winter and cash crops group, and 8 crop seed types of winter vegetables group. The next two sections present the average prices of crop seed types assessed during the third quarter of 2021 across the local markets in NWS.

Availability

Study respondents reported that agriculture (crops and livestock) inputs were widely available in the markets across Northwest Syria. Ninety three percent of study respondents reported that agriculture inputs were always available, 5% expressed that agriculture inputs' availability was influenced by the prevailing season and its market window, and only 1% of study respondents reported that the assessed agriculture inputs were not available.

It is worth noting that Soyabean, under animal feed items, recorded the highest un-availability rate across the assessed items with 15%, this was followed by Poultry fodder with 9%, and Cowpea seeds came at third rank with 6%.

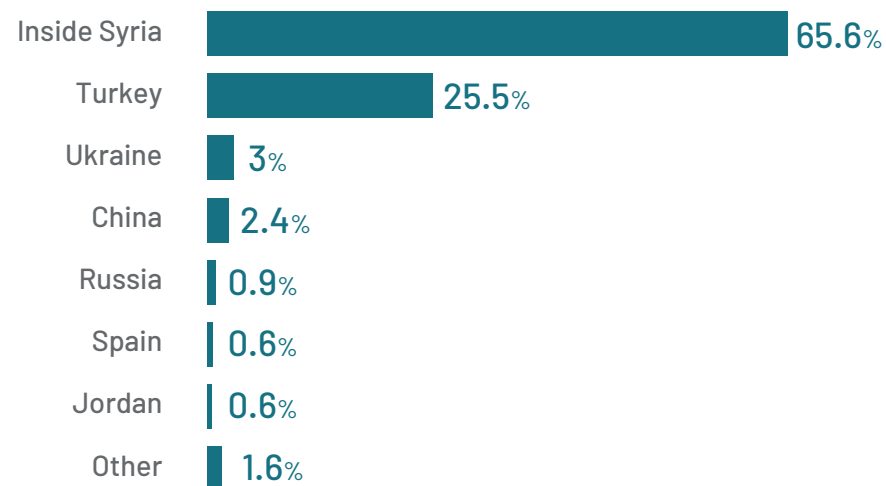
The most reported limitations for agricultural inputs' availability were low demand of inputs, (42%, n=43), increased inputs price (28%, n=29), low number of agriculture input vendors in the area (10%, n=11), and more challenges faced in the importation process of agriculture inputs (10%, n=10). See chart 1 for more details.

Figure 2. Agricultural Inputs Availability Limitations

Country of Origin

- Across all assessed agricultural inputs, Syria was reported as the main country of origin of the inputs with (66%), this was followed by Turkey (25%), the remaining 9% indicated different countries as country of origin for the assessed agricultural inputs which included and not limited to China, Ukraine, Russia, Spain, and Jordan reported as the main country of origin depending on the type of inputs.
- Turkey (46%), and Syria (28%) and China (10%), ranked in that order, were considered the main origin for Agro-Chemical Inputs (fertilizers, pesticides, and herbicides) which were available in the local market in NWS. It is worth mentioning that 91% of the study respondents reported that the origin of Organic fertilizer was Syria.

- Syria (57%), and Turkey (36%) ranked in that order, were considered the main origin for Livestock inputs (mainly animal feed for cow, sheep, and poultry), which were available in the local market in NWS. Study respondents reported that the main origin of Soyabean was from Turkey with only 19% reported that Syria was the origin for Soyabean in NWS.
- Syria was considered as the main origin of Winter and Cash Crops Seeds with a conformation from 90% of the study respondents. This was followed by Turkey as the second most frequent source of Winter and Cash Crops Seeds with 9%. It is worth mentioning that the percentage of used Winter and Cash Crops Seeds from Turkey recorded 6% increase rate, from 3% in 2019 to 9% in 2021. The main reported countries of origin for Winter Vegetables Seeds were Syria (84%), and Turkey (12%). Like Winter and Cash Crops Seeds, the percentage of used Winter Vegetables Seeds from Turkey recorded 7% increase rate, from 5% in 2019 to 12% in 2021.

Figure 3. Country of Origin

Agriculture Input Prices

Winter & Cash Crops Seeds

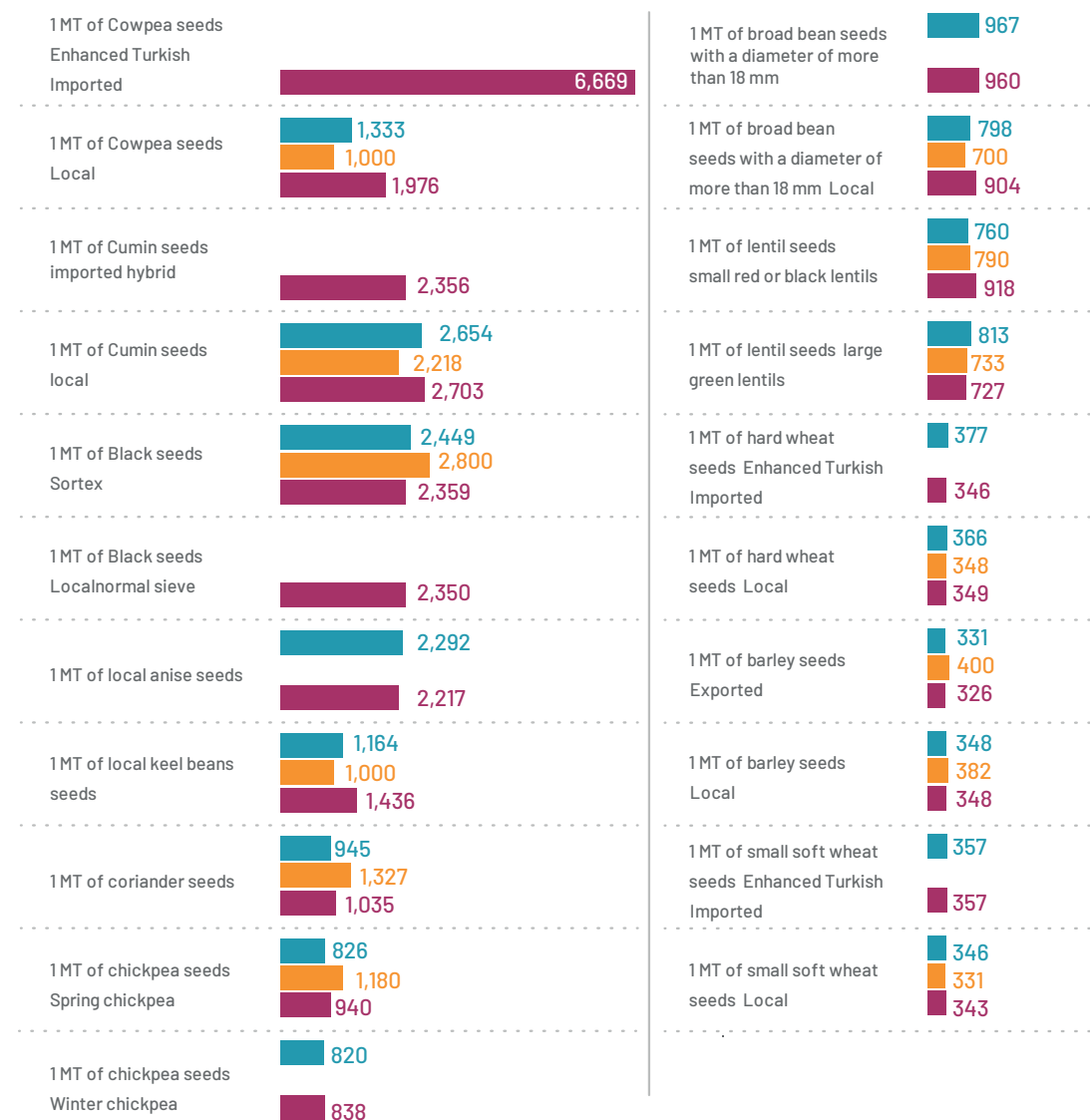
With close coordination among the field agricultural technical experts, iMMAP added more specification to the 12 assessed winter and cash crop seed types to avoid a large range of prices. This resulted in having 21 crop seed items under this group as illustrated in Figure 3 “Average Price of 1 MT of Winter and Cash Crops Seeds in NWS, Q3, 2021”.

The average price of winter and cash crops seeds varied across different seed types as assessed across the governorates. Imported cowpea seeds, local cumin seeds, and imported black seeds, ranked in that order, recorded the highest average prices of the assessed seed types under winter and cash categories across the NWS. Imported barley seeds, soft wheat seeds and local barley seeds, ranked in that order, recorded the lowest average prices of the assessed seed types under winter and cash categories across NWS.

It is worth noting that out of the 21 assessed crop seed types under the winter and cash crops seeds in NWS, Idleb governorate recorded the highest average price for 9 crop seed types, this was followed by Aleppo governorate which recorded the highest average price for 6 crop seed types, and Ar-Raqqa governorate came last with 5 crop seed types.

In general, the reported average price of imported crop seed types was higher than the reported average price of locally sourced crop seed types. Two crop seed types recorded different price patterns in this regard: Barley seeds, and Cumin seeds. The average price of local barley seeds was higher than the average price of imported barley seeds in both Aleppo and Idleb governorates. The average price of 1 MT of local barley seeds was 348 USD in both Aleppo and Idleb governorates, whereas the average price of 1 MT of imported barley seeds was 331USD in Aleppo governorate and it was 326 USD in Idleb governorate. The situation in Ar-Raqqa governorate was different: First, the average price of both types (local and imported) of barley seeds was higher than the reported average price in Aleppo and Idleb governorates. Second, the average price of local barley seeds was cheaper as compared to the average price of imported barley seeds at 382 USD/1 MT of local barley seeds and 400 USD/1 MT of imported barley seeds. The price of imported cumin seeds was only reported in Idleb governorate, and the average price of imported cumin seeds in Idleb governorate was lower than the average price of local cumin seeds at 2703 USD/1 MT of local cumin seeds and 2356 USD/1 MT of imported cumin seeds.

Figure 4. Average Price in USD of 1 MT of Winter and Cash Crops Seeds in NWS, Q3, 2021

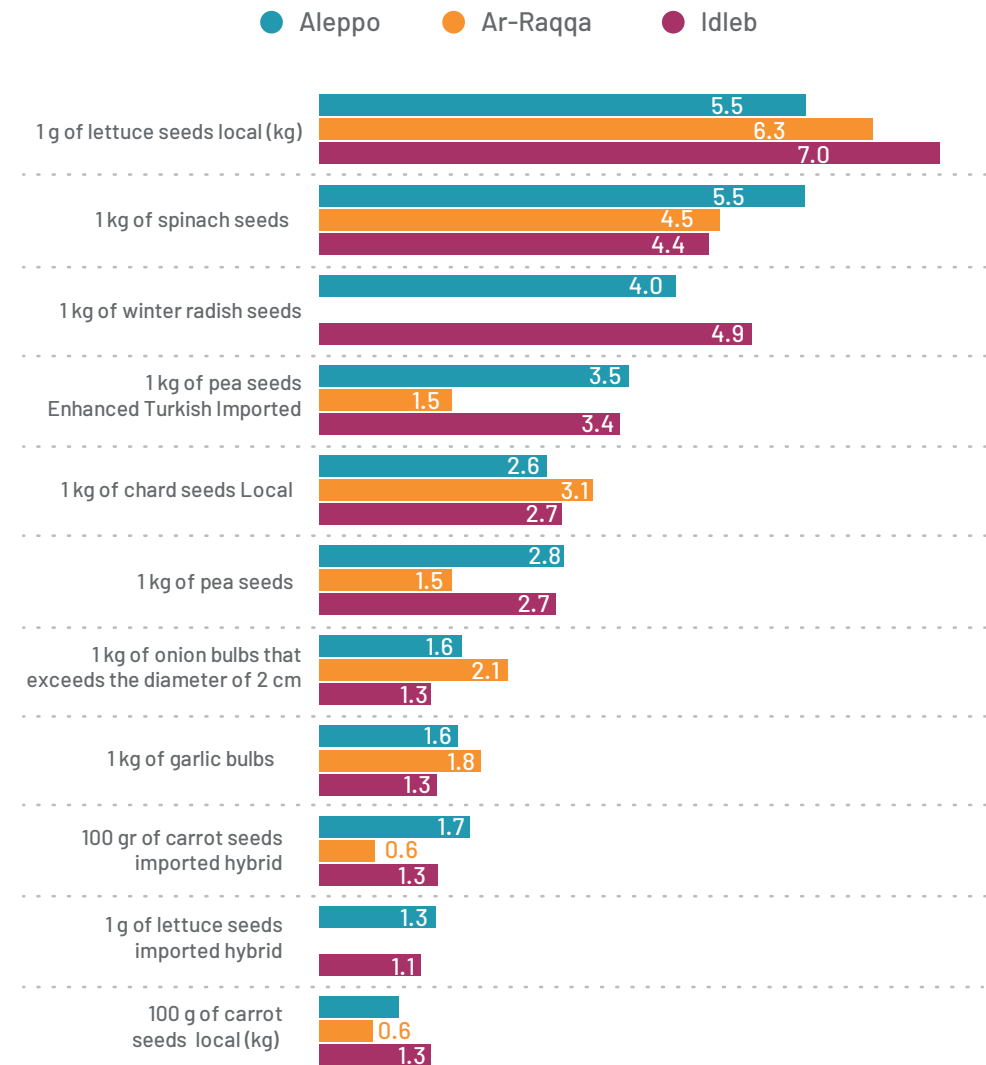


Winter Vegetables Seeds

By applying the specifications on different varieties of the assessed winter vegetables seeds, the 8 winter vegetable seed types become 11 winter vegetable seed types under this group. Local lettuce seeds, spinach seeds, and winter radish seeds, ranked in that order, recorded the highest average prices of the assessed winter vegetable seed types under winter vegetables group in NWS. Whereas, local carrot seeds, imported lettuce seeds and imported carrot seeds, ranked in that order, recorded the lowest average price across the assessed winter vegetable seed types under winter vegetables group in NWS. It is worth to note that not all the winter vegetable seed types under this group had the same unit of measurements, rather the selected unit of measurement was identified based on the unit used across the local market. In addition, Aleppo governorate recorded the highest average price for 5 winter vegetable seeds out of the 11 assessed winter vegetables seeds in NWS, this was followed by Ar-Raqqa and Idleb governorates where each governorate recorded highest average price for 3 items.

In general, the reported average price of imported items was higher than the reported average price of locally sourced winter vegetable seed. Only lettuce seeds showed different price patterns in this regard with a significant variation between the imported and local types. The average price of local lettuce seeds was higher than the average price of imported lettuce seeds in both Aleppo and Idleb governorates. The average price of 1 gm of local lettuce seeds was 6 USD in Aleppo governorate and it was 7 USD in Idleb governorate, whereas the average price of 1 gm of imported lettuce seeds was 1.32 USD in Aleppo governorate and it was 1.15 USD in Idleb governorate. At Ar-Raqqa governorate there was no reported price for imported lettuce seeds, and the average reported price of 1 gm of local lettuce seeds was 6 USD.

Figure 5. Average Price in USD of Winter Vegetables Seeds in NWS Q3, 2021

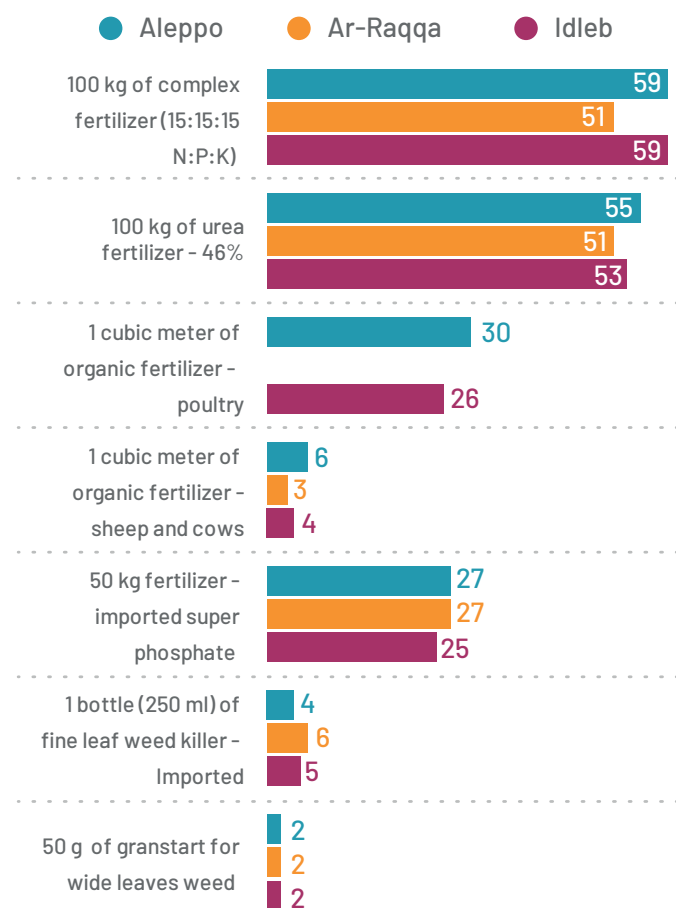


Fertilizers, Pesticides and Herbicides.

Seven chemical products were assessed under the Fertilizers, Pesticides and Herbicides group during the third quarter of 2021 across the local markets in NWS. Collected data recorded the high price of both the complex fertilizer (15:15:15 N:P:K), and urea fertilizer - 46% items. The average price of these two agro-chemical inputs, ranked in the same order, were reported to be the highest of the 7 assessed agro-chemical inputs under this group. The price of 100 kg of complex fertilizer (15:15:15 N:P:K) was 57 USD (59 USD in both Aleppo and Idleb governorates and 51 USD in Ar-Raqqa governorate) whereas the price of 100 kg of urea fertilizer - 46% was 54 USD (55 USD in Aleppo governorate, 53 in Idleb governorate and 51 USD in Ar-Raqqa governorate).

The collected data recorded that that the organic manure from poultry was way more expensive as compared to the organic manure from sheep and cow. The average price of 1 cubic meter of organic manure from poultry recorded 30 USD in Aleppo governorate and 26 USD in Idleb governorate, there was no data from Ar-Raqqa governorate, whereas the average price of 1 cubic meter of organic manure from sheep and cows recorded 6 USD in Aleppo governorate, 4 USD in Idleb governorate and 3 USD in Ar-Raqqa governorates.

Figure 6. Average Price in USD of Fertilizer, Pesticide Herbicide items in NWS Q3, 2021

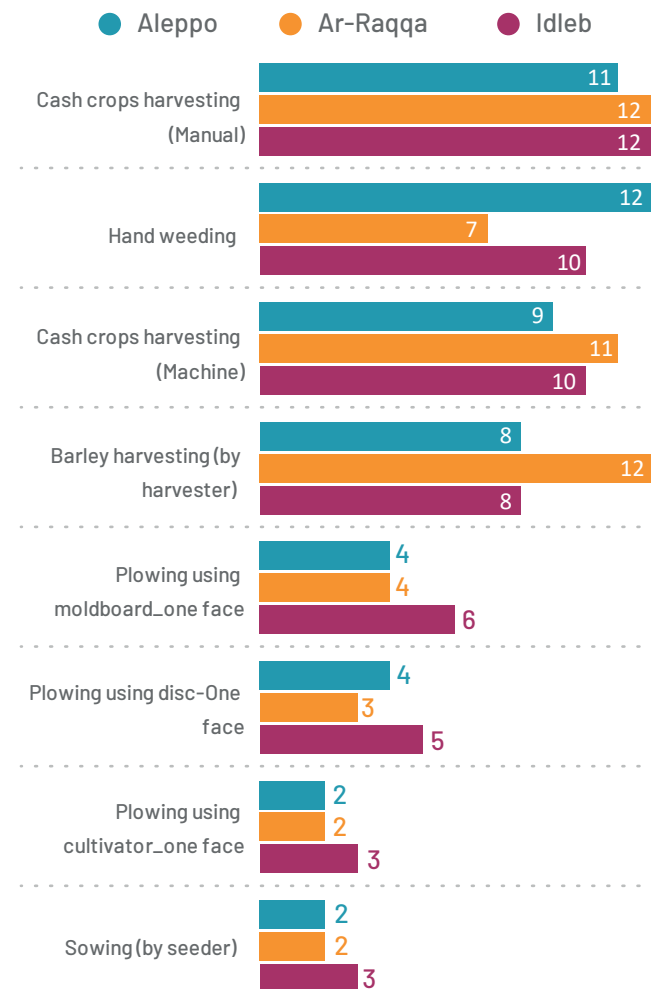


Land's Services

Eight types of land services were assessed under the land services group during the third quarter of 2021 across the local markets in NWS. Cash crops harvesting (Manual) was recorded at 11 USD/donum, Hand weeding was recorded at 10.4 USD/donum, and Cash crops harvesting (machine) was recorded at 9.9 USD/donum, ranked in that order, as the recorded highest average cost across the assessed lands' services in NWS. Whereas, sowing recorded 2.39 USD/donum, Plowing using cultivator/one face recorded 2.44 USD/donum and plowing using one disc face recorded 4.52 USD/donum, ranked in that order, as the recorded lowest average cost across the assessed lands' services in NWS.

In addition, Idleb governorate recorded the highest average cost for 4 services out of the 8 assessed lands' services in NWS, this was followed by Ar-Raqqa governorate which recorded the highest average cost for 3 services, and Aleppo governorate came last as it recorded the highest average cost for only one service.

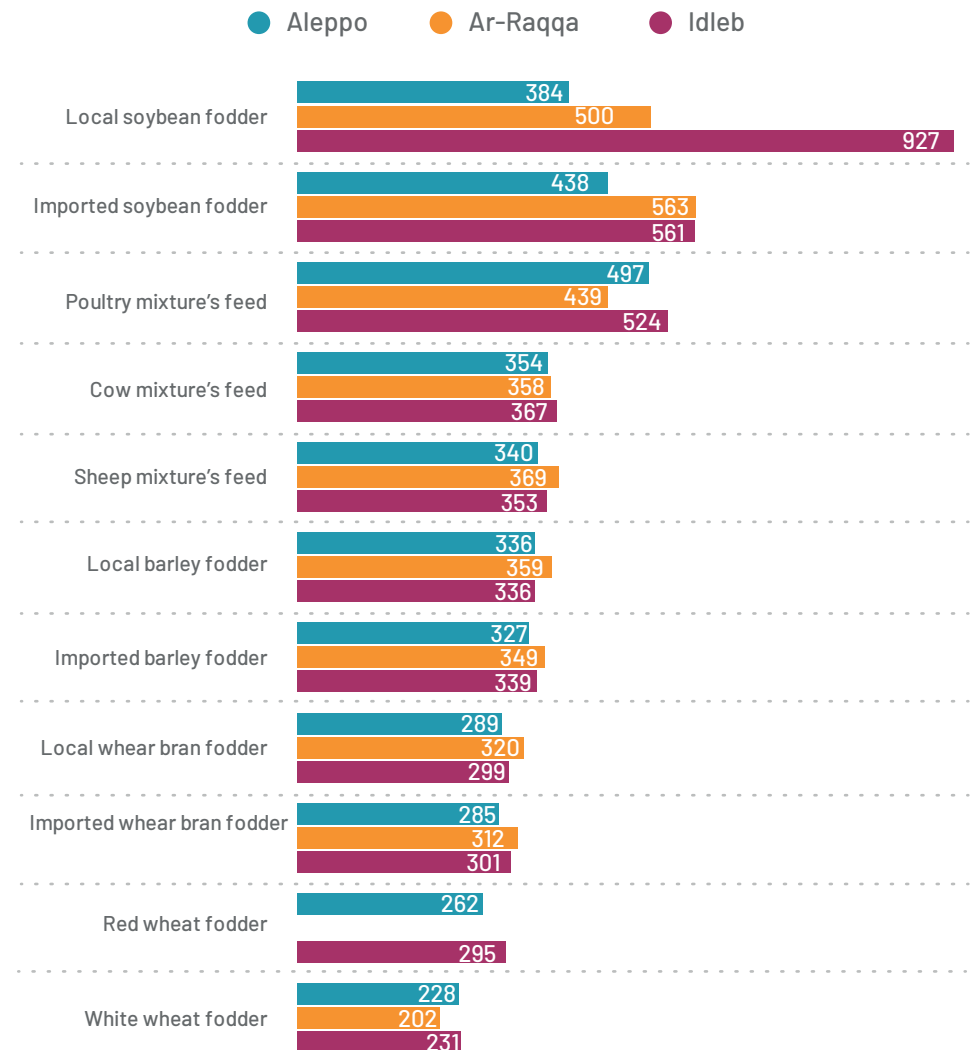
Figure 7. Average cost in USD of land services for one dunum in NWS Q3, 2021



Livestock Inputs

Fourteen livestock inputs were assessed under this exercise; these were grouped into three main categories: Mixture feed, individual feed items, and animal vaccine & vitamins. For the mixture feed category, the average reported price of 1 MT of poultry mixture feed (for eggs and meat) was the highest as compared to that of cows and sheep mixture feed (485 USD/ 1MT of poultry mixture's feed), this was followed by cow mixture feed (360 USD/ 1MT of cow mixture's feed), and sheep mixture feed being the cheapest at (348 USD/1MT of sheep mixture feed). Furthermore, Idleb governorate recorded the highest average price of both poultry and cow mixture feed (524 USD/ 1MT of poultry mixture feed and 367 USD/ 1MT of cow mixture feed), whereas Ar-Raqqa governorate recorded highest average price of sheep mixture feed (369 USD/ 1MT of sheep mixture feed). When it comes to the individual fodder items, soyabean recorded highest average price (717 USD/1 MT of local soyabean, and 509 USD/1 MT of imported soyabean), this was followed by barley (342 USD/1 MT of local barley, and 334 USD/1 MT of imported barley). However, white wheat fodder recorded the cheapest average price of the assessed individual fodder items in NWS (227 USD/1 MT white wheat fodder). In addition, the average reported price of 1 kg of animal vitamins was 9 USD at NWS level (10 USD in Aleppo and Idleb governorates, 6 USD in Ar-Raqqa governorate) and the average reported cost of Enterotoxaemia vaccination per sheep was 0.18 USD.

Figure 8. Average Price in USD of 1MT of Fodder items in NWS Q3, 2021

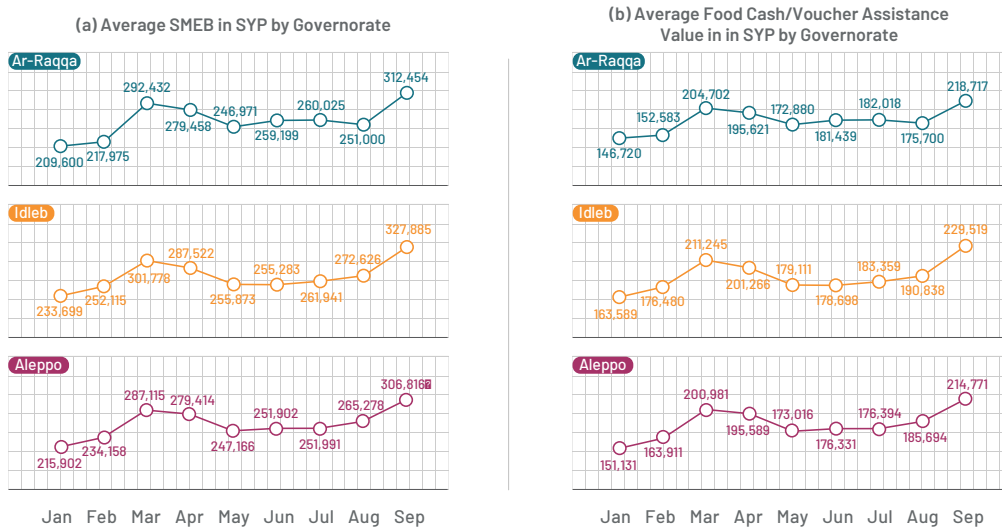


Key Finding - Food Market Prices

1. SMEB and Cash Assistance Value

According to REACH monthly price monitoring data Idleb governorate reported the highest SMEB values, while Aleppo and Ar-Raqqa reported the lowest SMEB value in September 2021. However, the difference between the different governorates is not very significant (range: 306,815 SYP – 327,885 SYP). The SMEB value was on the rise since January 2021 and followed the trend of the SYP exchange rate against USD. As per figure 9, prices notably increased at the end of quarter one, 2021 and recovered by the end of the second quarter. However, in September 2021, the SMEB value recorded the highest price since the start of 2021. Naturally, the cash/voucher assistance value followed the same trend as the SMEB Values, since the Cash Working Group (CWG) sets the cash/voucher assistance as 70% of the SMEB value.

Figure 9. Average SMEB and Average Food Cash/Voucher Assistance Values in 2021



2. Food Groups Market Prices

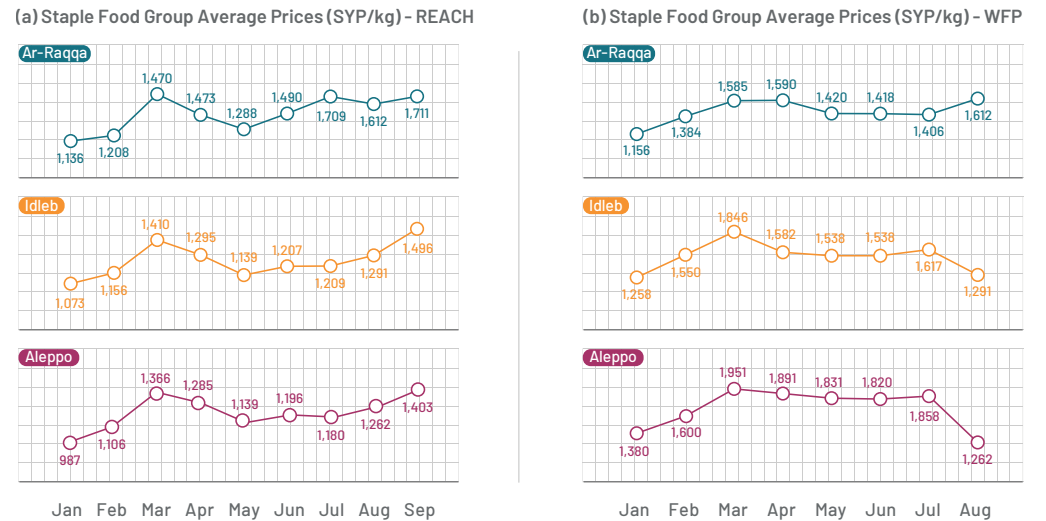
Staples Group

REACH staple items: Bread (shop), Bulgur, Pasta, Potatoes, Rice, Wheat flour

WFP staple items: Bread (shop), Bread (bakery), Bulgur, Pasta, Potatoes, Rice, Wheat flour

Pasta and rice recorded the overall highest average prices across all governorates in NWS. While shop bread, bakery bread, potatoes recorded the lowest prices. Staples followed the same trend as the SMEB temporal price trend, where in March and September 2021 there was a record of the highest staple food prices. The overall prices of staples per governorate shows that Ar-Raqqa recorded the highest for REACH prices. As for WFP-VAM staple prices, Aleppo recorded the highest prices.

Figure 10. Staple Food Group Average Prices (SYP/kg) in 2021



Pulses Group

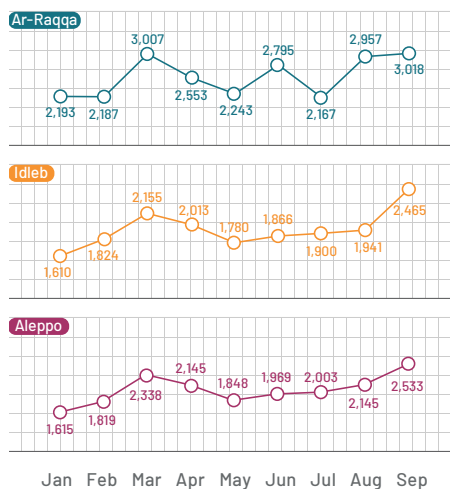
REACH pulses items: red lentils, split lentils, chickpeas, and green peas

WFP pulses items: white beans, chickpeas, and lentils

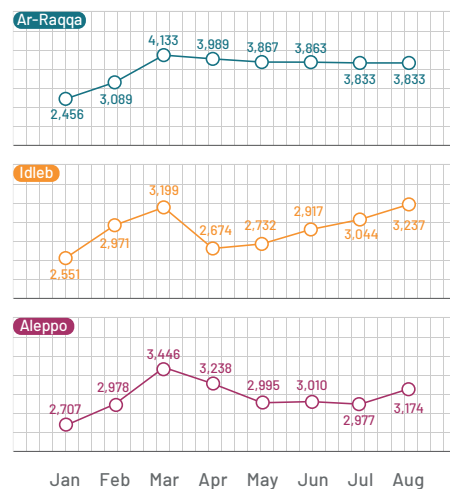
Overall, according to both data sources, chickpeas recorded the lowest average price across all governorates in NWS, followed by split lentils. While green peas recorded the highest price according to REACH data, and white beans recorded the highest price according to WFP data. As a group, prices of pulses were higher compared to the staples group prices. Ar-Raqqa recorded the highest prices of pulses in both REACH and WFP-VAM prices.

Figure 11. Pulses Food Group Average Prices (SYP/kg) in 2021

a) Pulses Food Group Average Prices (SYP/kg) - REACH



(b) Pulses Food Group Average Prices (SYP/kg) - WFP



Dairy Group

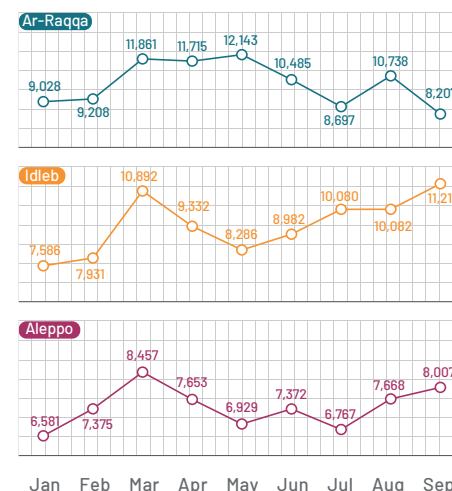
REACH dairy items: milk, and powder milk

WFP dairy items: yoghurt, and cheese

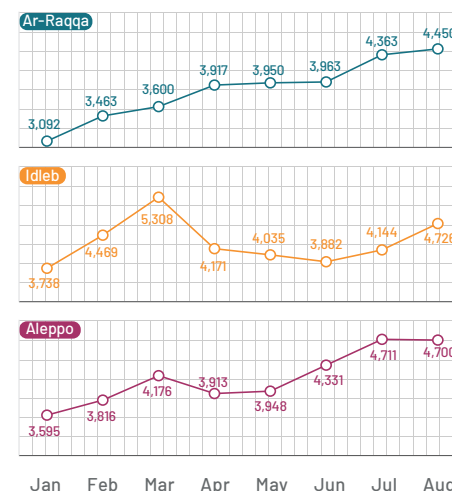
For REACH data, powder milk recorded significantly higher price compared to regular milk which inflated REACH dairy group prices. As for WFP data, yogurt recorded lower price compared to cheese. Dairy prices (milk and yogurt) are in general higher than staples prices and lower than pulses, which make dairy products more accessible for households to purchase than pulses. Idleb recorded a significant higher price for dairy prices than Aleppo and Ar-Raqqa for REACH prices.

Figure 12. Dairy Food Group Average Prices (SYP/kg) in 2021

(a) Dairy Food Group Average Prices (SYP/kg) - REACH



(b) Dairy Food Group Average Prices (SYP/kg) - WFP



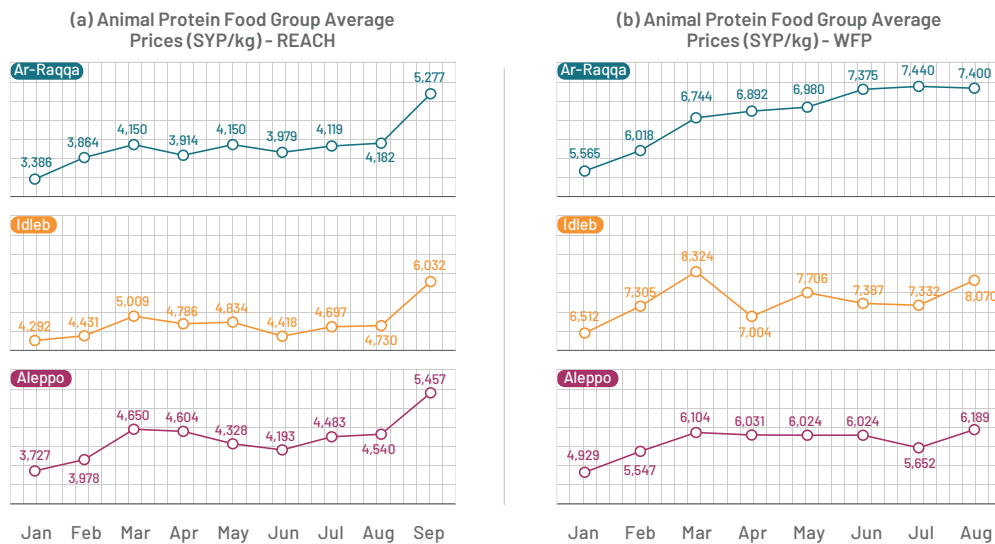
Animal Protein Group

REACH animal protein items: canned fish, chicken, and eggs

WFP animal protein items: canned fish, plucked chicken, chicken legs, minced beef, and eggs

Overall, according to both data sources, canned fish recorded the lowest average prices of the animal protein group and across all governorates in NWS. While according to WFP data, minced beef is considered the most expensive item in the animal protein group. The price of minced beef was significantly higher than other animal protein food items, which inflated the prices of this group as per the record from the WFP data. Animal protein is considered the most nutritious food group, however in general the group was the most expensive of all other food groups. Idleb recorded the highest prices of animal protein group prices compared to Aleppo and Ar-Raqqa.

Figure 13. Protein Food Group Average Prices (SYP/kg) in 2021



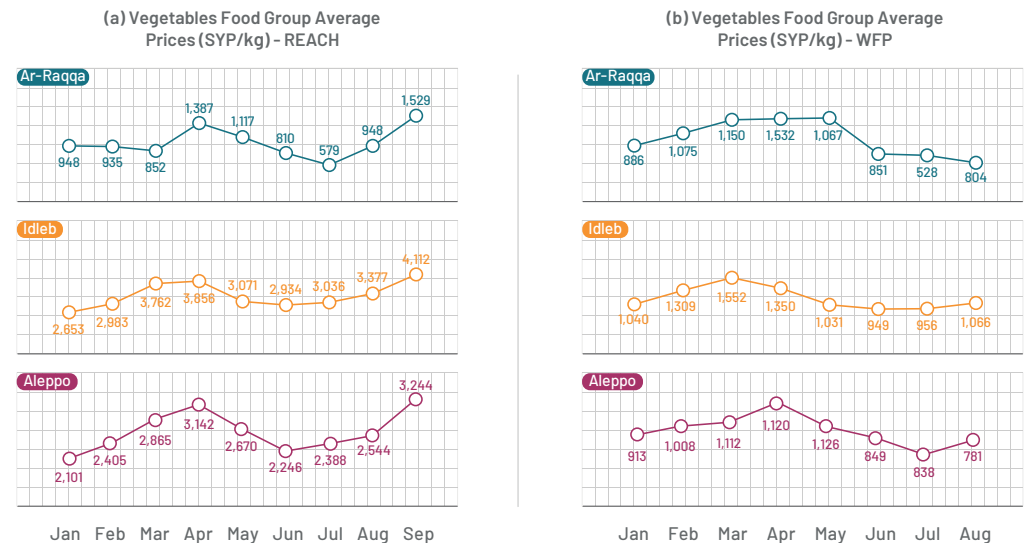
Vegetable Group

REACH vegetable items: cucumbers, onions, tomatoes, kale, and Jew's mallow (mulukhiya)

WFP vegetable items: cucumbers, onions, tomatoes, carrots, eggplants, and parsley

Leaf vegetables like parsley and kale reported relatively low prices in WFP and REACH data respectively, while according to REACH group Jew's mallow (mulukhiya) reported the highest price in Aleppo, Ar-Raqqa, and Idleb governorates. It is worth mentioning, that mulukhiya is a seasonal leaf vegetable which may be the reason for the high price of this vegetable produce. Apart from leaf vegetables, onions reported the lowest vegetable price in both data sources and across all governorates in NWS. Cucumbers, tomatoes, and eggplants recorded the highest prices. Idleb recorded the highest vegetables group prices compared to Aleppo and Ar-Raqqa.

Figure 14. Vegetables Food Group Average Prices (SYP/kg) in 2021



Fruit Group

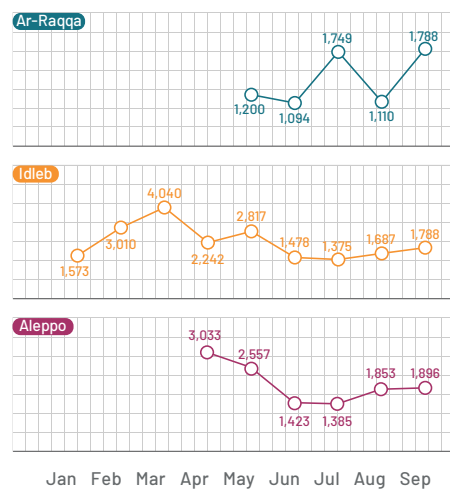
REACH fruit items: nectarines, and watermelon

WFP fruit items: bananas, apples, and dates

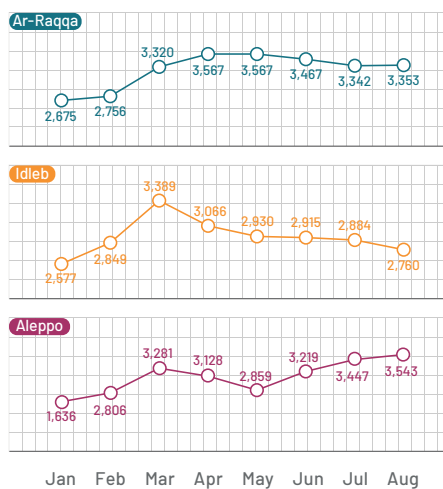
REACH collects prices of nectarines and watermelon, which does not represent the most commonly consumed fruits in NWS. These items are also seasonal products and might not be accessible throughout the year to many households. As for WFP data, apples recorded the lowest price, while dates recorded the highest price.

Figure 15. Fruits Food Group Average Prices (SYP/kg) in 2021

(a) Fruits Food Group Average Prices (SYP/kg) – REACH



(b) Fruits Food Group Average Prices (SYP/kg) – WFP



Food Security and Livelihood Outlook

Food prices are projected to continue on an increasing trend driven by high inflation rate and the depreciation of local SYP against the hard foreign currency of USD and LI. Localized insecurity, low import capacity, economic crisis, blockade of trade routes, opportunistic ambushes/ banditry along the roads as well the perennial climate induced aridity will most likely lower commodity availability in many markets and further upset market functioning especially in the hinterlands with consequential increase in prices. Exorbitant prices of essential food commodities coupled with further reduction in households' purchasing power, will greatly compromise food access and dietary diversity for many families across the region during this lean season. Staple cereal prices are expected to remain way above their seasonally adjusted levels due to diminishing stocks attributed to the absence of climate change impact response strategy, for instance, despite the earlier reported drought scenarios which caused crop failure last season in Syria. Household purchasing power will also decline seasonally and will be greatly eroded as the economic crisis worsens. As purchase prices of essential food commodities are likely to remain high amidst reduced households' purchasing power reduced, food access and dietary diversity for many families will be greatly compromised.

Recommendations on FSL Programming

Food prices and agricultural input prices have drastically increased across the study area and this could be as a result of conflict and drought scenario during the reporting period. This reported increasing prices of food items and agricultural inputs highlighted the worsening household purchasing power of vulnerable Syrian households. Given the recorded price increase rate of change for various agricultural inputs, then as FS Cluster partners must design and plan for agricultural input and livelihood provision programming then there is need to factor in, the respective price increase changes over time when deciding the cash transfer value or unit cost per farming household targeted for agriculture input support.

- Humanitarian partners ought to review cash transfer value based on the prevailing SMEB or Food Basket value in order for the supported vulnerable households to be able to meet their immediate household needs.
- Humanitarian partner supporting vulnerable farmers also need to review any planned cash transfer for inputs support in line with the recorded prevailing prices of input, to ensure that supported farmers are able to adequately access agricultural inputs for sustainable agricultural production.
- With the recorded ever increase in livestock fodder/feeds given the drought scenario, humanitarian partners need to consider support farmers to purchases grain and farm by-products from farmers and imports fodder additives to produce livestock feed concentrates at household level.

Recommendations for Future Studies

- Item selection approach; the number of selected agricultural inputs were large. This needed huge efforts not just at the data collection stage, but also at the analysis and finding visualization. It is recommended for further rounds to re visit the selected agricultural inputs and prioritize defined and selected agricultural kits.
- Limited Scope; the scope of this initiative is limited to quantitative data that are used to monitor the price, availability, and country of Origin. It is recommended to add a qualitative part that could be useful to justify and contextualize the findings. This can also address the challenge of having many Items Diversities; having different varieties for each of the assessed items resulted in having a large range of the provided price.
- Agricultural input kits response packages; For Agriculture Input support/ Interventions we do not have a single standard package like in Food Assistance where we do have a Standard Food Basket and SMEB which serves as composite unit of analysis both spatial and temporal. However, it is recommended to consider the FSS_S02 & S03 standard Agricultural Input/Kits response packages set with specific standard value cost, then we do spatial-temporal analysis over time factoring seasonality of course. In short, we can focus on the following Agricultural kits; Cereal Inputs, Legume Inputs, Poultry Inputs, Livestock(shoats/cattle)Inputs, for spatial and temporal analysis – the first of this kind for Syria's Agricultural Input Market monitoring. This will inform FSS partners/agency members in deciding on Cash Transfer Values for respective Agricultural Inputs/Kit distributions over time and space, the same way the standard food basket and SMEB values inform cash transfer values for Food Assistance.