

Integrated Market Monitoring Initiative (IMMI)

Bulletin Quarter 3 (Winter Season), 2022

Price Monitoring for Agriculture and Livestock Inputs



Introduction

Price of inputs is an overarching indicator that provides key information for the implementation of the Food Security and Livelihood (FSL) activities. As an outcome of input supply and demand forces, input price monitoring give timely insight into many different drivers that influence the functioning and viability of a market, and this is relevant for food assistance and agro-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 inputs (crops and livestock) across the targeted geographical locations on a seasonal basis. Monitoring prices and trends of the cost value of selected crops and livestock inputs, 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 holders aimed at 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 input markets in Northeast Syria (NES) on a seasonal basis, to assess the availability, country of origin, sources, and prices of agricultural inputs. **This report covered the winter agriculture production season of NES in 2022¹.**

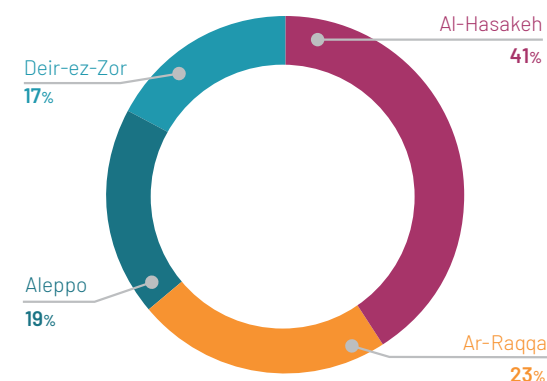
¹ Winter Planting season (August-September) - WoS FSL Cluster Seasonal Calendar. This [link](#) for the last Winter Planting Season (August-September) - 2021

Study Methodology and Geographical Coverage

The set of agriculture inputs covered in this round (winter season) were identified by the NES FSL cluster and Agriculture Working Group (AWG). The study covered 101 agriculture inputs categorized into five different groups.

Prior to the start of data collection, the specifications and naming of the selected agriculture inputs were validated with AWG members. **Ten partners collected input price data across 27 subdistricts in the governorates of Aleppo, Deir-ez-Zor, Ar-Raqqa and Al-Hasakeh as in figure 1**, with increased participation and coverage rate in comparison to Q3 2021 where 18 subdistricts were covered. Not all sub-districts in NES were covered mainly because of the limited humanitarian access to all areas due to the security-related issues. The reported prices of agricultural inputs were validated through discussions with the technical and field experts of AWG participating organizations. The outliers' data were revised based on the identified acceptable market price range generated in the validation workshop.

Figure 1. Percentage of Study Respondents per Governorate



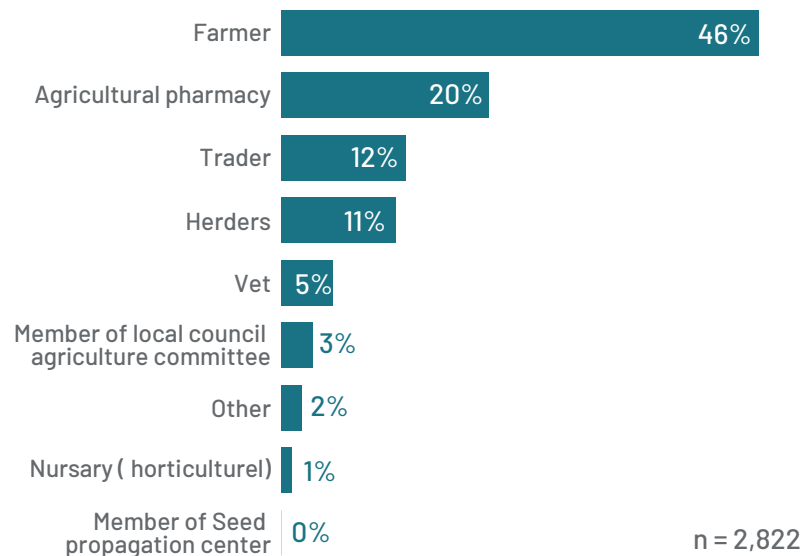
Study Respondents

The data collection teams reached 2,001 study respondents in total from various agricultural backgrounds (see figure 2). In this round, farmers had the highest participation rate (46%), followed by agricultural pharmacies (20%), then traders (12%), and the rest mainly composed of herders, veterinary experts, members of the Economic and Agricultural Commission (EAC), members of the agricultural and livestock committees. In comparison to Q3 2021, there was no major change in the percentage of the respondent's participation.

Interactive Dashboard

This report provides a summary of the key findings and a description of the study methodology. For detailed analysis and visualization of the agricultural inputs' availability, country of origin, and prices of inputs at different geographical levels (sub-district, district, governorate), refer to the produced interactive dashboard through this [link](#).

Figure 2. Data Collection Respondents



Key Findings – Agricultural Inputs

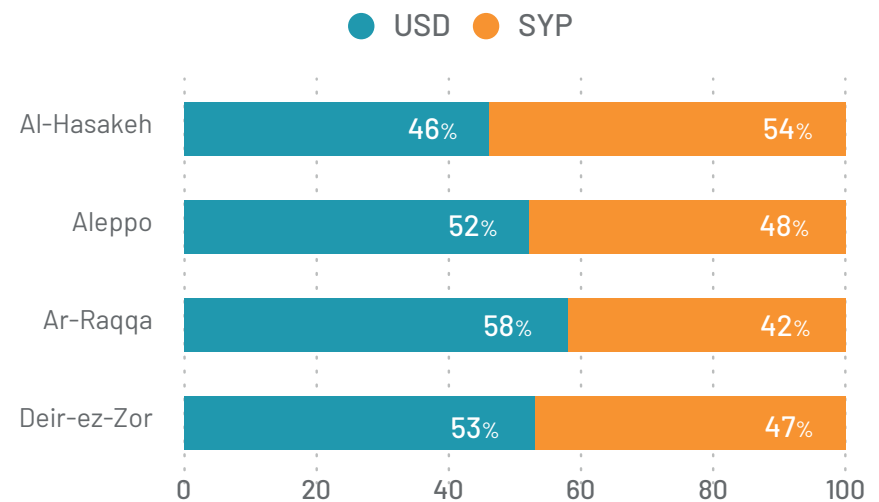
Exchange Rate and Currency Used for Trading Inputs

The reported exchange rate of 1 US Dollar (USD) for Q3 2022 was 4,618 Syrian Pound (SYP) in NES whereas it was 3,379 SYP/USD in Q3 2021. There was a notable depreciation in exchange rates of SYP against the USD in the last two years, the exchange rate of one dollar increased by 1,239 SYP in comparison with the same period last year.

Most respondents reported using both USD and SYP (41%) to purchase and sell their agricultural (crops and livestock) inputs and outputs. Other respondents indicated that they only used USD (33%) to purchase and sell their agricultural inputs and outputs. Also, some respondents reported using only SYP (26%) to purchase and sell their agricultural inputs and outputs.

In Aleppo and Deir-ez-Zor governorates, nearly equal use of the US Dollar (USD), and Syrian Pound (SYP) was reported. However, in Ar-Raqqa governorate it was reported that the use of US Dollar (USD) was more common than the Syrian Pound (SYP).

Figure 3. Currency Used in Trading Agriculture Inputs



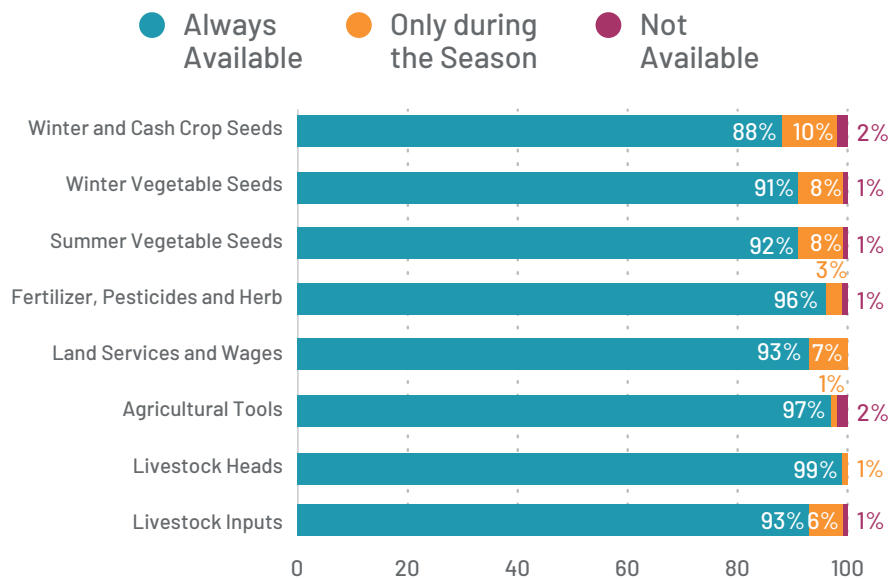
Availability

Generally, most study respondents considered the agricultural inputs as available in their local community market across Northeast Syria during the study period of the winter season of 2022. On average, the agricultural inputs availability percentage for all groups covered in this round was reported to be 94% available (Ar-Raqqa and Deir-ez-Zor governorates, 97%, Aleppo governorate, 96%, and Al-Hasakeh governorate, 87%).

Respondents that considered the agricultural inputs as only available during the winter season were reported to be 6% on average, the highest inputs being 10% for Winter and Cash Crop Seeds, 8% for both Winter Vegetable Seeds and Summer Vegetable Seeds, 7% Land Services and Wages, and 6% Livestock Inputs.

On average, only 2% among all the agricultural inputs were considered not available at any time of the year. Most unavailable inputs were in Al-Hasakeh and Ar-Raqqa governorates. The top reported reasons why those inputs were not available was the price increase, the seasonality of inputs, and the high demand for the agricultural inputs.

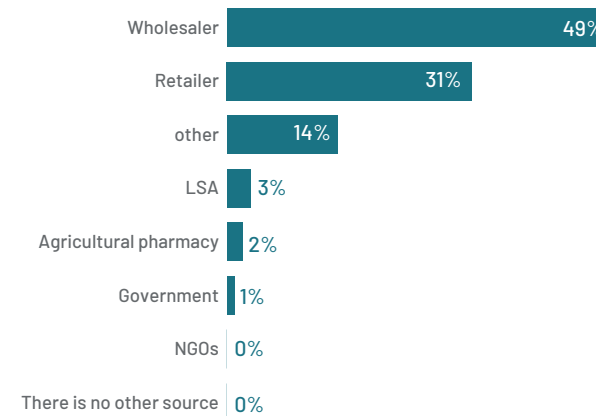
Figure 4. Reported Availability of Agriculture Inputs



Source of Access

Most respondents reported that wholesalers and retailers were the main source of access to agricultural inputs (96%). These sources included farmers, herders, market owners, vets, and agricultural pharmacies. On the other hand, the Local Self Administration of Northeast Syria (LSA)(3%) and the government(1%) were also identified as other sources of access to obtain agricultural inputs.

Figure 5. Sources for accessing



Country of Origin

Across all assessed agricultural inputs, Syria was reported as the main country of origin of the inputs with 67% and was followed by 17% from China. The remaining 16% indicated different countries of origin for the assessed agricultural inputs, including but not limited to Holland, Ukraine, Russia, Spain, and Jordan, and varying across the type of inputs. However, these percentages 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 (30%), followed by Syria (25%), then Turkey (14%) as a reported source for **agrochemical inputs** (fertilizers, pesticides, and herbicides).
- China came as the first reported country of origin for the **agricultural tools** (45%), and Syria came in second (34%) followed by Turkey (14%)
- Syria was the main reported country of origin for the **Land Services and Wages** (99%).
- Most **livestock inputs** (specifically feed and fodder, vaccination, and wages) were reportedly produced in Syria (69%), followed by Turkey (15%), then China, Russia, and Ukraine (4%) per each country.
- Syria was the main reported country of origin for the **winter and cash crops seeds** (76%), followed by Turkey and European Countries with (8%) per each, then regional countries (Jordan, Iraq, and Lebanon) recorded (5%).
- Most **winter vegetables seeds** were reportedly produced in Syria (91%), followed by Turkey (3%), European Countries (3%) and regional countries (2%).

- Many of the **summer vegetables seeds** were reportedly produced in Syria (54%), followed by Turkey (20%), European Countries (20%), and China (4%).
- Syria was the main reported country of origin for the **Livestock Heads** (89%), Turkey (5%), Holland (5%) and regional countries with (1%).

Figure 6. Country of Origin

	Syria	Turkey	China	European Countries	Regional (Jordan, Iraq and Lebanon)	Other	Holland	Russia	Ukraine
Winter and Cash Crop Seeds	76%	8%	3%	8%	5%				
Winter Vegetable Seeds	91%	3%		3%	2%	1%			
Summer Vegetable Seeds	54%	20%	4%	20%		2%			
Fertilizer, Pesticides and Herb	25%	14%	30%	12%	12%	7%			
Agricultural Tools	34%	14%	45%			7%			
Livestock Inputs	69%	15%	4%			5%		4%	3%
Livestock Heads	89%	5%			1%		5%		
Land Services and Wages	99%	1%							

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

Source Inside Syria

One of the objectives of Q3 2022 was to assess the sources of agricultural inputs inside Syria. The results showed that the highest percentages were reported from the governorates of Aleppo, Al-Hasakeh, Ar-Raqqa, Deir-ez-Zor, Damascus, Homs, Rural Damascus, and Hama.

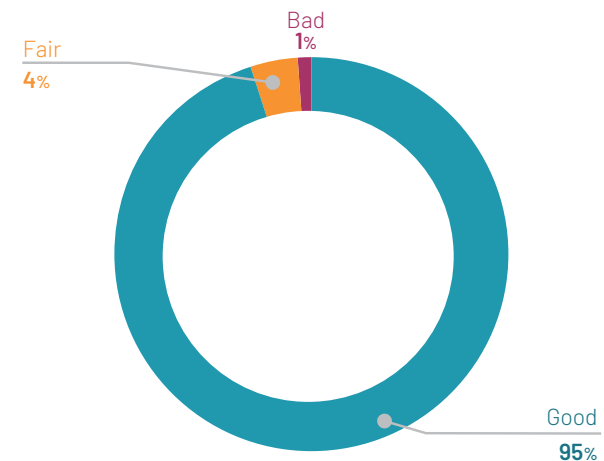
Figure 7. Source inside Syria

	Al-Hasakeh	Ar-Raqqa	Deir-ez-Zor	Aleppo	Damascus	Rural Damascus	Other	Homs	Hama	Idleb	Latakia
Winter and Cash Crop Seeds	40%	26%	19%	12%	2%	1%	1%	0.3%	0.3%	0.2%	0.0%
Livestock Heads	31%	25%	20%	15%	2%	2%	1%	3%	1%	0.2%	0.4%
Livestock Inputs	29%	26%	18%	19%	5%	1%		1%	1%	0.1%	0.1%
Summer Vegetable Seeds	21%	19%	16%	27%	11%	2%	1%	1%	0.2%	0.5%	0.5%
Winter Vegetable Seeds	21%	18%	11%	26%	14%	3%	1%	2%	2%	1%	1%
Fertilizer, Pesticides and Herb	2%	2%		5%	43%	15%	1%	29%	1%	1%	2%
Agricultural Tools	9%	12%	4%	63%	8%	2%		1%	1%		
Land Services and Wages	21%	29%	34%	15%	0.2%						

Quality of Agricultural Input

Overall, the quality of the agriculture inputs in the market of Northeast Syria based on the respondent's opinion was Good (95%), Fair (4%) and Bad by (1%). The top reported reasons for fair and bad quality of inputs were due to the lack of hybrid seeds, the weak production of local seeds, less effectiveness of chemicals to treat diseases, and the lack of control over the quality of the seeds locally produced.

Figure 8. Quality of Agriculture Inputs



Key Findings – Agriculture 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, livestock inputs and agricultural tools.

It was taken into consideration that inputs had different unit of measurements, therefore the unit were unified for the sake of reporting (excluding figures).

Winter & Cash Crop Seeds

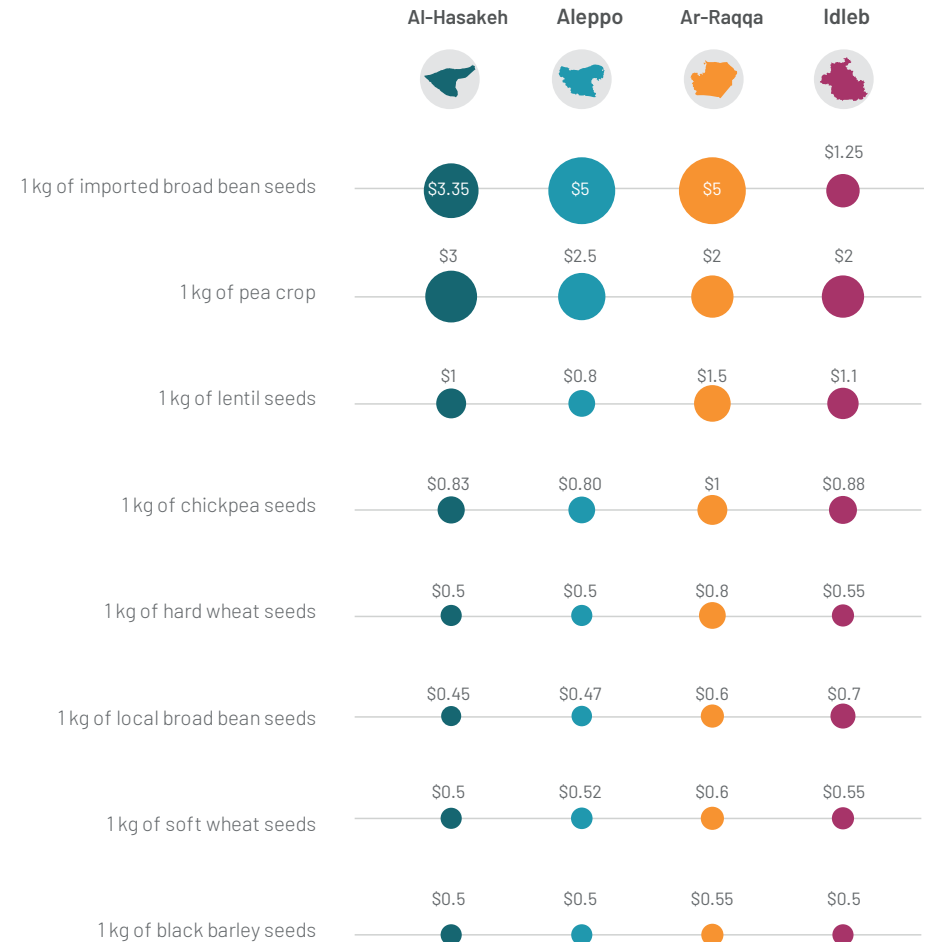
With close coordination among the field agricultural technical experts, iMMAP added more specification to the 8 assessed winter and cash crop seed types to avoid a large range of prices. This resulted in having 8 crop seed items under this group as illustrated in Figure “Median Prices in USD of Winter and Cash Crops - Q3 2022”.

The median price of winter and cash crops seeds varied across different seed types as assessed across the governorates. Imported broad bean seeds, pea crop, and chickpea seeds, respectively, recorded the highest median prices of the assessed seed types under winter and cash categories across NES. Black barley seeds, soft wheat seeds, local broad bean seeds, and hard wheat seeds, respectively, recorded the lowest median prices of the assessed seed types under winter and cash categories across NES.

It is worth noting that out of the 8 assessed crop seed types under the winter and cash crops seeds in NES, Ar-Raqqa governorate recorded the highest median price for most crop seed types, this was followed by Deir-ez-Zor governorate which recorded the second highest median price, and Al- Hasakeh governorate with Aleppo governorate came last.

At District level, imported broad bean seeds recorded the highest price of 6 USD/kg in Deir-ez-Zor, Al- Hasakeh and Ain Al Arab districts, while black barley seeds recorded the lowest price of 0.34 USD/kg in Qamishli district.

Figure 9. Winter and Cash Crop Seeds



Winter Vegetable Seeds

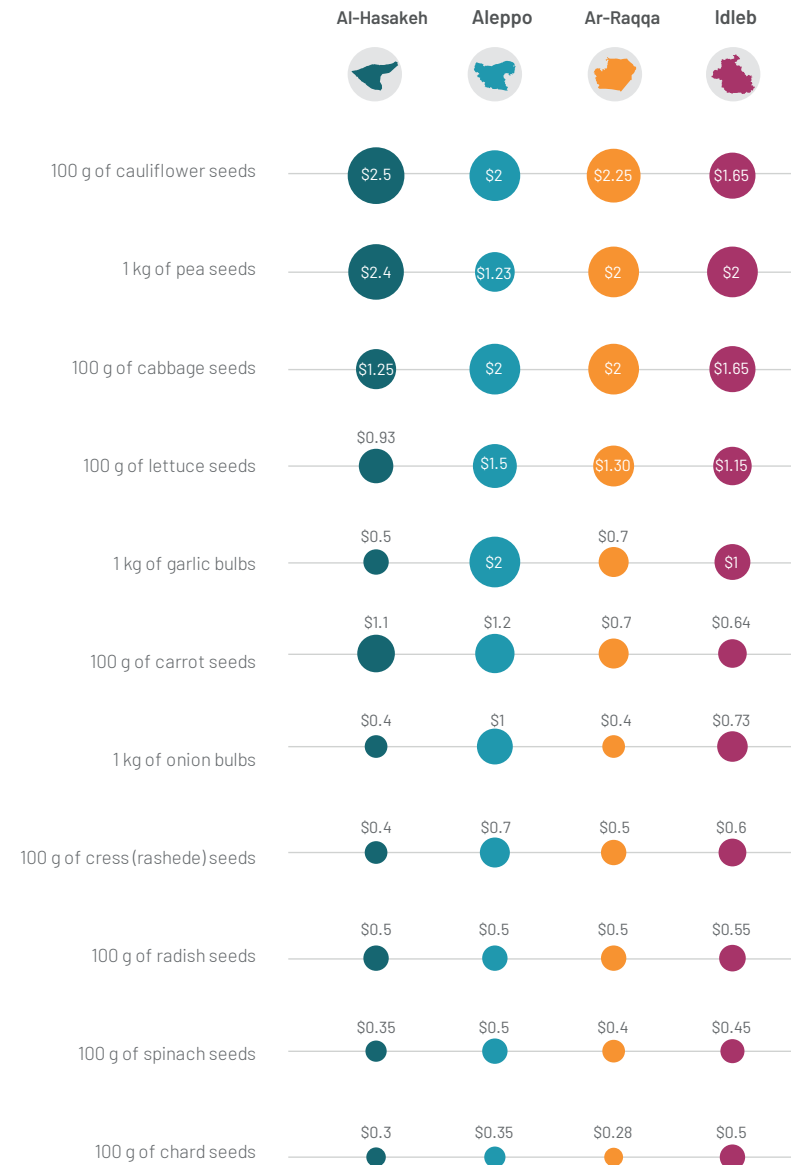
By applying the specifications on different varieties of the assessed winter vegetables seeds, the winter vegetable seeds types become 11 winter vegetable seed types under this group. Cauliflower seeds, cabbage seeds, lettuce seeds, carrot seeds, cress (rashede) seeds, radish seeds, and spinach seeds respectively, recorded the highest median prices of the assessed winter vegetable seed types under winter vegetables group in NES. Whereas winter onion bulbs, garlic bulb and onion, pea seeds, and chard seeds respectively, recorded the lowest average price across the assessed winter vegetable seed types under winter vegetables group in NES.

In this category, out of the 11 assessed crop seed types under the winter vegetables seeds, Aleppo, and Deir-ez-Zor governorates recorded the highest median price for most vegetable seed types, followed by Al-Hasakeh governorate, then Ar-Raqqa governorate recorded the lowest median price.

Cauliflower seeds recorded the highest median price of 2.5 USD/100g in Ar-Raqqa governorate. On the other hand, chard seeds recorded the lowest average price of 0.275 USD/100g also in Ar-Raqqa governorate.

At district level, Cauliflower seeds recorded the highest average price of 6UDS/100g in all Al-Malikeyyeh, Ar-Raqqa, and Menbij districts, while chard seeds recorded the lowest average price of 0.15 USD/100g in both Ar-Raqqa and Quamishli districts.

Figure 10. Median Prices in USD of Winter Vegetable Seeds - Q3 2022

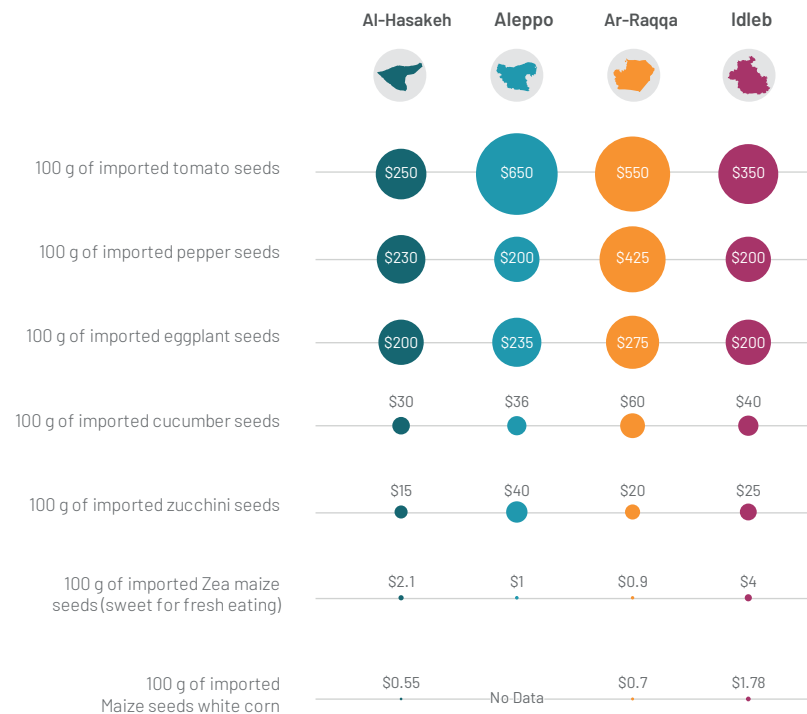


Summer Vegetable Seeds

Overall, in this category, imported summer vegetable seeds recorded higher median prices. Imported tomato seeds had the highest reported average price of 650 USD/100 g in Aleppo governorate. In comparison, local Maize seeds (white corn) had the lowest recorded average price of 0.25 USD/100g in Al-Hasakeh governorate. These findings are related to the same findings from a FAO Syria report as triangulated to verify the authenticity of this data highlighting exorbitant high prices for imported vegetable seeds³.

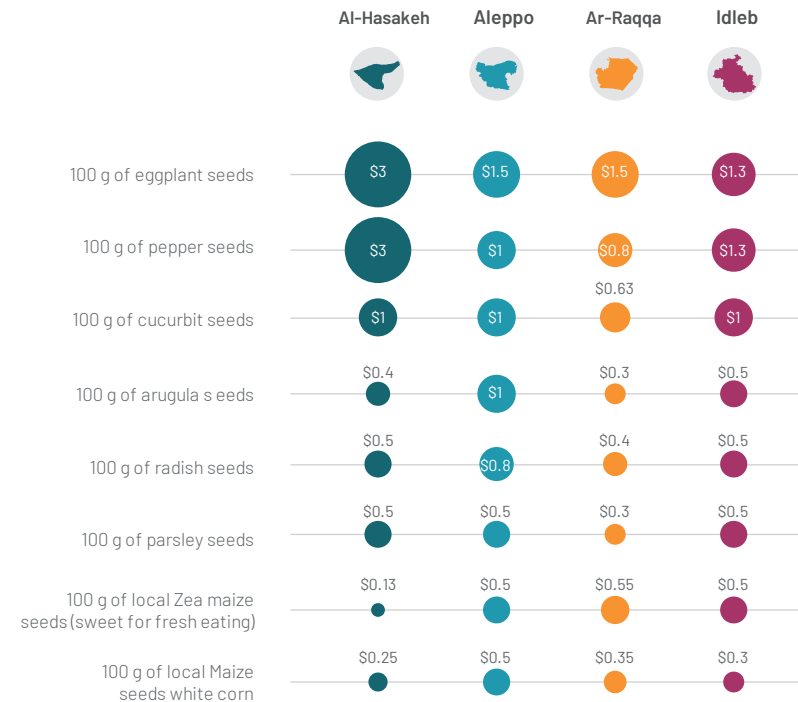
At district level, imported tomato seeds had the highest recorded price of 1,100 USD/100g in Ar-Raqqa district. However, local Maize seeds had the lowest recorded price of 0.1 USD/100g in both Qumishli and Abu Kamal sub-districts.

Figure 11. Median Prices in USD of Summer Vegetable Seeds (Imported) - Q3 2022



In general, the reported median price of imported items was higher than the reported median price of locally sourced summer vegetable seeds. Only eggplant and Zea maize seeds (sweet for fresh eating) showed different price patterns in this regard with a significant variation between the imported and local types. The median price of imported eggplant seeds was higher than the median price of local eggplant seeds. The median price of 100 gr of imported eggplant seeds was 227.5 USD, whereas the median price of 100 gr of local eggplant seeds was 1.8 USD.

Figure 12. Median Prices in USD of Summer Vegetable Seeds (Local) - Q3 2022



³ This link is for the latest FAO report on agriculture inputs and commodity price, June 2022 per 100 seeds while we are reporting on 100 g which is enough to plant 10 donums

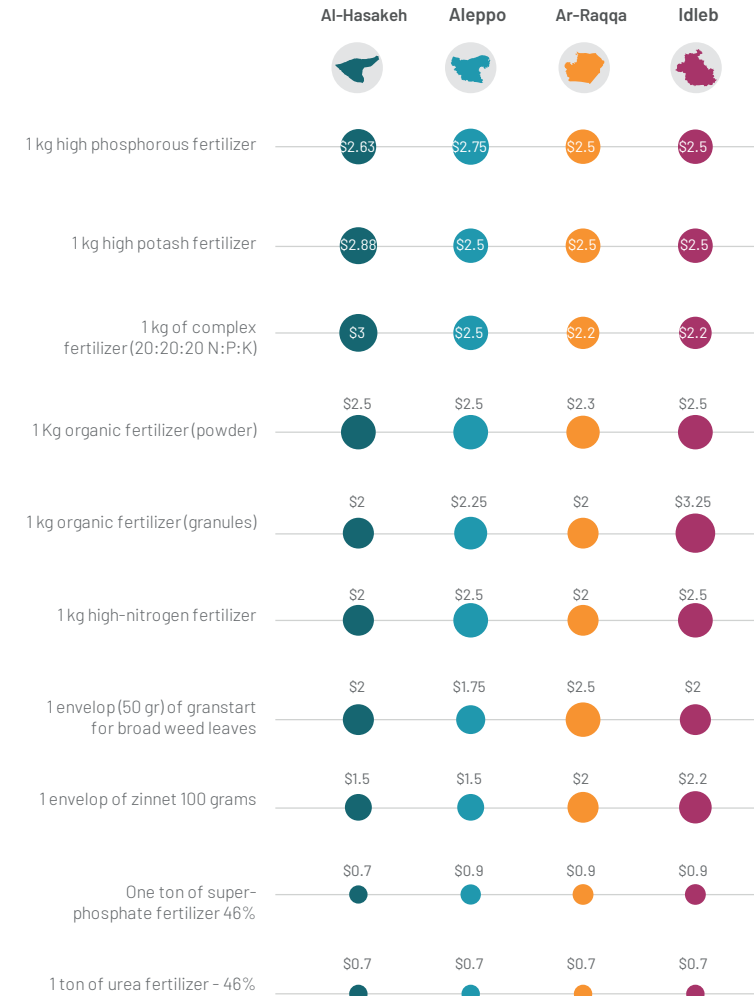
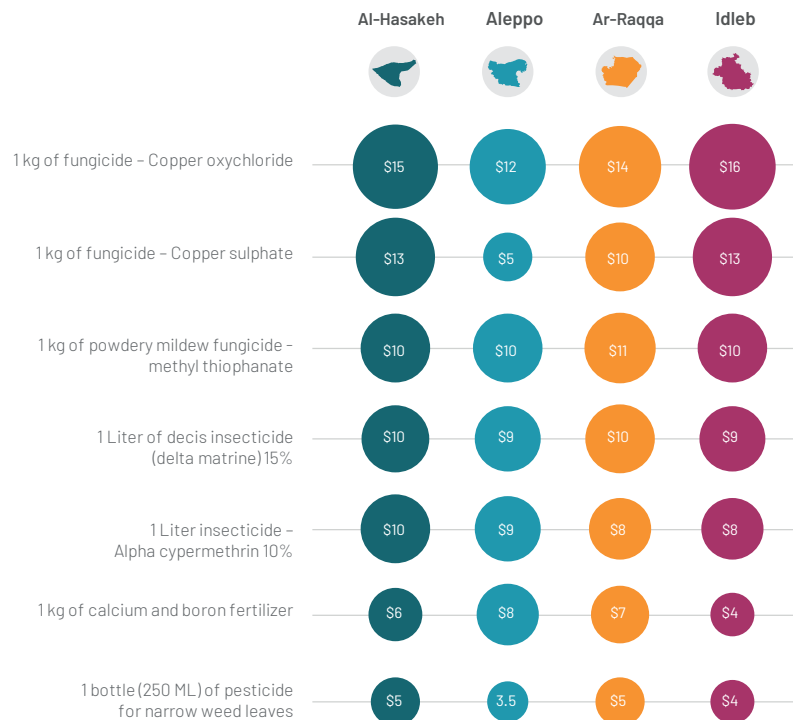
Fertilizers, Pesticides, and Herbicides

Seventeen chemical products were assessed under the Fertilizers, Pesticides and Herbicides group during the third quarter of 2022 across the local markets in NES. Collected data recorded varied median prices across different types and assessed governorates.

For instance, in this category, fungicide - Copper oxychloride had the highest recorded median price of 15.5 USD/kg in Deir-ez-Zor governorate. On the other hand, urea fertilizer - 46% had the lowest reported median price of 0.7 USD /kg across all governorates in NES.

At district level, fungicide - Copper oxychloride recorded the highest price of 18 USD/kg in Abu Kamal district, while urea fertilizer - 46% recorded the lowest average price of 0.55 USD/kg in Al-Hasakeh district.

Figure 13. Median Prices in USD of Fertilizer, Pesticides and Herb - Q3 2022

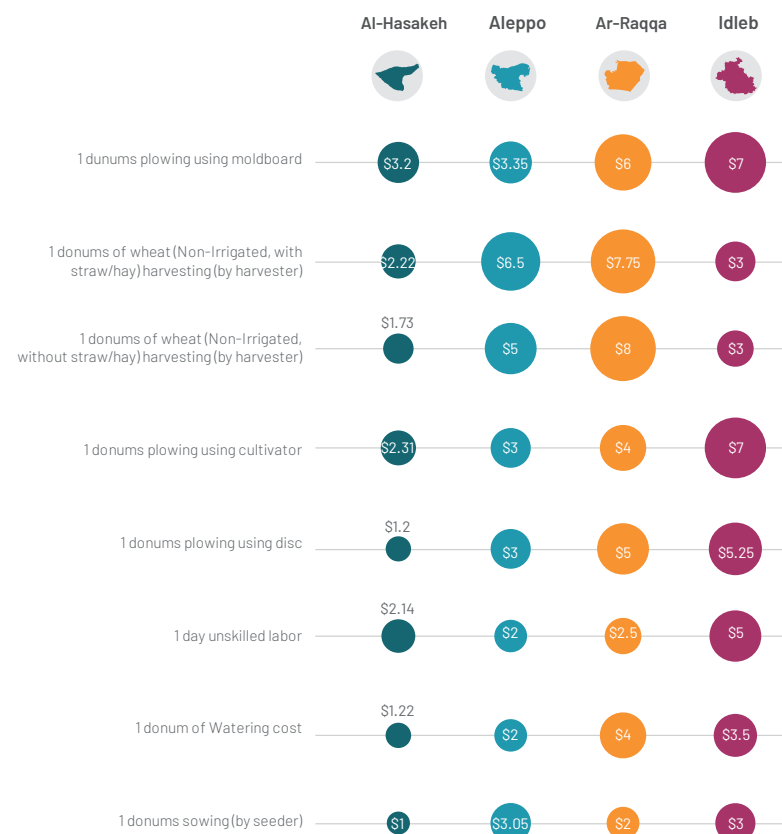
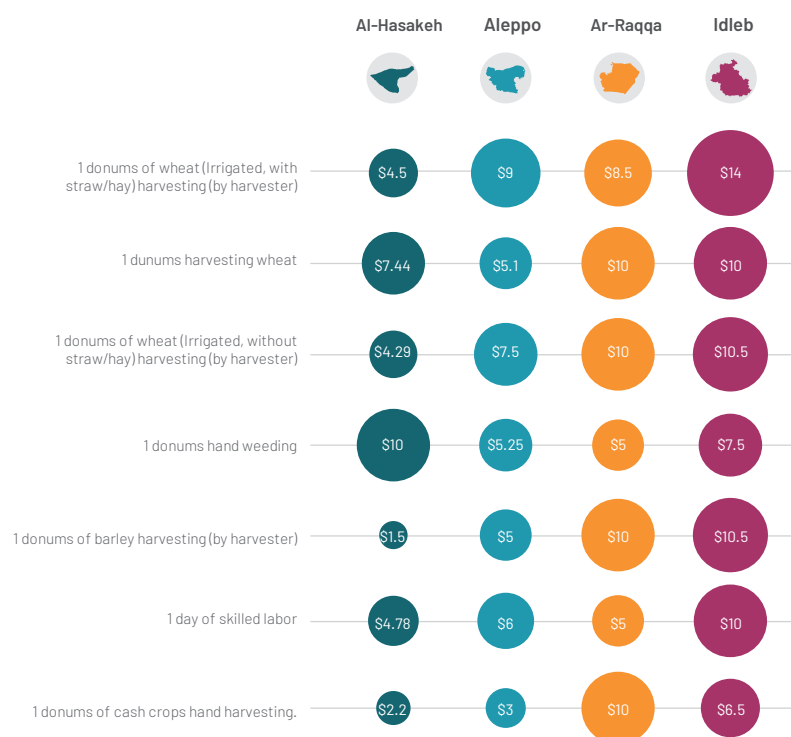


Land Services and Wages

Fifteen types of land services were assessed under the land services group during the third quarter of 2022 across the local markets in NES. Harvesting wheat (irrigated, with straw) by harvester was recorded the highest median price of 14 USD/donum in Ar-Raqqa governorate, while sowing by seeder had the lowest recorded average price of 1 USD/donum in Al-Hasakeh governorate.

In addition, hand weeding had the highest reported price of 20 USD/donum in Abu Kamal district, while sowing by seeder had the lowest recorded price of 0.45USD/donum in Al-Malikeyyeh district.

Figure 14. Median Prices in USD of Land Services and Wages - Q3 2022

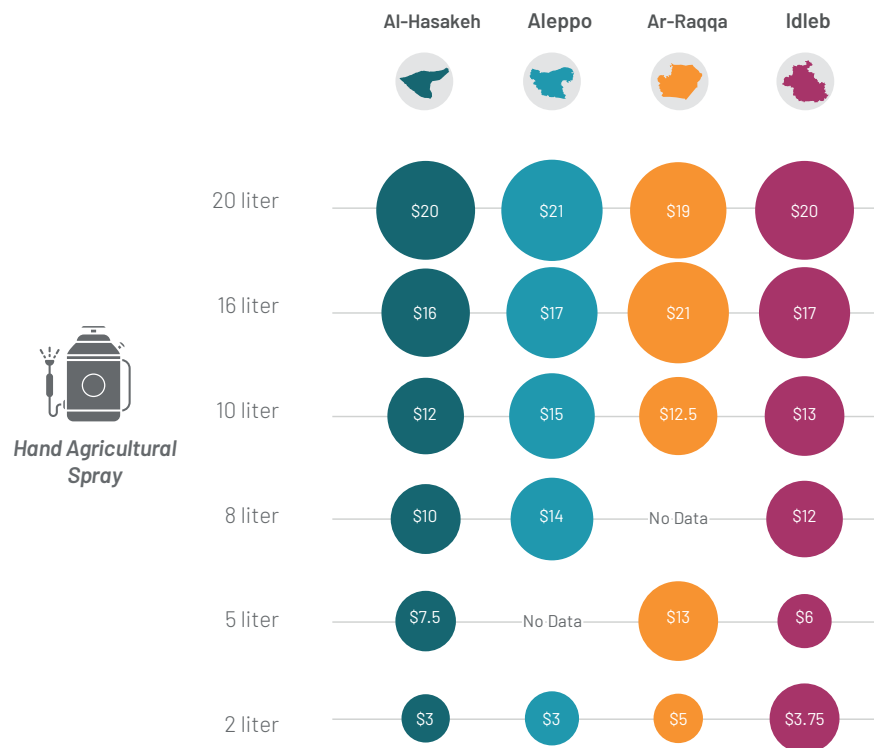


Agricultural Tools

Figure “Median Prices in USD of Agriculture Tools - Q3 2022” summarizes the reported prices in each governorate for the tools and equipment used in agriculture practices. Aleppo governorate recorded the highest median hand agricultural spray 20-liter price, followed by Deir-ez-Zor and Al-Hasakeh then Ar-Raqqa governorates, respectively.

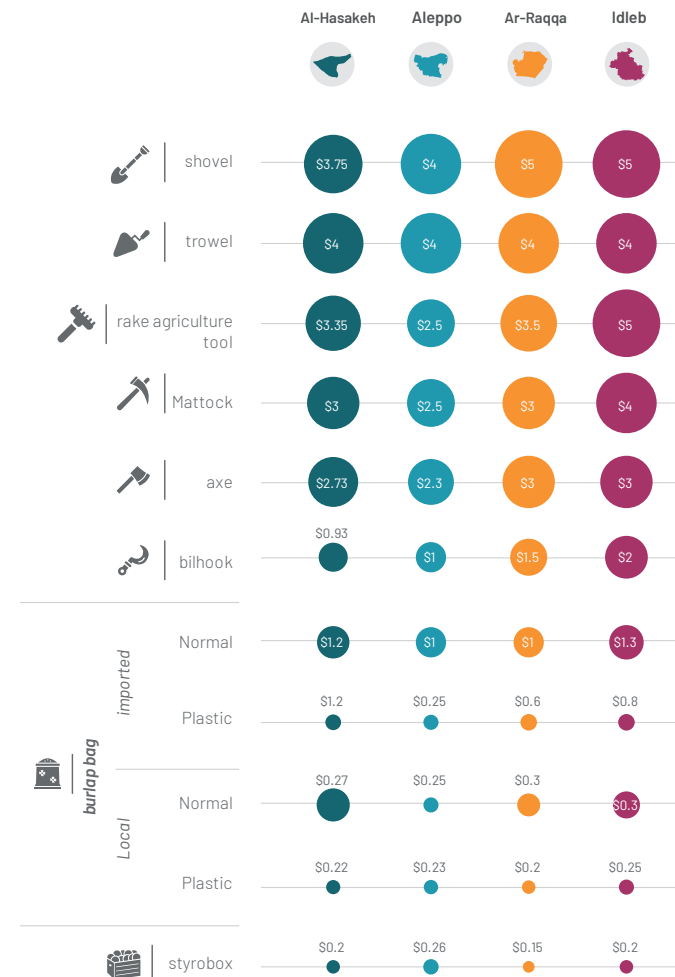
The overall median cost of local burlap bag (plastic) was 0.22 USD, whereas in Deir-ez-Zor and Al-Hasakeh governorates reported the highest median price, followed by Ar-Raqqa and Aleppo governorates, respectively. Study respondents in Aleppo governorate reported that farmers did not have access to hand agricultural spray 5-liters, while in Ar-Raqqa they did not have access to hand agricultural spray 8-liter.

Figure 15. Median Prices in USD of Hand Agricultural spray Tools - Q3 2022



At district level, hand agricultural spray 20-liter had the highest recorded price of 45 USD in Ar-Raqqa districts, while local burlap bag (plastic) had the lowest recorded price of 0.1 USD in Ar-Raqqa and Menbij districts.

Figure 16. Median Prices in USD of Agricultural Tools - Q3 2022



Key Findings – Livestock Inputs

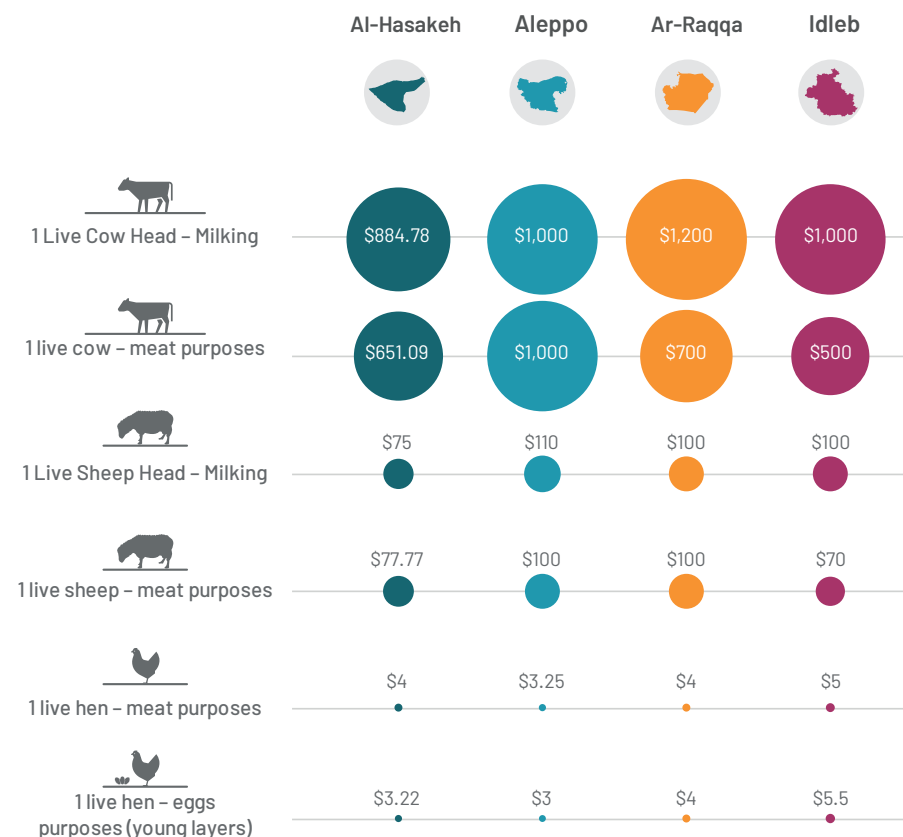
This study also assessed the prices of different livestock inputs, including livestock heads (cow, sheep, and poultry), feed and fodder, vaccination, and wages. Nineteen items were assessed under the livestock inputs as presented in the categories below.

Livestock Heads

This category covered live animal prices, and inputs and services related to animal production. Live animal Prices ranged depending on the animal production purpose whether for meat, milk, or eggs, where naturally live cow animals were considered the most expensive and particularly for milking purposes. Cow meat was reported as fairly available in Amuda subdistrict in Al-Hasakeh governorate. As for poultry meat, Amuda subdistrict in Al-Hasakeh governorate and Ain al Arab subdistrict in Aleppo reported to have very limited number of poultry producers and chicken meat was not widely available compared to other subdistricts in NES due to the weather conditions.

The most common raised concern was the shortage in green pastureland and increased prices of animal production inputs, namely, livestock feed and fodder. Farmers reported that the increased prices of livestock feed and fodder were forcing some farmers to sell their animals at lower prices.

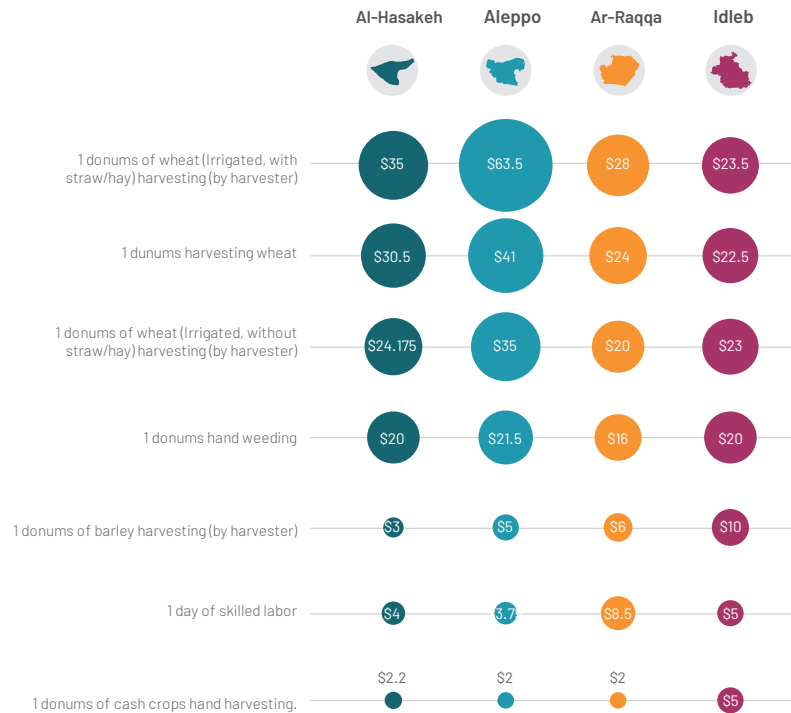
Figure 17. Median Prices in USD of Livestock Heads - Q3 2022



Livestock Inputs

Nine livestock inputs were assessed under the livestock inputs group during the third quarter of 2022 across the local markets in NES; these were grouped into three main categories: Mixture feed, individual feed items, and animal vaccine & vitamins. For the mixture feed category, the median reported price of broiler was the highest at 63USD/50 kg in Aleppo governorate, this was followed by daily wages of skilled livestock labor (10USD/ day) in Deir-ez-Zor governorate, and wheat hay being the cheapest at (0.1 USD/1kg) across all NES. **“Foot and Mouth Disease FMD vaccination per sheep” was not available in most markets in Ar-Raqqa, Membij, Jurneyyeh, Karama, and Darbasiyah subdistricts, this is usually imported, and this is It is usually distributed free of charge from the government.**

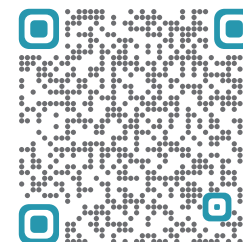
Figure 18. Median Prices in USD of Livestock Inputs - Q3 2022



Recommendations

- Agricultural input prices have drastically increased across NES compared with the **winter agriculture production season of NES in 2021 for the same inputs**, which could be because of the ongoing conflict, closure of border crossings and lack of pasture during the reporting period. This reported increase prices of agricultural inputs highlighted the worsening household purchasing power of vulnerable NES households. **Given the recorded price increase rate of change for various agricultural inputs in comparison with Q3 2021, 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.**
- One of the main reasons for the higher prices of agricultural inputs than last year was the 10% decrease in the percentage of agriculture inputs reported originated from Syria in comparison with the **winter agriculture production season of NES in 2021** against a 12% increase in imports from China this year. This year 10% was recorded as agriculture inputs imported from European Countries in comparison with 5% last year.
- With the recorded ever increase in livestock fodder/feeds given the lack of pasture, humanitarian partners need to consider support to farmers to purchases grain and farm by-products from farmers and import fodder additives to produce livestock feed concentrates at household level.
- The study reported that agriculture (crops and livestock) inputs were widely available in the markets across NES. The present report recorded that **most agriculture inputs were locally available, with Aleppo, Damascus, Deir-ez-Zor, Ar-Raqqa, and Rural Damascus governorates recorded with the highest internal sources to obtain agricultural items.** This calls for raising awareness of the abundance of these inputs inside Syria instead of importing them at a high cost.
- Where possible, the humanitarian partners need to gradually **promote the distribution of locally procured quality open pollinated varieties which are locally adapted seeds (cereals, pulses, and vegetables). Distribution of open pollinated varieties has a merit upon harvest, it is possible for seed selection and seed retainment for subsequent planting in future cropping seasons,** thereby, breaking the cycle of seed shortage or prohibitive cost of imported hybrid seeds which at harvest cannot be retained for subsequent cropping, thus, setting donor dependence syndrome tendencies year in year out as beneficiaries would need seed distributions. Furthermore, there is a need from donors, partners, and local authorities to support laboratories specialized in studying seed quality and their compliance with specifications and standards

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THINK!



[LINK](#)