

# Food Security System in Armenia: Policy over Years, Market Functionality, Supply Chains\*

**Gagik Makaryan, Ph.D., President of the Republican Union of Employers of Armenia (RUEA)**  
**Shushanik Makaryan, Ph.D., Sociologist**

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Until mid-2010s Armenia food security policy was heavily linked to poverty. Many of the provisions of the Policy focused on social support mechanisms to the poor. This emphasis was largely driven by the large proportion of poverty in the country—which in 1996 was estimated at 47.7% of the population (Government of Armenia 1997), and in 2019 at 26.4% of the population (Armstat 2020).

As Armenia developed various poverty reduction strategies, gradually, food security policy refocused on ‘self-sufficiency of vital food products’ and on ‘food independence,’ both to be achieved through promoting local agricultural production.

Since 2016 agricultural development policy and food security in Armenia have become strongly interlinked, and the agricultural development is regarded as cornerstone of Armenia’s food security and food self-sufficiency.

However, in the last 20 years the implementation of various food security policies has had many loopholes. The lack of evidence-based assessments of economic risks and capacities in the agriculture prevented opportunities for the government to engage with relevant stakeholders on food security. Laws adopted were not carefully reviewed. *On a practical level* this exposed food insecurity in the country and from time to time various products faced deficit in the market. *On a policy level* this led to vague and unrealistic policy objectives, outdated legislation, and inconsistent policy implementations over years.

For example, the **2002 Law on Ensuring Food Security**, and the **2004 Law on the Minimum Livelihood Basket and the Minimum Livelihood Budget** are outdated, and some policymakers describe them as “dead laws.” Even the **2011 Policy Framework on Ensuring Food Security in Armenia** (the most recent policy concept on food security) is no longer followed by the policy makers, even though its 2017-2021 Action Plan is still being implemented, however little this may make sense. New policy framework is supposed to be drafted soon.

As a result of incoherence that prevailed in food security policies of Armenia in the last 20 years, today, once one of the most prosperous Soviet republics is only the 76<sup>th</sup> in the world with its overall Global Food Security Index (Economist Intelligence Unit 2020). On one component of this index—the food quality and safety, Armenia is even behind of many poor African countries, such as Rwanda, because of its poor nutritional diet: Armenians consume a lot of bread, baked goods, pasta, eggs, and potato which are not healthy dietary habits (WFP 2019).

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\* Please, forward correspondence to Gagik Makaryan at [makaryan.ruea@gmail.com](mailto:makaryan.ruea@gmail.com).

**Table 1.** Global Food Security Index (GFSI) for Affordability, Availability and Quality and Safety of Food, by Country, 2019.

Ranking in the World	Country	Overall Index	Affordability Index	Availability Index	Quality and Safety Index
1st	Singapore	87.4	95.4	83.0	79.4
2nd	Ireland	84.0	90.5	76.8	87.7
3rd	United States	83.7	87.4	78.3	89.1
35th	China	71.0	74.8	66.9	72.6
36th	Belarus	70.9	76.0	62.9	80.2
41st	Turkey	69.8	74.7	64.8	71.1
42nd	Russia	69.7	79.8	60.1	70.9
48th	Kazakhstan	67.3	77.5	57.7	68.3
53rd	Azerbaijan	64.8	75.3	59.2	54.0
71st	Uzbekistan	59.0	65.6	55.1	53.4
76th	Ukraine	57.1	63.9	50.0	59.6
76th	Armenia*	57.1	51.7	66.2	45.4
77th	Myanmar	57.0	59.1	57.2	51.3
78th	Pakistan	56.8	63.2	55.7	43.6
79th	Nepal	56.4	58.5	55.4	53.7
80th	Mali	54.4	45.9	60.1	59.9
81st	Senegal	54.3	51.6	56.1	56.1
82nd	Nicaragua	54.2	63.5	47.9	48.2
83rd	Bangladesh	53.2	60.4	54.8	30.6
84th	Cote d'Ivoire	52.3	53.5	58.1	33.1
85th	Benin	51.0	48.6	54.9	46.4
86th	Kenya	50.7	56.7	48.0	43.2
87th	Burkina Faso	50.1	47.0	55.9	41.6
88th	Cameroon	49.9	53.7	47.6	47.0
89th	Niger	49.6	50.2	53.6	37.4
90th	Cambodia	49.4	56.7	48.1	34.6
91st	Ethiopia	49.2	49.7	52.6	39
92nd	Laos	49.1	55.5	47.6	37.4
93rd	Tajikistan	49.0	58.8	41.1	46.6
94th	Nigeria	48.4	50.4	45.8	50.7
95th	Rwanda	48.2	43.8	52.0	48.5
96th	Tanzania	47.6	45.1	50.4	45.9
97th	Guinea	46.7	47.4	52.4	29.0
98th	Uganda	46.2	45.8	45.5	49.1
99th	Sudan	45.7	47.1	44.4	46.0
100th	Angola	45.5	51.3	40.5	44.9
101st	Zambia	44.4	41.8	50.7	33.6
102nd	Togo	44.0	45.6	47.2	31.0
103rd	Haiti	43.3	50.3	39.6	35.9
104th	Malawi	42.5	39.4	48.6	33.1
105th	Mozambique	41.4	42.5	47.9	20.6
106th	Sierra Leone	39.0	40.8	40.3	30.6
107th	Syria	38.4	34.6	38.9	46.4
108th	Madagascar	37.9	35.7	45.7	22.1

<b>109th</b>	<b>Chad</b>	36.9	40.3	34.9	33.5
<b>110th</b>	<b>Congo (Dem. Rep.)</b>	35.7	37.3	40.0	19.8
<b>111th</b>	<b>Yemen</b>	35.6	45.5	28.6	30.2
<b>112th</b>	<b>Burundi</b>	34.3	36.6	32.2	34.5
<b>113th</b>	<b>Venezuela</b>	31.2	15.8	32.2	66.9

**Source:** Economist Intelligence Unit (2020), Ministry of Economy of the Republic of Armenia (2020).

\* Armenia’s GFSI assessment was conducted in 2019, but the data and the report are not yet released into the GFSI global public database. Only GFSI index scores are available for Armenia and are posted on the website of the Ministry of Economy of the Republic of Armenia (2020), <https://www.mineconomy.am/page/1333>.

**Global Food Security Index** defines affordability/access as “the ability of consumers to purchase food, their vulnerability to price shocks, and the presence of programmes and policies to support consumers when shocks occur.” Availability refers to “sufficiency of the national food supply, risk of supply disruption, capacity to disseminate food, and research efforts to expand agricultural output.” Quality and safety describe “the variety and nutritional quality of the average diet, as well as food safety” (Economist Intelligence Unit 2020).

## Why linking food security and agriculture is not enough?

Today, Armenia still continues the same line of food security conceptualization that was established 15 years ago, and as a policy objective sees food security as dependent on **achieving self-sufficiency of local production of vital food items**, which on its turn should lead to **food independence** of Armenia. So, food security is part of agriculture.

Within this conceptualization many problems of agriculture are linked to the development of food security. Even on the website of the Ministry of Economy of the Republic of Armenia, food security is listed under agriculture, <https://www.mineconomy.am/en/page/1333>.

**Armenia agriculture has low profitability and has very high initial value of product production.** The reasons are many, and all are interlinked:

Armenia’s agriculture is very vulnerable to natural disasters (hailstorms, drought, frost, landslides, floods, etc.). There are no risk monitoring and management practices to monitor soil and weather conditions, or to have protection infrastructures from hail, or to cultivate climate-resistant or climate-adequate varieties of crops, or to have an insurance against natural disasters and risks. Technologies and machinery are outdated and slow-down production. Land plots are small and fragmented, which makes establishing large cultivation and irrigation systems – to speed up the timing and volume of cultivation—hard. Many arable lands are not cultivated at all, even though they are owned by farmers and peasants. Water shortages and lack of irrigation are serious too. Farmers have low skills and little knowledge about new and innovative agricultural practices. They use low quality seeds, questionable fertilizers, lack proper environmental risk management equipment and knowledge. Risks are many. Thus, **for farmers agriculture has become unpredictable and unprofitable.**

**The government of Armenia has implemented numerous projects** (many with support of international organizations) **to stimulate local agricultural production** and to support farmers, such as by providing seeds and other mechanisms (loans, tax reductions, etc.), or providing subsidies to local enterprises to motivate them purchase products from local farmers and peasants

rather than import raw food materials. This is especially important because importing raw materials is often more profitable than producing them locally in Armenia.

In the last 2-3 years reforms in the agriculture have become more realistic, more integrated and targeted. Especially the **Strategy on Main Directions Ensuring the Economic Development of the Agricultural Sector of Armenia for 2020-2030 is a strong policy document**. This is a positive development for the agricultural policy of Armenia that has been dormant for decades since independence of Armenia in 1991.

But this is not enough.

This current policy linkage of agriculture and food security implies that **if agriculture develops, then food security will also develop. And if not, then food security ....?**

## Market functionality and supply chains in Armenia

When the COVID-19 pandemic hit, many western developed industries, such as the USA or the UK, experienced serious food shortages (CNN 2020, BBC News 2020).

In contrast, in Armenia, as the recent assessment by the World Food Programme and the Republican Union of Employers of Armenia (RUEA) revealed, in spring and summer months of 2020 shops did not experience major food shortages, and almost for all vital products supply was stable, with some exceptions of short delays for oils and sugar. Traders in Armenia insist that suppliers of products are abundant. And indeed, there is balanced assortment and large availability of food and essential non-food items in shops of Armenia.

Small shops, due to small facility capacity and limited refrigeration infrastructure, have smaller stockpiles of products. Supermarket chains and large retailers import their own products and accumulate large stockpiles in their warehouses. Typically, traders do not wait for products to run out of stock. They replenish the stockpile frequently (daily, weekly, etc.). If stockpiles are limited, then it is not because the product has limited availability in the marketplace, but because these products have shorter expiration dates, are delivered in small quantities and frequently, such as daily for bread, several times a week for dairy products, or weekly/monthly for other food and non-food items.

In theory, if product inventories are small, then the lead time to replenish stocks must be small too. When supply chains are stable, **small stocks with frequent supplies give traders flexibility** to timely respond to consumer demand changes (WFP 2020a). And this is the case in Armenia: Traders have small stockpiles and receive supplies frequently (even though it is in small amounts), and when consumer demand changes, traders are able to quickly respond.

However, if major disruptions happen in the supply chain, then retailers with small stockpiles of products become extremely vulnerable to product deficit because small traders will lack the safety net to counter-act uncertainties in the demand even if these disruptions are short-term (WFP 2020).

So, as much as small stocks with frequent supplies give flexibility to traders to timely respond to changes in consumer demand, small stocks also expose traders to potential disruptions in the supply chain leaving them without safety net of reserve stocks until supply rebounds.

What COVID-19 health pandemic destroyed in developed western economies is the long-established **network of economic relations** that held various producing, supplying and consuming actors of the economy in balance: a seed producer, a farmer, a harvester, a restaurateur, a meat packer, a shop-owner, a consumer, a business insurer, and so on and so on. The business of one depended on the other, and they flowed together. When demand is predicted, these established economic relations give stability to traders, but also deprive them of flexibility to quickly adjust to sudden changes of consumer demand. COVID-19 changed the balance of the operational dynamics of markets in developed economies.

**In Armenia** major challenges of market functionality did not manifest as such exactly because of the lack of strong, long-established and institutionalized network of these economic relations between various market actors: seed producers, peasants, harvest collectors, suppliers, food processing companies, banks, risk monitoring and insurance companies, etc. In Armenia's developing economy these economic relations are more fluid, inconsistent, spontaneous and still in the process of structuration. *Thus, both the COVID-19 and overall food security challenges of Armenia are more related to systemic institutionalization problems of the Armenian economy and agriculture rather than to specific market operational dynamics and functionality.*

## Food security is more than agriculture

If food security is conceptualized as an area *within* agriculture, then this limits what food security can do for the economy of the country. Everything for food security then rests on the success of agriculture. And the development of food security also becomes a limited concept because local consumption is limited, and there is only so much that a given population can consume.

But food security can contribute much more to the development of economy than just be confined to the limits of agriculture. It can link various branches and actors of the economy, and by its development can help boost the development of all these involved and intersecting actors, sectors of the economy and specialized industries. For example, it can link tourism and the service sector with food quality and safety issues, information technologies and communication with improving risk monitoring and prevention systems in agriculture, transportation industry with supply chains and expanding exports, heavy industry and construction with development of food storage facilities and refrigeration and transportation infrastructures, food processing industry with the transportation sector, and so on and so on. It can contribute to the development of agro-food processing and agriculture; transportation logistics; modernization of machinery and repair and engineering



services; agrotourism; winemaking, brandy production and fruit vodkas; consulting, certification services and testing, etc.

So, food security can have multiplicative effect on the development of the economy. Food security can support the development of the **economy**. Food security can be an alternative model of the economic development if its objectives are not confined only within agriculture.

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