

Northeast Syria

Integrated Market Monitoring Initiative (IMMI)

Bulletin Quarter 3, 2021

Price Monitoring for Agricultural 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 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 agricultural inputs and food commodities across the targeted geographical locations on a 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 Northeast Syria (NES) to assess the availability, country of origin, and prices of agricultural inputs. Furthermore, the initiative incorporates consolidated data of food item prices collected across NES 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 of how food price fluctuations in Syria impact the food security of households.

Methodology

This initiative is based on joint efforts from FSL cluster (NGO) member partners collecting field data and iMMAP designing the data collection tools, validating the data, and then using it to produce the analysis report and dashboard.

This exercise assessed the availability, country of origin, and prices of **ninety-nine** most commonly used agricultural inputs during the winter cropping season in NES. These agricultural inputs were selected in close coordination with the FSL Cluster and AWG members of the NES hub. Also, these inputs were prioritized based on feedback solicited from FSL Cluster partners and AWG members from a programming point of view, both operational and coordination, on an ongoing basis.

The ninety-nine agricultural inputs fell under eight categories that include crop inputs such as seeds (winter and summer vegetable seeds, and winter and cash crop seeds), agrochemical inputs (fertilizers, pesticides, herbicides), land services, tools, and wages; and livestock inputs such as livestock heads (cow, sheep, and poultry), feed and fodder, vaccination, and wages.

As for food prices, the REACH and WFP monthly price dataset covering the period from January 2021 to September 2021 was the main data used in this report.

Geographical Coverage

The data collection for the winter season was conducted during September 2021. Four FSL cluster member partners participated in the data collection across 18 sub-districts in four governorates: Aleppo, Al-Hasakeh, Ar-Raqqa, and Deir-ez-Zor. Fifty percent of the interviews were conducted in Al-Hasakeh governorate.

Overall, 836 interviews were conducted with different agricultural input market actors, and around 2,643 agricultural input data points were collected from all interviewed respondents.

Respondents

Data was collected via in-person key informant (KI) interviews across all NES governorates from 836 respondents composed of 12 various market actor types of whom the majority were farmers (46%), followed by agricultural pharmacies (16%), then herders (15%), and the rest mainly being composed of traders, breeders, members of the Economic and Agricultural Commission (EAC), members of the agricultural and livestock committees, and veterinary service experts.

Limitations

Agricultural inputs selection: the number of selected inputs was vast: one-hundred agricultural inputs to be exact. This needed huge efforts at the data collection stage, and at the analysis and finding visualization stages.

Limited scope: Only 18 sub-districts in NES were assessed in September 2021 across the four governorates (Aleppo, Al-Hasakeh, Ar-Raqqa, and Deir-ez-Zor). Not all sub-districts in NES and agricultural inputs were equally covered mainly because of the limited humanitarian access to all areas due to the decreased capacity and security-related issues.

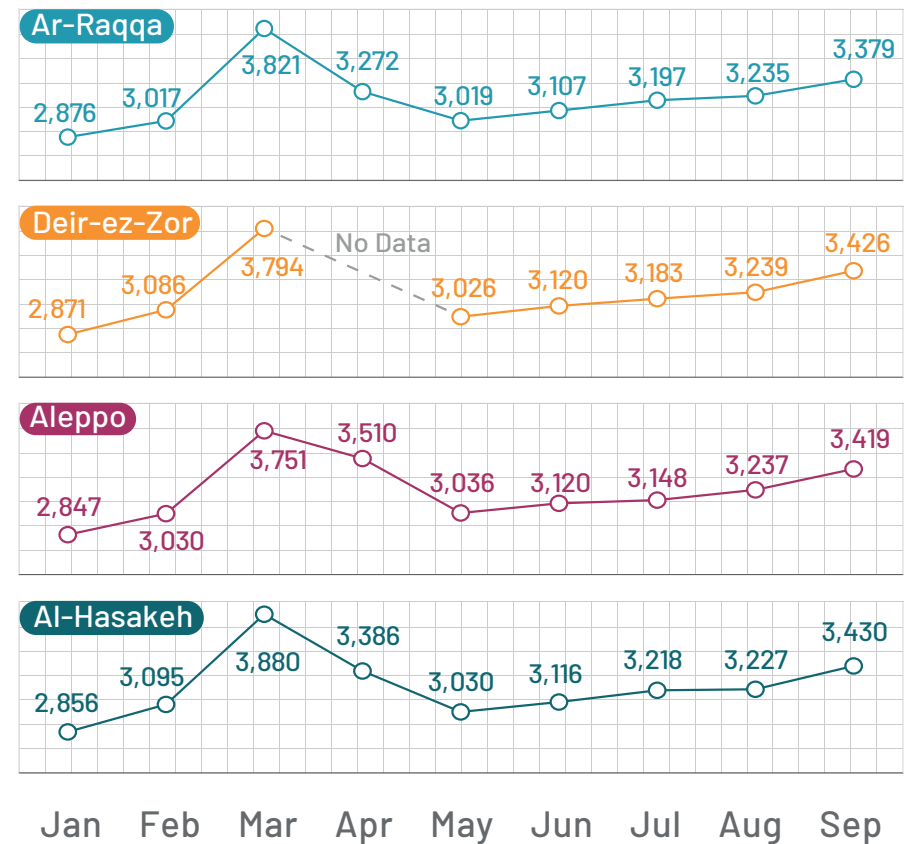
Interactive Dashboard

For detailed analysis and visualization of the agricultural inputs' availability, country of origin, and prices of inputs and food items at different geographical levels (sub-district, district, governorate), refer to the produced interactive dashboard through this [link](#).

Exchange Rates and Currency Used

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

Figure 1. Average SYP against USD Value in NES, 2021



Usually, the unofficial (black market) exchange rate is used amongst market actors, which is higher than the official exchange rate. The average official SYP/USD exchange rate in September 2021 was 2,511 SYP/USD¹, while the average unofficial exchange rate reported by the respondents at the time of data collection (September 2021) was 3,456 SYP/USD.

Most respondents reported using only SYP (67%) to purchase and sell their agricultural (crops and livestock) inputs and outputs. Other respondents indicated that they only use USD (17%) to purchase and sell their agricultural inputs and outputs. Also, some respondents reported using both USD and SYP (16%) to purchase and sell their agricultural inputs and outputs.

Key Findings - Agricultural Inputs

Source of Access

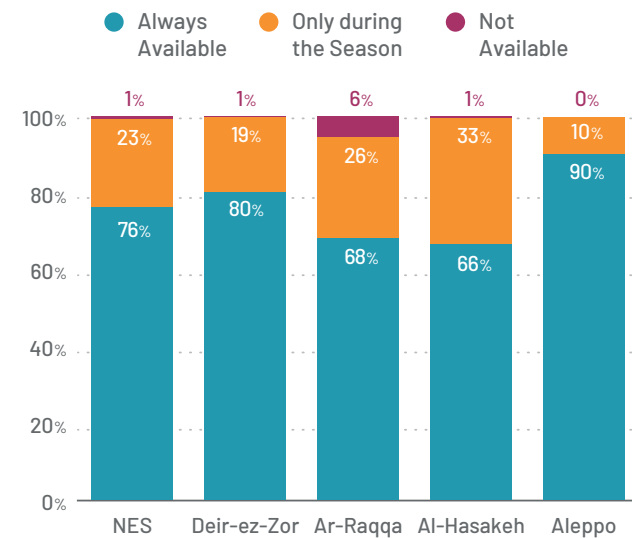
Respondents reported that local traders, including wholesalers and retailers (95%), were the main source of access to agricultural inputs. These traders included farmers, herders, market owners, vets, and agricultural pharmacies. On the other hand, the Self Administration of Northeast Syria (SANES) (5%) was also identified as one of the other sources of access to obtain agricultural inputs.

Availability

During September 2021, study respondents reported that agricultural (crops and livestock) inputs were generally available in their local community market across the assessed areas of the NES region. Respondents reported that crops and livestock inputs were seventy-six percent always available, twenty-three percent available during particular seasons, and only one percent not available at any time of the year. Most unavailable inputs were in Al-Hasakeh (38%) and Ar-Raqqa (52%) governorates.

The top reported reasons why those inputs were not available at the community level were the increase in their prices and scarcity of inputs due to the recent drought of the 2020/2021 cropping season. Also, respondents reported that agricultural inputs that were not usually available at community level, were available at sub-district or district levels.

Figure 2. Agricultural Inputs Availability in NES, Sept. 2021



¹ The official exchange rate was retrieved from [WFP - VAM](#), Sept 2021.

Country of Origin

Overall, the main reported country of origin for all agricultural (crops and livestock) inputs was Syria (78%), this was followed by China (7%), then the United States of America (USA) (5%), and finally Turkey (5%). However, these numbers differed depending on the type of inputs.

Below are the prominently reported countries of origin of agricultural inputs in local markets in NES. They are classified by the categories of agricultural inputs²:

- China came first (42%), followed by Syria (21%), then Turkey (10%) as a reported source for **agrochemical inputs** (fertilizers, pesticides, and herbicides).
- Syria came as the first reported country of origin for the **agricultural tools** (82%) in the local markets in NES, and China came in second (13%).
- Syria was the main reported country of origin for the **land, wages, and livestock heads** (100%).
- Most **livestock inputs** (specifically feed and fodder, vaccination, and wages) were reportedly produced in Syria (95%), followed by Turkey (4%), and Jordan (1%).
- Syria was the main reported country of origin for the **winter and cash crops seeds** (98%), followed by Turkey (1%).
- The majority of **winter vegetables seeds** were reportedly produced in Syria (84%), followed by USA (9%), Turkey (6%), and France (1%).
- Many of the **summer vegetables seeds** were reportedly produced in Syria (63%), followed by USA (25%), Turkey (8%), Chile (2%), Netherlands (1%), and Jordan (1%).

Figure 3. Figure 3: Agrochemical Inputs (fertilizers, pesticides, and herbicides) Country of Origin in NES, Sept. 2021

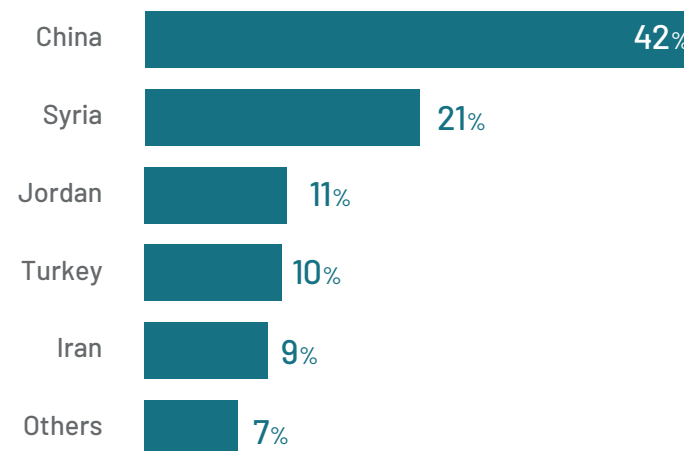
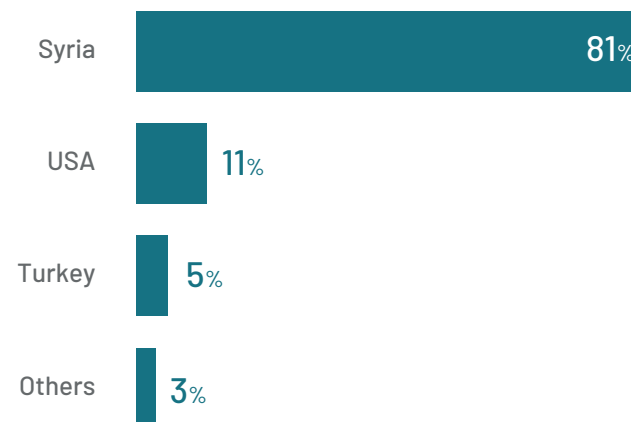


Figure 4. Seeds (winter and cash crops, and summer vegetables) Country of Origin in NES, Sept. 2021



² For individual agricultural input items on different geographical levels (sub-district, district, and governorate) refer to the dashboard [link](#).

Affordability

Interviewed market actors reported that sixty percent of all crops and livestock inputs were always affordable. They also reported that thirty-three percent of all inputs were affordable at certain times, and only four percent were not affordable at all. Most of the unaffordable inputs were in Al-Hasakeh (49%) and Deir-ez-Zor (41%) governorates. The top unaffordable items were soft and hard wheat seeds, imported tomato, cucumber, and zucchini seeds, black barley seeds, and urea 46% and superphosphate 46% fertilizers. The main reported challenges that the market actors faced in affording the agricultural inputs were primarily related to the increasing input prices and the decreasing purchasing power. Also, many respondents indicated that they find imported inputs unaffordable given that they are sold in USD, and therefore considered expensive given the depreciation of the Syrian Pound (SYP) exchange rates against the USD.

Agricultural Input Prices

The following sections show the price findings of the agricultural (crops and livestock) inputs at category and item levels using average prices in the assessed areas. Refer to the dashboard [link](#) for further detailed statistics regarding the items and their prices on different geographical levels (sub-district, district, and governorate).

1. Crop Input Prices

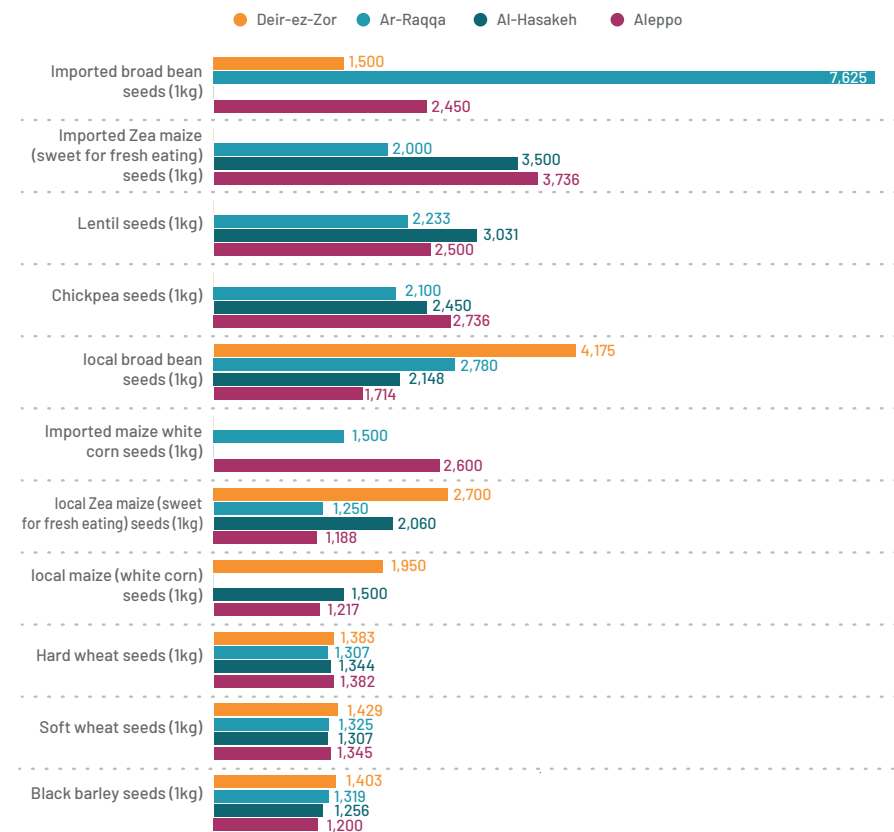
This study assessed the prices of different crops inputs, including seeds (winter and cash crop seeds, and winter and summer vegetables seeds), agrochemical inputs (fertilizers, pesticides, and herbicides), land services, tools, wages, and agricultural tools. Eighty items were assessed under the crop inputs as presented in the categories below.

Winter and Cash Crop Seeds

The average price of winter and cash crops seeds varied across different inputs in assessed governorates. For instance, in this category, imported broad bean seeds had the highest recorded average price of 7,625 SYP/kg in Ar-Raqqa governorates. However, local maize (Zea maize) seeds had the lowest recorded average price of 1,188 SYP/kg in Aleppo governorate.

At sub-district level, in this category, imported broad bean seeds recorded the highest average price of 14,000 SYP/kg seeds in Karama sub-district, while local maize seeds recorded the lowest average price of 875 SYP/kg in Ar-Raqqa sub-district.

Figure 5. Average Winter and Cash Crop Seeds Prices (SYP) in NES, Sept. 2021

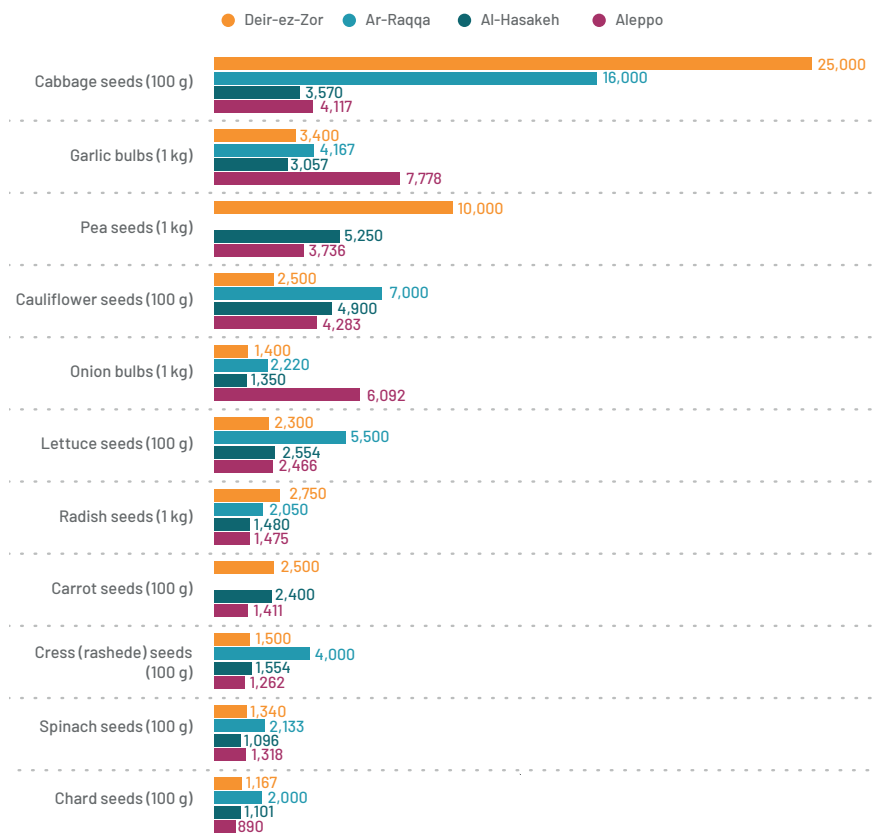


Winter Vegetable Seeds

Eleven different types of seeds were assessed in the winter vegetables category. In this category, cabbage seeds recorded the highest average price of 25,000 SYP/100g in Deir-ez-Zor governorate. On the other hand, chard seeds recorded the lowest average price of 890 SYP/100g in Aleppo governorate.

At sub-district level, cabbage seeds recorded the highest average price of 25,000 SYP/kg in both Sur and Karama sub-districts, while chard seeds recorded the lowest average price of 350 SYP/kg in Areeshah sub-district.

Figure 6. Average Winter Vegetable Seeds Prices (SYP) in NES, Sept. 2021

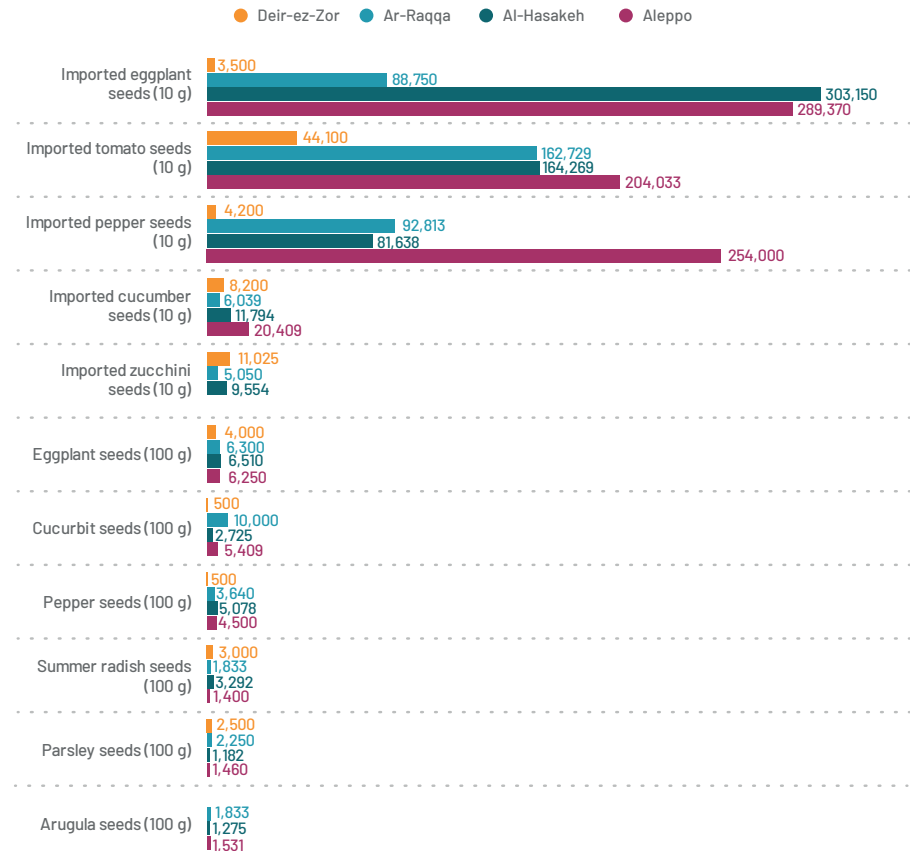


Summer Vegetable Seeds

Overall, in this category, imported summer vegetable seeds recorded higher average prices. Imported eggplant seeds had the highest reported average price of 3,031,500 SYP/100 g in Al-Hasakeh governorate. In comparison, pepper and cucurbit seeds had the lowest recorded average price of 500 SYP/100g in Der-ez-Zor governorate.

At sub-district level, imported eggplant seeds had the highest recorded average price of 5,050,000 SYP/100g in Ber Al-Hulo Al-Wardeyyeh sub-district. However, cucurbit and pepper had the lowest recorded average price of 500 SYP/100g in Sur sub-district.

Figure 7. Average Summer Vegetable Seeds Prices (SYP) in NES, Sept. 2021

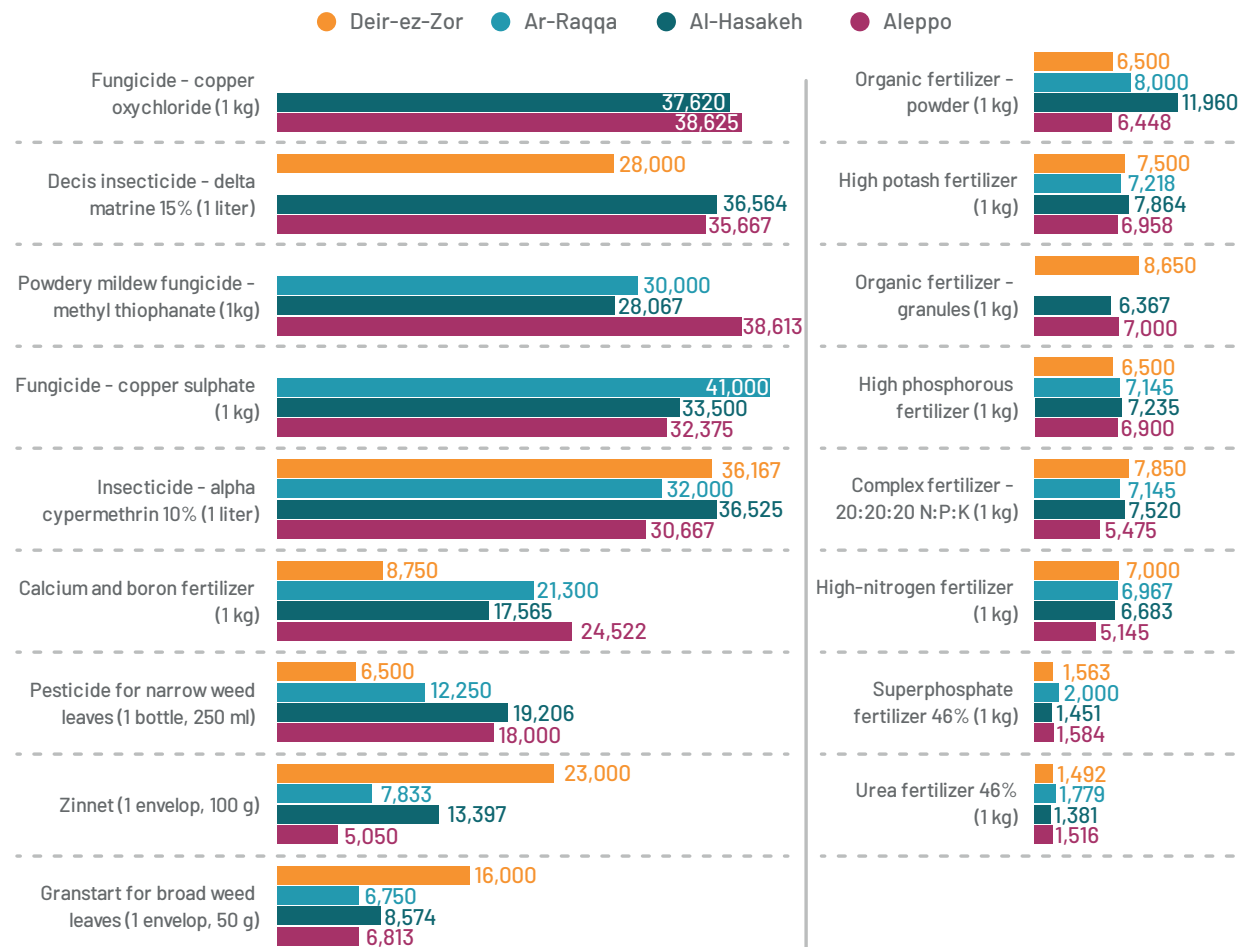


Fertilizers, Pesticides, and Herbicides

The average price of fertilizers, pesticides, and herbicides varied across different types and assessed governorates. For instance, in this category, fungicide -copper sulphate had the highest recorded average price of 41,000 SYP/kg in Ar-Raqqa governorate. On the other hand, urea fertilizer - 46% had the lowest reported average price of 1,381 SYP/kg in Al-Hasakeh governorates.

At subdistrict level, fungicide - copper sulphate recorded the highest average price of 50,000 SYP/kg in Al-Hasakeh sub-district, while urea fertilizer - 46% recorded the lowest average price of 1,254 SYP/kg in Qahtaniyyeh sub-district.

Figure 8. Average Fertilizers, Pesticides, and Herbicides Prices (SYP) in NES, Sept. 2021

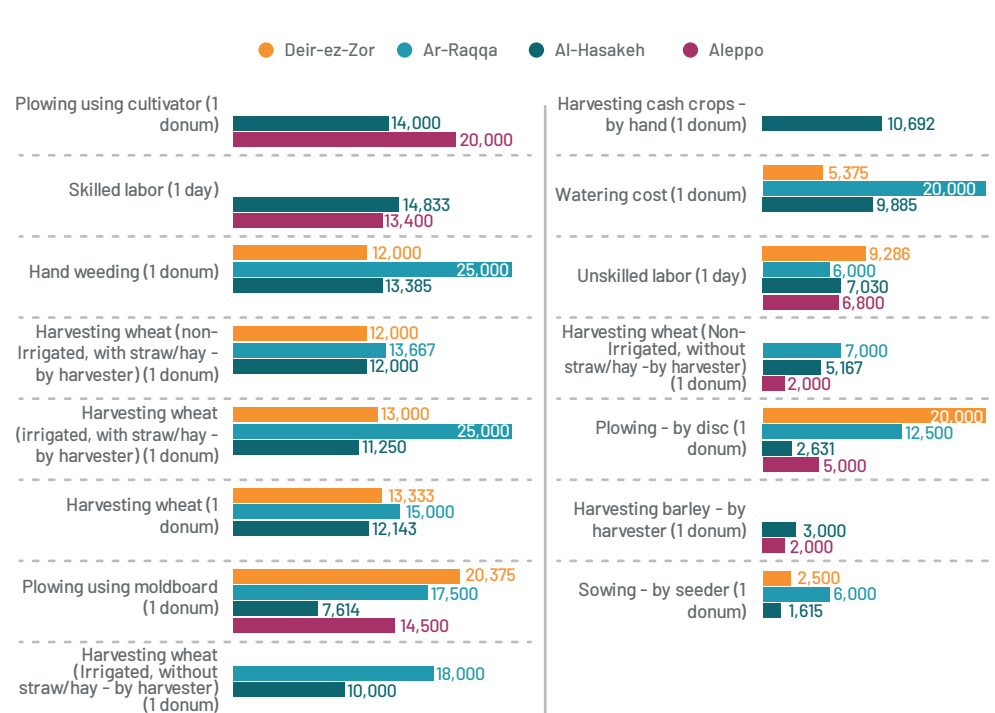


Land Services and Wages

In this category, hand weeding had the highest recorded average price of 25,000/donum in Ar-Raqqa governorate, while sowing by seeder had the lowest recorded average price of 1,615 SYP/donum in Al-Hasakeh governorate.

At sub-district level, hand weeding had the highest reported average price of 30,000 SYP/donum in Al-Haskaeh sub-district, while sowing by seeder had the lowest recorded average price of 1,011 SYP/donum in Qahtaniyyeh sub-district.

Figure 9. Average Land Services and Wages Prices (SYP) in NES, Sept. 2021

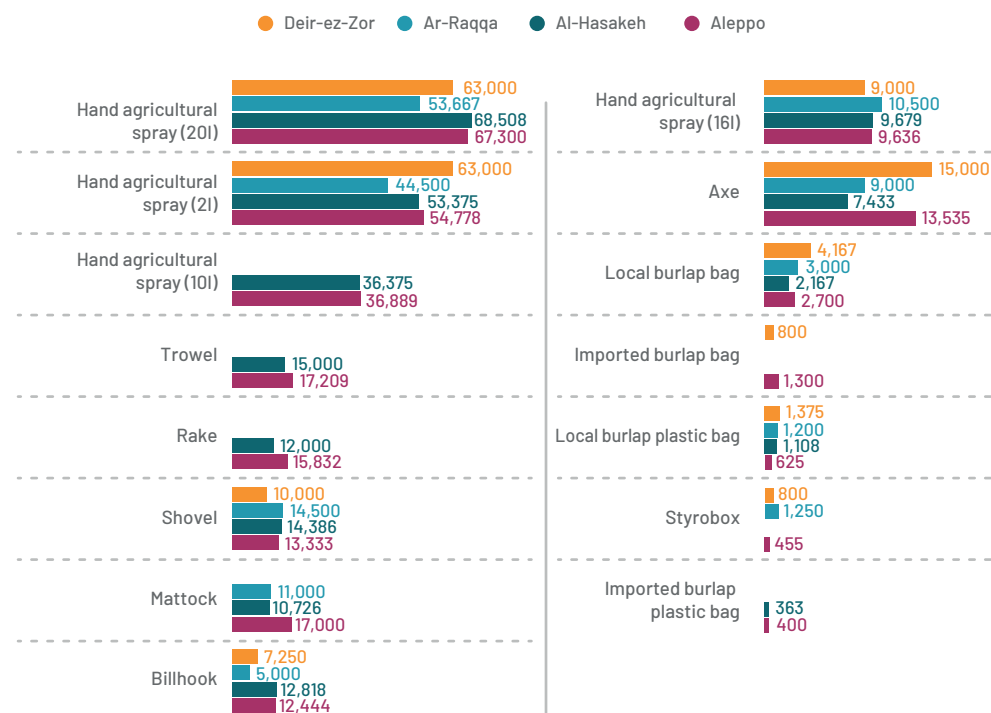


Agricultural Tools

In this category, hand weeding had the highest recorded average price of 25,000/donum in Ar-Raqqa governorate, while sowing by seeder had the lowest recorded average price of 1,615 SYP/donum in Al-Hasakeh governorate.

At sub-district level, hand weeding had the highest reported average price of 30,000 SYP/donum in Al-Haskaeh sub-district, while sowing by seeder had the lowest recorded average price of 1,011 SYP/donum in Qahtaniyyeh sub-district.

Figure 10. Average Agricultural Tools Prices (SYP) in NES, Sept. 2021



2. Livestock Input Prices

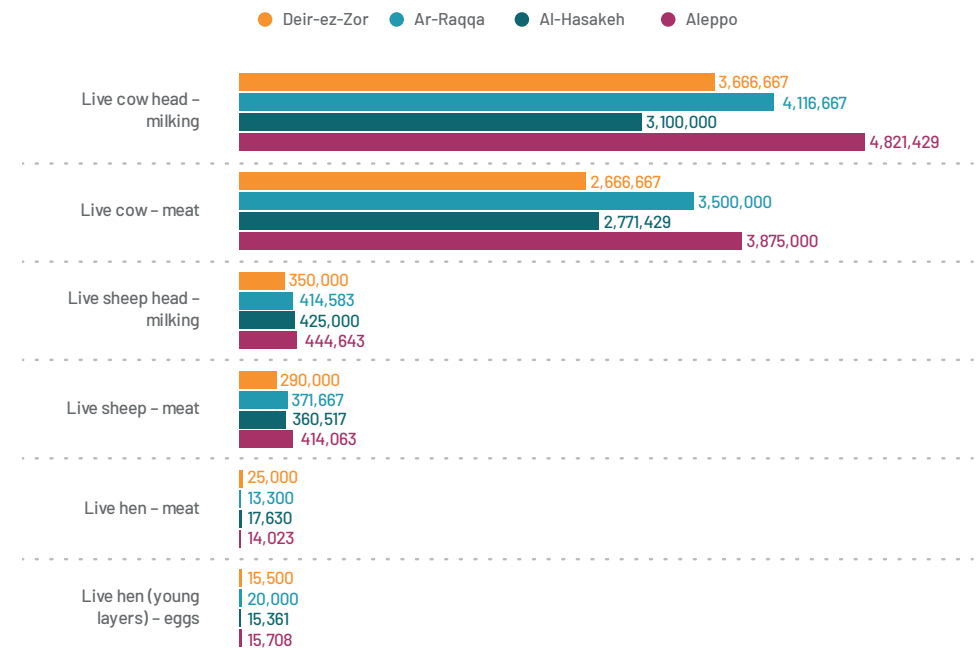
This study also assessed the prices of different livestock inputs, including livestock heads (cow, sheep, and poultry), feed and fodder, vaccination, and wages. Nineteen items were assessed under the livestock inputs as presented in the categories below.

Livestock Heads

In this category, one live cow for milking purposes recorded the highest average price of 4,821,429 SYP in Aleppo governorate. On the other hand, one live hen for meat purposes recorded the lowest average price of 13,300 SYP in Ar-Raqqa governorate.

At sub-district level, one live cow for milking purposes had the highest recorded average price of 6,000,000 SYP in Karama sub-district. In contrast, one live hen (young layers) for egg purposes had the lowest recorded average price of 4,500 SYP in Al-Hasakeh sub-district.

Figure 11. Average Livestock Heads Prices (SYP) in NES, Sept. 2021

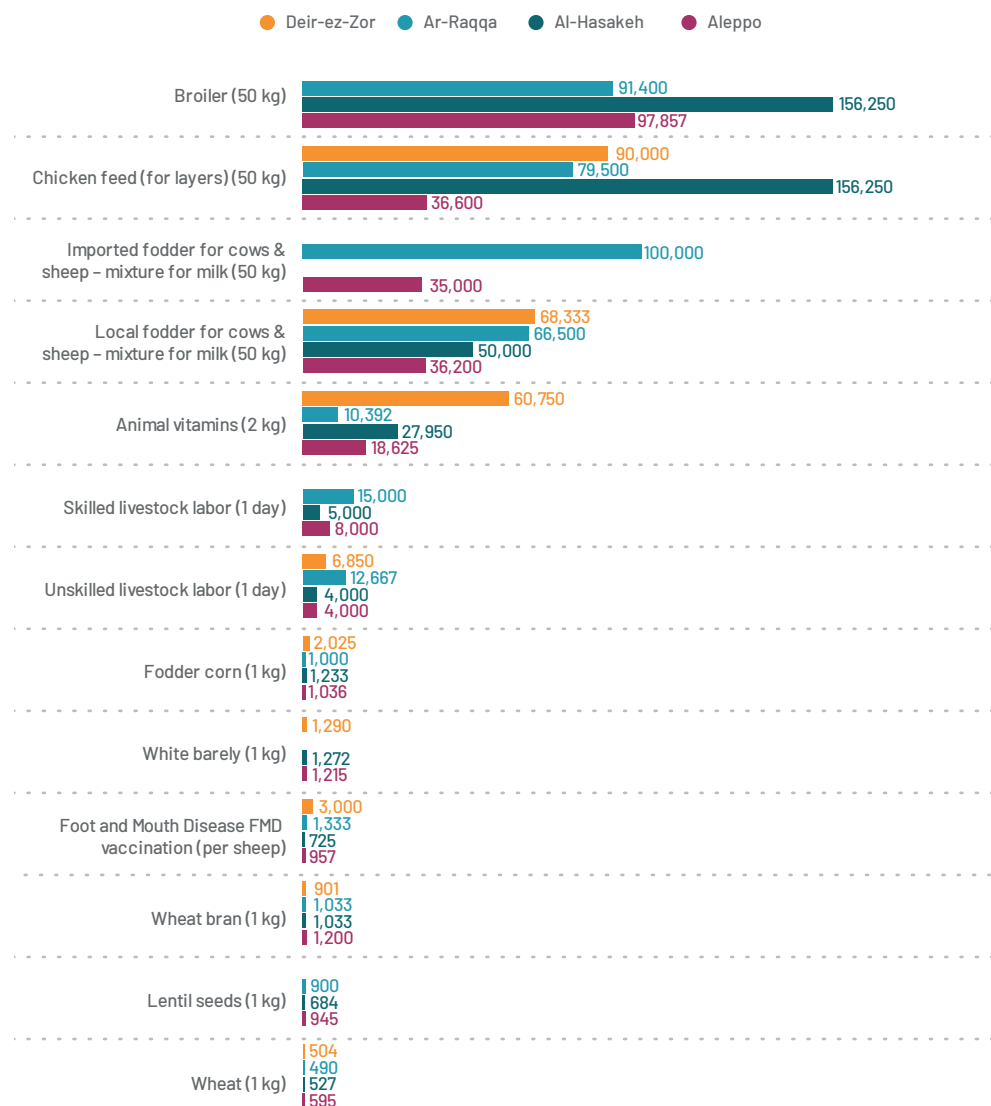


Livestock Inputs

This category includes various types of livestock inputs such as livestock feed and fodder, vaccination, and wages. Livestock feed and fodder had the widest range, where broiler recorded the highest average price of 156,250 SYP/50 kg in Al-Hasakeh governorate, while wheat recorded the lowest average price of 490 SYP/kg in Ar-Raqqa governorates.

At sub-district level, broiler had the highest recorded average price of 156,250SYP in Al-Hasakeh sub-district, while wheat had the lowest recorded average price of 450 SYP/kg in Quamishli sub-district.

Figure 12. Average Livestock Inputs Prices (SYP) in NES, Sept. 2021

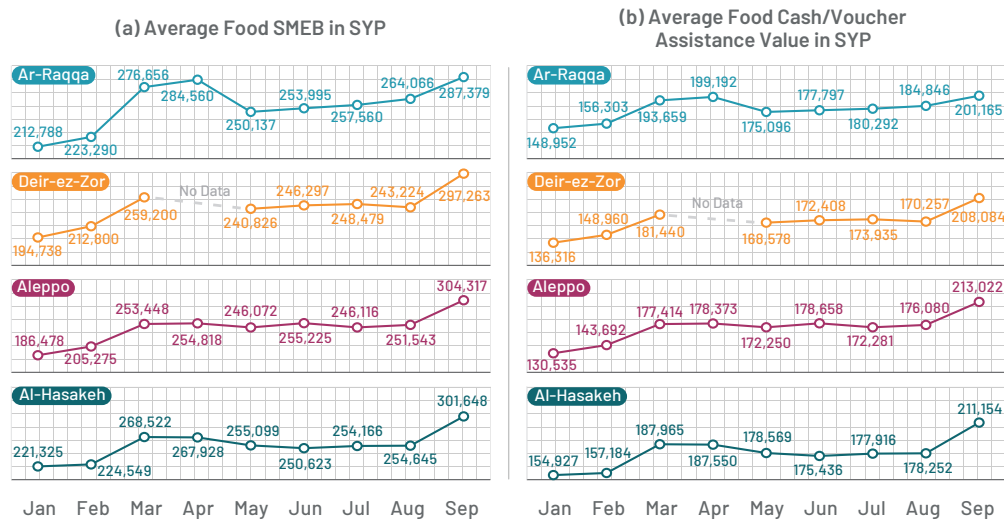


Key Findings - Food Market Prices

3. SMEB and Cash Assistance Value

According to REACH monthly price monitoring data, Aleppo and Al-Hasakeh governorates reported the highest SMEB values while Ar-Raqqa governorate reported the lowest SMEB value in September 2021. However, the difference among governorates was not very significant (range: 297,262 SYP – 301,648 SYP). The SMEB value was on the rise since January 2021, following the trend of the SYP exchange rate against USD. As per figure 2, prices notably increased at the end of quarter one, and started recovering at the end of the second quarter of 2021. However, in September 2021, the SMEB value recorded the highest amount 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 at 70% of the SMEB value.

Figure 13. Average SMEB and Average Food Cash/Voucher Assistance Values, 2021



4. Food Groups Market Prices

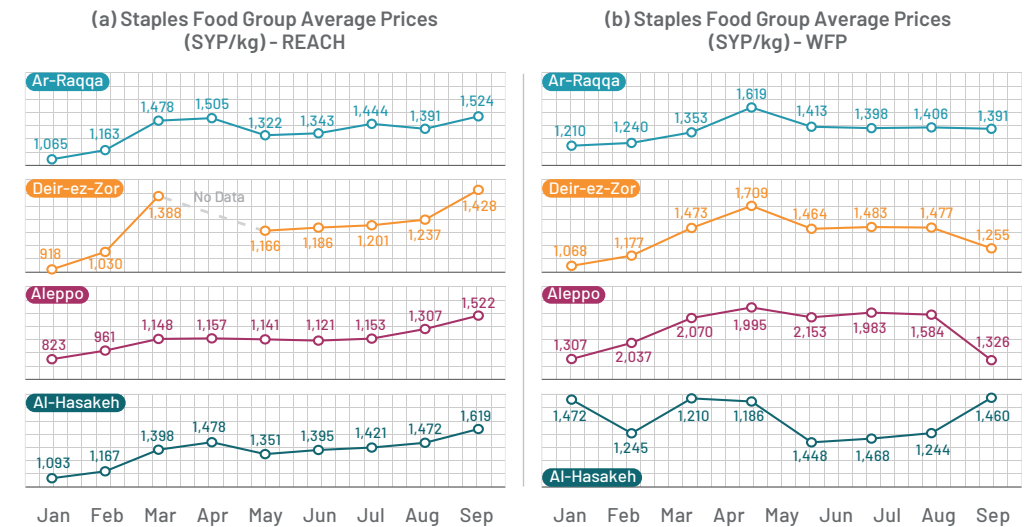
Staples Group

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 NES. However, shop bread and bakery bread reported the lowest prices. Staples followed the same trend as the SMEB temporal price trend, where March and September 2021 recorded the highest staple food prices. The overall prices per governorate

Figure 14. Staples Food Group Average Prices (SYP/kg), 2021



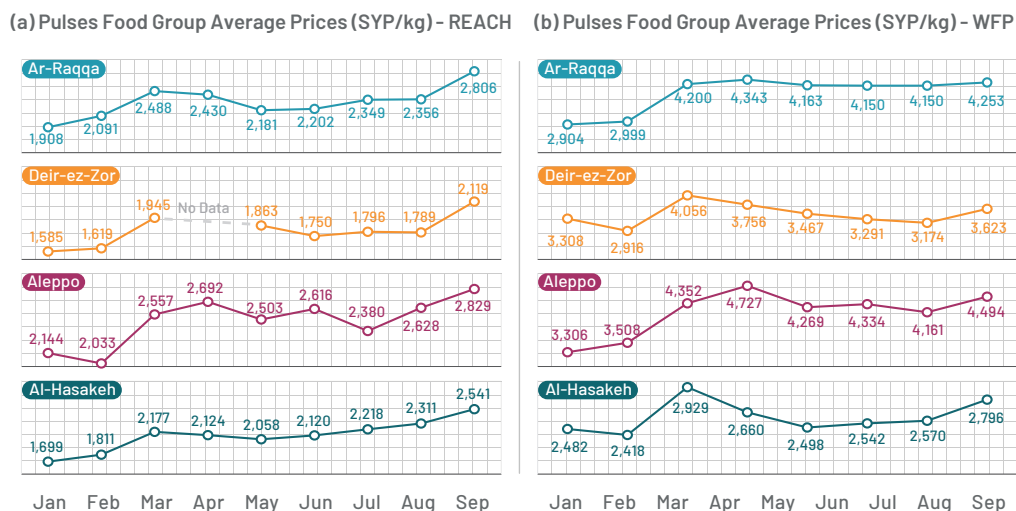
Pulses Group

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 NES, 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.

Figure 15. Pulses Food Group Average Prices (SYP/kg), 2021



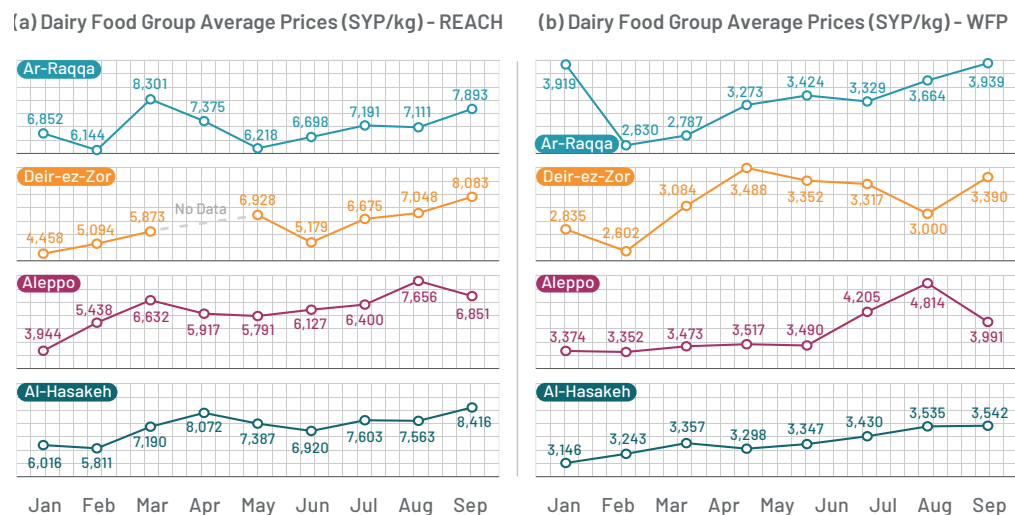
Dairy Group

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 were generally higher than staples prices and lower than pulses (milk and yogurt), which made dairy products more accessible for households to purchase than pulses.

Figure 16. Dairy Food Group Average Prices (SYP/kg), 2021



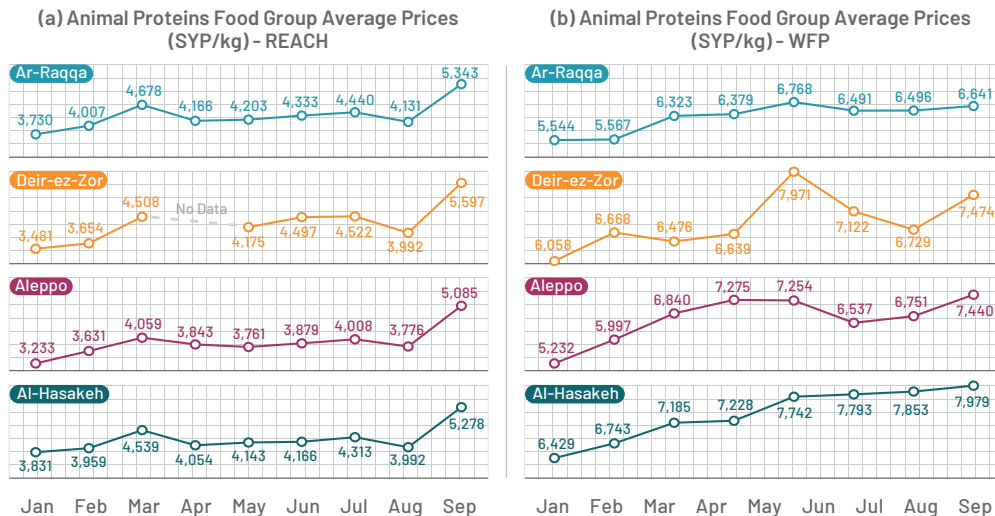
Animal Proteins Group

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 across all governorates in NES. While according to WFP data, minced beef was 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 in the WFP data. Animal protein was considered the most nutritious food group, however, the group was the most expensive of all other food groups.

Figure 17. Proteins Food Group Average Prices (SYP/kg), 2021



Vegetables Group

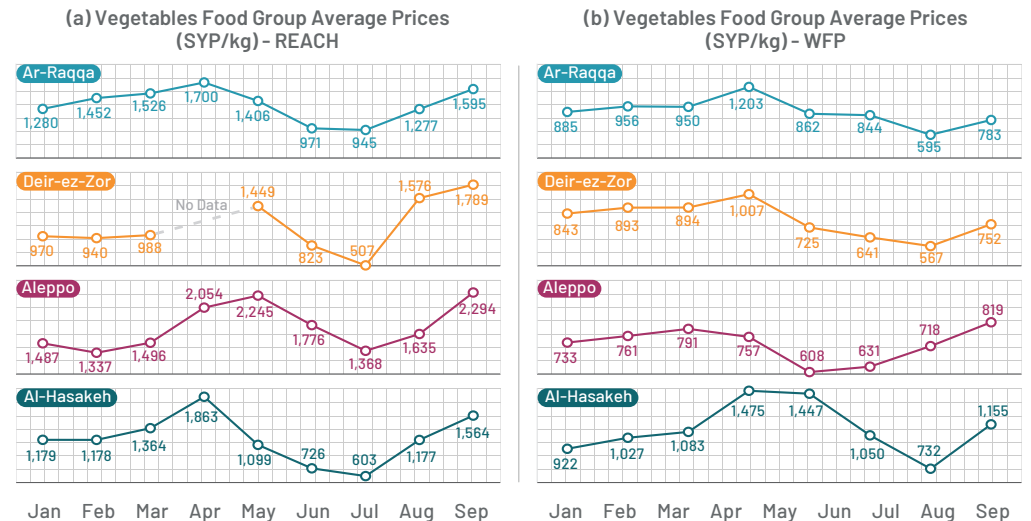
REACH vegetable items: cucumbers, onions, tomatoes, kale, and Jew's mallow (mulukhiya)

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

Leaf vegetables like parsley and kale recorded relatively low prices in WFP and REACH data, respectively.

According to REACH group Jew's mallow (mulukhiya) recorded the highest price in Al-Hasakeh and Ar-Raqqa governorates. It is worth mentioning, that (mulukhiya) is a seasonal leaf vegetable which may be the reason for the high price of this food item. Apart from leaf vegetables, onions recorded the lowest vegetable price in both data sources and across all governorates in NES. Cucumbers, tomatoes, and eggplants recorded the highest prices.

Figure 18. Vegetables Food Group Average Prices (SYP/kg), 2021



Fruits Group

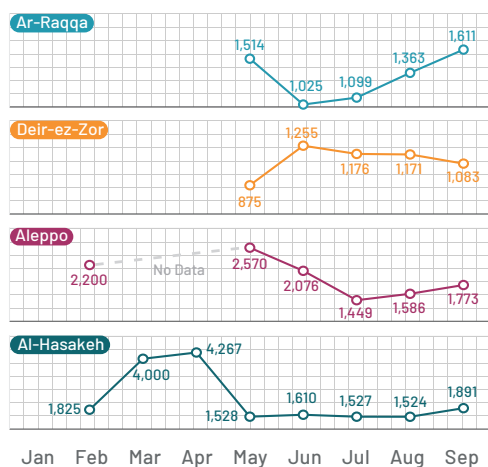
REACH fruit items: nectarines, and watermelon

WFP fruit items: bananas, apples, and dates

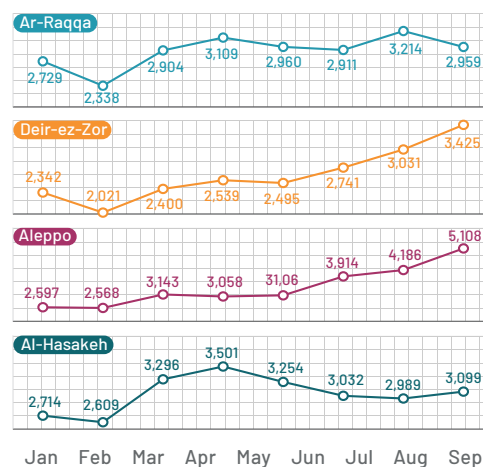
REACH collected prices of nectarines and watermelon, which did not represent the most consumed fruits in NES. These fruits are also seasonal products and might not be accessible throughout the year to many households. As for WFP data, apples recorded the lowest price, while dates recorded the highest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

Figure 19. Fruits Food Group Average Prices (SYP/kg), 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 an increasing trend driven by the high inflation rate and the depreciation of local SYP against the hard foreign currency of USD. Low import capacity, economic crisis, blockade of trade routes, opportunistic ambushes/ banditry along the roads, and the rainfall water scarcity will 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 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 experienced drought in NES. Household purchasing power will also decline seasonally and will be 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 compromised.

Recommendations on FSL Programming

Food prices and agricultural input prices have drastically increased across NES, which could be because of the ongoing conflict and drought during the reporting period. This reported increasing prices of food items and agricultural inputs highlighted the worsening household purchasing power of vulnerable NES households. Given the recorded price increase rate of change for various agricultural inputs, then as FS Cluster partners must design and plan for agricultural inputs and livelihood provision programming, then there is a 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 agricultural 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 partners 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 can 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 import fodder additives to produce livestock feed concentrates at household level

Recommendations for Future Studies

- **Item selection approach:** the number of selected agricultural inputs was 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 revise the selected agricultural inputs and prioritize defined and selected agricultural kits.
- **Items Diversities:** having different varieties for each of the assessed items resulted in having an extensive range of the provided price. This was overcome by conducting a follow-up consultation with the technical experts from FSL cluster members to ensure the data quality and that findings are contextually aware.
- **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.
- **Agricultural input kits response packages:** For agricultural 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 a composite unit of analysis both spatial and temporal. However, it is recommended to consider the FSS_S02 and 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 (sheep/ cattle) Inputs, for spatial and temporal analysis – the first of this kind for Syria's Agricultural Input Market monitoring. This will inform humanitarian 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.