

# **SSA PAPER**

**2021**

Megi Ezugbaia  
Faculty of International Management and Business

**TENDENCIES OF LOCAL FOOD CONSUMPTION IN GEORGIA AND  
INFLUENCE OF COVID 19**

Internal Supervisor: Lisányi Endréné Dr. Beke Judit  
External Supervisor: Kartlos Ezugbaia

2021,11, 8

## **Table of Contents**

<b>Introduction</b>	1
<b>Chapter 1. Defining sustainable food consumption</b>	3
Definition of local food consumption	5
<b>Chapter 2. Importance of local food in Georgia</b>	8
Background information about Georgia	8
Local food consumption tendencies in Georgia based on GDP calculation	9
Local food consumption tendencies based on prices calculation	10
Influence of local food consumption on the trade balance in Georgia	11
Influence of local food consumption in reaching 2030 Sustainable Development Goals in Georgia	11
Local food consumption expenditures in Georgia	12
The food Self-Sufficiency Index in Georgia	13
<b>Chapter 3. Changes experienced by farmers and consumers during Covid 19</b>	15
<b>Chapter 4. Conclusion</b>	19
<b>Appendix</b>	23
Questionnaire of the research	23
<b>References</b>	24

## List of Figures

Figure 1. The 2030 Sustainable Development Goals .....	<b>Error! Bookmark not defined.</b>
Figure 2. GDP Structure of Georgia in 2020 (percentage) .....	<b>Error! Bookmark not defined.</b>
Figure 4. Rate of unemployed and employed people in Georgia between 2015-2020 (persons, percentage) .....	<b>Error! Bookmark not defined.</b>
Figure 5. Financial Aid towards local food production from the state budget between 2015-2020 .....	<b>Error! Bookmark not defined.</b>
Figure 6. Effect of exchange rate fluctuations on the interviewed farmers during Covid (persons) .....	<b>Error! Bookmark not defined.</b>
Figure 7. Reasons behind decreased number of labor force according to interviewed farmers (persons).....	<b>Error! Bookmark not defined.</b>

## List of tables

Table 1. Shares of agriculture in GDP between 2015-2020 (percentage).....	9
Table 2. The average rate of food Self-Sufficiency Index in Georgia between 2016-2018.....	14

## **Introduction**

In the modern world, the topic of food sustainability has become one of the most debatable topics. This idea has been influencing the discussion of new policies and rules related to safe food, the environment, and the production and consumption of food (Vargas, et al., 2021).

Generally, sustainability is usually described as meeting the demand of today's society without jeopardizing the needs of the future one. Sustainability is a general term that interconnects not only the environmental but economic and social needs of communities (Univeristy of Alberta, n.d.). Firstly, the concept of sustainable development was introduced by the World Commission on Environment and development in 1987, describing how it was possible to harmonize ecology with prosperity (Jarvie, 2016).

Nowadays, sustainability is believed to be an approach that takes into consideration ecology, social and economic development of the world, recognizes the importance of each, and underlines that prosperity will be reached by considering each of the dimensions. The three dimensions (Environmental sustainability, economic sustainability, and social sustainability) are usually regarded as three pillars of sustainability. The social pillar focuses on understanding the relevance of social problems and securing cultural and social stability while also reducing the number of violent confrontations (CSR Journal, n.d.). Economic sustainability is concerned with topics such as infinite levels of economic growth, production, and consumption (Ben Purvis, 2018). Lastly, the environmental pillar focuses on the stability of physical and ecological systems (CSR Journal, n.d.). It highlights problems related to economic growth, output, and consumption levels that can be sustained indefinitely (Anon., 2020).

While talking about sustainability, it is worth mentioning that nowadays, loss and damage of about 33% of the food produced in the world mainly due to security flaws and quality control at all stages of value chains, worsen the situation. In this regard, the situation in all sectors of agriculture, crop production, animal husbandry, and aquaculture decisive action must be taken. (Food and Agriculture Organisation of the United Nations, 2017). Society has realized that along with increasing agricultural productivity, it is necessary to minimize negative environmental impacts and, moreover, make changes for the better. As a result, in agriculture, there will be a transition to production of a new level, towards sustainable production considering possible shocks and changes, such as climatic variability, and new and re-emerging crises in the field of food safety. People have understood that so fast natural, technological, demographic, and social change and related fears in the field of food safety require the development of national, international, and intersectoral initiatives, policies, and capacity building, innovation, and incentives (Food and Agriculture Organisation of the United Nations, 2017).

The United Nations (UN) 2030 Sustainable Development Agenda is an obvious case for sustainable development. It is a normative agenda on sustainability that covers 17 Sustainable Development Goals (SDGs) and includes objectives that provide a measurable roadmap for achieving the goals. Among those SDGs, some of them highlight the importance of food

sustainability and focus on such topics as decreasing poverty, ending hunger, producing and consuming in a sustainable way, and protecting the earth (United Nations, n.d.).

Sustainable food is a relatively new term that can represent a significant portion of sustainability. Sustainable food systems ensure food security and nutrition for all while conserving the economic, social, and environmental roots that are necessary for future generations to have food and nutrition security (Nations, n.d.).

Researchers identify various ways of creating sustainable food consumption patterns, and one of those ideas is consuming locally produced food. Consumption of local food reduces the distance of traveling needed to purchase goods, consumers have the possibility to directly talk with the producers and ensure how nutritious the goods they are buying actually like. Furthermore, agriculture, production of food locally is a big part of the country's economy. It is an important part of GDP and generates various job opportunities which bust the growth of the economy (Alexandre Maia Vargas, 2021).

In Georgia, local food production is a significant component of citizens' lives. Considering the fertile soils, water resources, and climate, the country has ideal natural conditions for the development of agriculture. Nevertheless, Georgia is an import-dependent country. Despite the fact that Georgia encourages local farmers to produce more food, during 2014-2019, the country imported \$ 5.9 billion worth of agri-food products, which means Georgia spends an average of \$ 1.2 billion annually on the wages, production costs, and profits of foreign agricultural workers, instead of encouraging the local production and the usage of food grown locally (Transparency, 2020). Additionally, with the migration of people towards the developed cities such as Tbilisi, the capital of Georgia, society switched toward the consumption of imported goods and delivered meals, which also significantly decreases the popularity of local food. The country is not using the opportunities which are created by its land to produce goods locally, which is a big and current issue. (Transparency, 2020).

The goal of the research paper is to try to find a solution to the above-mentioned problem. Based on the analysis of the tendencies of local food consumption in Georgia during 2015-2020 and the factors influencing the usage, the paper aims to answer the below question: What actions can be taken in Georgia to reconnect consumers to the locally produced food and create a growing pattern of local food consumption?

The research hopes by the answer to the above question to understand which negative and positive factors influence the local food consumption and conclude the solutions based on those. By finding what encourages the local consumption, actions can stimulate those to reach better results, and from the opposite side, finding negative effects, actions highlighted should focus on minimizing those aspects.

The analysis in the paper is based on an in-depth review of the literature published, focusing on materials published during the last 10 years. A review of the literature was conducted during the autumn of 2021 using Google Scholar, and the ScienceDirect database with additional documents collected from scientific journals, statistical offices, and the database of the Parliament of Georgia. More specifically the scope of the paper included journal articles, research papers,

dissertations, statistical data, reports, and other sources published in three different languages: English, Russian and Georgian.

Within the framework of the research, the data published by the Statistics Office of Georgia, the National Bank of Georgia, the Ministry of Rural Affairs and Environment, and the Ministry of Finance were studied, generalized, and analyzed.

In the scope of the research, the primary data was collected by interviewing locally working farmers. Interviews have been conducted face-to-face, using internet sources and video chats. The aim of the primary data collection was to collect the information from the small business owners to see what are the problems which farmers face and conclude what initiatives would assist the local food production and consequently consumption. The data collected could be characterized as qualitative and quantitative, out of which qualitative data was later used to illustrate the statistical numbers through diagrams and tables.

## **Chapter 1. Defining sustainable food consumption**

Agriculture is considered to be a big part of the environment. Types of food and diets are important in terms of long-term usage, preparation, and distribution, as well as other socio-economic issues such as health and other social stability (Reisch, et al., 2013). Annually, approximately one-third of all food that is growing can be found in consumers' and retailers' trash or spoils owing to inadequate shipping and farming techniques (United Nations, n.d.).

It's all about achieving more and better with less effort when it comes to sustainable consumption and production. It's also about separating economic improvement from environmental deterioration, boosting resource efficiency, and encouraging people to live more sustainably (United Nations, n.d.).

Before describing sustainable food consumption in more detail, first has to be analyzed what sustainable consumption means. In 1994, the Oslo Symposium offered the following working definition of "sustainable consumption: "the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials, and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations" (Ofstad, et al., 1994). Wolff and Schönherr have offered another definition that describes sustainable consumption as purchasing, utilizing, and disposing of products and services in a socially and environmentally conscious manner (Bulut, et al., 2018).

Developing a sustainable food system consists of a variety of actions. In the food system, we have the side of consumers and producers. Collective responsibility for the supply, distribution, and consumption of sufficient food within a profitable industry that preserves and develops our natural quality of living now and for future generations is what sustainable food production entails. To summarize, it means addressing current requirements without jeopardizing the future (Origin Green Ireland, n.d.).

The concept of sustainable food consumption can be linked to the concept of a balanced meal. This means that all citizens, regardless of their social or economic level, should have sufficient access to food. In other words, we're talking about a reliable supply of balanced food,

the ability for each person to receive food whenever he or she wants it, and in appropriate quantities for an active and healthy existence (Ажукене, et al., 2010).

Buyers have a vital role in building sustainable food systems by shaping them by their purchasing decisions. People can help promote the creation of goods that correlate with sustainable diets, that are defined by the FAO as "protective and respectful of biodiversity and ecosystems; culturally acceptable, accessible, economically fair and affordable, nutritionally adequate, safe and healthy while optimizing natural and human resources" (FAO, 2010)

Sustainable food consumption behaviors cannot be established solely via understanding or even awareness; deliberate habit formation associated with positive desire and dedication is necessary. In comparison to the critical need for a shift, the uptake process is extremely delayed. The following are some of the most significant obstacles to modify (Bulut, et al., 2018):

- A lack of understanding. Consumers are frequently uninformed of the harmful effects of their food consumption patterns or are made to believe in false ones by the media (Bulut, et al., 2018).
- The 'people don't care attitude ' obstacle is another common stumbling block. Regardless of awareness and training, most people will be persuaded to alter their food consumption habits only when they are set as a cultural norm (Bulut, et al., 2018).
- Another impediment is the expense of sustainable consumption, whether actual or anticipated (Bulut, et al., 2018).

For the individuals who are interested in switching toward more sustainable food consumption, there are different ideas from which they can choose from. People can begin cutting down on their weekly meat consumption; reducing food waste is another direction they can choose. Humans can ensure they utilize the highest possible amount of food which they can; Another possible action includes consuming food that has been grown locally (Bulut, et al., 2018).

Nowadays, food systems become more international, which results in them having a significant impact on climate-changing GHG emissions, from cultivation to processing and delivery, as well as food consumption (Gonzalez Fischer & Garnett, 2016). All the negative effects of those are being experienced by the ultimate goal of the distribution chain, the customer, who is becoming the matter of interest in the food sustainability dilemma. Consumers pick the items and services they consume, and their lifestyles influence how they enforce healthy and sustainable habits. Therefore, creating sustainable food consumption patterns among the buyers would help the world switch towards a more sustainable environment (Vargas, et al., 2021).

The interplay of social, ecological, and economic development is critical to the concept of sustainable food consumption development as a whole. When evaluating the sustainability of a policy or project, these so-called before mentioned three elements of sustainability must be considered. However, Seyfang in order to analyze the development of sustainable food consumption developed a theoretical framework based on five dimensions, taking into account the multidimensions of seasonal fluctuations: localization, community development, lowering the ecological impact, collectivism, and developing new provisioning infrastructures (Seyfang, 2009). Choosing local, organic, and seasonable foods are some of the sustainable food behaviors offered



by him (Seyfang, 2009). Out of those 5 factors, mentioned above, which Seyfang, the paper will focus on choosing local food as a part of developing sustainable food consumption.

It is important to understand what is the scope of sustainable food consumption, what it means, and how the goal of eating in a sustainable way means to understand how consuming locally produced goods food supports the idea of sustainable food consumption.

## Definition of local food consumption

The word "local food" has a wide range of definitions, some of which are contradictory. In most circumstances, it signifies that the product was grown within a short distance of the buyer. The food offered in an alternative food market is another example (Martinez, et al., 2010). The wider description of "local product" characterizes it as "goods that belong to a particular geographic location or neighborhood and owe their public image and reliability to the environmental circumstances and features of that location, as well as the knowledge, expertise, and customs of that territory, and which were manufactured by enhancing the economic advancement of that area by using its natural resources (Ozturka & Akoglu, 2020).

Therefore, the idea of local food is part of a bigger idea of local purchasing and economy, which is defined as a desire for buying products and services made domestically rather than those created by businesses situated in different locations from where people are spending (Smithers, et al., 2008).

From the point of view of sustainable food consumption, the usage of the local food by humans or businesses has a significant role. Systems of local foods, along with the national food are considered to be a part of a global food system and described as "the system covering the production, processing, distribution, and consumption of local food which affects the environmental, economic, social and nutritional fields" (Ozturka & Akoglu, 2020). Local food systems evolve over time as a result of elements like the structure of the soil, temperature within the region, customs, and social sexes, and so on (Ozturka & Akoglu, 2020).

During the last years, the public worries related to the practices of food manufacturing and safety, as well as deep ideas that locally produced food is more environmentally friendly, healthful and goes along with the sustainable development goals have fueled the interest of the customers for the local food, which has created a social movement, referred to as "Local Food Movement" (Ozturka & Akoglu, 2020). The local food movement is a "collaborative effort to build a more locally based economy, self-sufficient in food. Sustainable food production, processing, distribution, and consumption are integrated to improve the economy, environment, and society of a particular place" (Feenstra, 2002). The local food movement began during different times in different countries. For instance, in the United States of America in the 1970s, the local food movement arose in response to reform in federal agriculture policy. Until that moment, federal funds aided farmers by covering their expenses (Lin, 2014). President Nixon promised to lower food prices, and he achieved it by diverting federal funds away from producers in general and toward only a few agriculture products, namely corn and soy. Food prices plummeted dramatically, but farmers took a huge hit. Farmers declared bankruptcy and abandoned their

farms forever, signaling the end of cultivation. Small farms were purchased by large corporations and merged into gigantic operations that supplied large quantities of grain and soy (Lin, 2014). During this time, "internationalization" and "globalization" became highly discussed topics. Countries started obtaining products from all over the planet which influenced the food market a lot. Customers had the possibility to purchase unseasonal food any time of the year. The kinds of the same products which people could buy increased as well. All the imported products were packaged in plastic or other harmful containers which led to negative consequences about which societies did not think ahead (Lin, 2014). Only after 25-30 years, communities started to see the harmful effects of shifting away from local foods towards fast food and processed food and that began to put the existence of humans under the question. Countries started to experience health care issues; obesity became a very sensitive topic. When the communities understood the line between the food supply and the issues they faced, they propelled the local food movement into the forefront (Lin, 2014).

The local food movement managed to bring together farmers and customers. Farmers' markets have turned into venues where manufacturers can sell their products straight to the public, without being taken advantage of by intermediaries. Farmers' markets created a chance for the farmers to get a reasonable price for their labor. On the other hand, buyers can directly communicate with the people who grew the products and inquire about information related to the growth of products (Roberts, 2017).

Demand for locally grown products has gotten so much notice that the lexical item of the year in 2007 was "locavore," which identifies a consumer who eats food grown or produced within a 50 to 100-mile radius. The "locavore movement" encourages people to shop at farmers' markets and even cultivate or select their own food, claiming that fresh, local foods are more nutritious and delicious (Ruth-McSwain, 2012).

While examining the advantages of consuming locally produced food, a variety of different reasons can be identified (Roberts, 2017).

The existence of the local food markets and the trend of buying locally positively affects the local economy domestically. For instance, in the United States of America, most part of the \$100 spent by the consumers on food at the Walmart supply chain is channeled far from the people, into the international economy. However, when buyers purchase \$100 worth of goods at the local farmers' markets, the money remains in the neighborhood, assisting the local economy is becoming more robust and vibrant (Roberts, 2017).

Furthermore, it is beneficial for nature. While farmers are selling their products locally, they do not need to be transported very far. Usually, locations, where the products can be purchased, are located in the nearby territory and after the purchase, goods travel only as far as reaching the table, it aids in cutting greenhouse gas emissions and reducing our environmental impact (McGill, n.d.).

Consumption of locally produced goods promotes sustainable agriculture as well. With this action, it becomes easier to monitor the distribution network back to its origin in order to assess environmental practices (McGill, n.d.)

Local food production and consumption can be viewed not only as a segment of sustainable food consumption; however, it can be highlighted as an activity that supports the Sustainable Development Goals (SDGs) (United Nations, 2015). The 2030 Agenda for Sustainable Development, which comprises 17 Sustainable Development Goals, was adopted by the United Nations General Assembly in September 2015 (United Nations, 2015). The new Agenda takes a comprehensive approach to build a sustainable future for all, based on the principle of "leaving no one behind" (United Nations, 2015).

On Figure 1 are identified 17 Sustainable Development goals, highlighting which ones of those 17 can be supported by the local food consumption (United Nations, 2015).

*Figure 1. The 2030 Sustainable Development Goals*



*Source: United Nations, n.d.*

Figure 1 presented above highlighted 2 Sustainable Development Goals which can be supported by increasing local food consumption. In order to identify the goals, the following circumstances were taken into account: sustainable and inclusive economic growth, which contributes to the elimination of hunger. Based on the above, the consumption of local food contributes the most to the achievement of the following goals of sustainable development:

- Goal 2 - Zero Hunger. Everyone should have safe, nutritious, and sufficient food, especially children, mothers, and vulnerable people. An increasing amount of locally produced food and distribution to society has a direct connection with the given goal. (United Nations, n.d.).
- Goal 8 - Decent Work and Economic Growth. In order (United Nations, n.d.).

## Chapter 2. Importance of local food in Georgia

### Background information about Georgia

The territory of Georgia is located at the crossroads of Europe and Asia, in the central and western part of the South Caucasus (Transcaucasia). The total length of the borders of Georgia is 2114 kilometers, of which 312 km are on the sea border and 1800 km on the land border (Legislative herald of Georgia, 2020). The total area of the country is 69,700 km<sup>2</sup> and the share of agricultural land in the total area adds up to 43.4% (30.3 thousand km<sup>2</sup>) (National Statistics Office of Georgia, 2021). Among this territory, in 2018, 207.1 thousand hectares were used to produce annual crops while the area of land occupied with perennials was 109.6 thousand hectares (National Statistics Office of Georgia, 2021).

Regarding the population of the country, according to the statistical data from 2020, out of the whole population of Georgia which is equal to 3,728.6 thousand people, 41.0% (1,522.4 people) lived in the rural areas of the country where agricultural activities occur (National Statistics Office of Georgia, 2021).

The population on the territory of Georgia is unequally distributed, which is caused by the influence of natural-geographical and economic factors. A small number of Georgians are currently living in the Caucasus Mountains due to unfavorable agricultural development conditions or in mountainous zones of southern Georgia (National Statistics Office of Georgia, 2021). The majority of the population lives in the inter-mountainous lowlands (National Statistics Office of Georgia, 2021). This part of Georgia is distinguished by the most favorable physical and geographical conditions for life. From the economic point of view, the territories of Samegrelo, Imereti, Shida and Kvemo Kartli, Guria, and Javakheti are the most developed. It should be noted that the Autonomous Republic of Adjara and Kvemo Kartli are the most densely populated in Georgia (National Statistics Office of Georgia, 2021). Georgian soils are very diverse. The western, eastern, and southern soil districts are mainly distinguished. In the western district, there are lowland marshy and ethereal, hilly foothills, red and yellow soils, mountain-forest, and mountain-meadow soil zones. The eastern district is characterized by chestnut and black earth soils (in the steppe zone) and brown soils (in some parts of the southern part of the Eldar Desert and the Iori Plateau (Iashvili, 2020).

Despite the scarcity of territory, Georgia has almost all types of climates on the Earth's surface. (Iashvili, 2020). It is possible to distinguish 13 climatic regions (zones) which creates an opportunity for the growth of a range of locally produced food. (Iashvili, 2020) Many excellent varieties of grapes, crops, fruits, etc. are produced on the territory of the country. Thus, Georgia's unique phylogenetic fund is a "living monument" of the country's natural and cultural heritage, and it is humans' task to study, protect and restore it (National Statistics Office of Georgia, 2018).

## Local food consumption tendencies in Georgia based on GDP calculation

As mentioned at the beginning of the paper, Georgia's land gives farmers an opportunity to utilize it in a smart manner to produce a large amount of local food, however, the country remains import-dependent. In order to check the current tendencies of local food consumption In Georgia, throughout analyzes of GDP has been conducted, checking the segment of agriculture in it specifically.

Based on the existing numbers, in order to analyze the changes in the local food consumption, the GDP of Georgia was checked between 2015-2020. In 2020, the real decline in GDP was 6.2 percent compared to the previous year. During the year, the gross domestic product in nominal terms was set at GEL 49,407.3 million, which was 0.3 percent higher than the same period the year before and GDP per capita was 13,292.7 GEL (\$ 4,274.6) (National Statistics Office of Georgia, 2021). The average of the above-mentioned indicator in the European Union was recorded to be 34768.65 USD (Trading Economics, 2020).

The COVID-19 pandemic has had a severe influence on the world economy. Due to restrictions on movement and various activities, the tourism industry in Georgia, as well as in the world, has suffered the most. In comparison to the other industries, the small industrial and agricultural sectors have been affected relatively less (National Statistics Office of Georgia, 2020).

*Table 1. Shares of agriculture in GDP between 2015-2020 (percentage)*

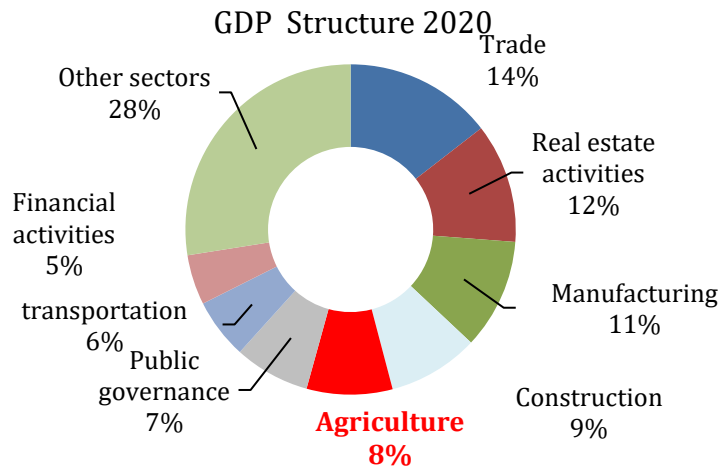
	<b>Gross Domestic Product (GDP)</b>					
	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
GDP real growth, percentage change	3.00%	2.90%	4.80%	4.80%	5.00%	-6.20%
Share of agriculture in GDP %	8.80%	8.30%	7.20%	7.80%	7.40%	8.40%

*Source: National Statistics Office of Georgia 2020*

According to the Statistics Service of Georgia, despite the 6.2 percent decline in the economy in 2020, the real growth of the agricultural sector was 3.6% compared to the previous year, therefore, agriculture made a significant contribution to the GDP growth of 0.3 percent (National Statistics Office of Georgia, 2020).

The GDP structure of Georgia in 2020 has been analyzed as well on the diagram presented below as Figure 2 (National Statistics Office of Georgia, 2020):

Figure 2. GDP Structure of Georgia in 2020 (percentage)



Source: National Statistics Office of Georgia, 2020

On Figure 2 can be seen that according to the data of 2020, agriculture has a rather high share in the sectoral structure of GDP, namely 8.4 percent, which is 1 percentage point higher than the same indicator of 2019 before the pandemic (National Statistics Office of Georgia, 2020).

### Local food consumption tendencies based on prices calculation

Additionally, in 2020, GDP at current prices from the point of view of locally produced food consumption increased by GEL 437.5 million (13.7%) compared to 2019, and by GEL 989.6 million (37%) compared to 2015, amounting to GEL 3.6 billion. In 2012-2018, the average annual growth rate of this indicator was 164 million GEL, while the average annual growth rate was 5.7%. In 2020, the GDP portion in the agricultural sector at constant prices increased by GEL 99.5 million (1.3%) compared to 2017, and by GEL 174.2 million (6.6%) compared to 2015, amounting to GEL 2.8 billion ((National Statistics Office of Georgia, 2020).

In 2020, according to preliminary data, GDP at constant prices in the agricultural sector increased by 99.5 million GEL (1.3%) compared to 2019, and by 174.2 million GEL (6.6%) compared to 2015, amounting to 2.8 billion GEL (National Statistics Office of Georgia, 2020).

According to preliminary data, in 2020, the output of agricultural products at constant prices increased by 637.1 million GEL (13%) compared to 2019, and by 1.58 billion GEL (40.9%) per year in 2015 and reached 5.47 billion GEL. In 2015-2020, the average annual growth rate of this indicator was 275.6 million GEL, while the average annual temperature rate was 6.5%. In particular, by 2020, the total output of agricultural products 45% (2.47 billion GEL) was coming from a plant growing, 52.1% from animal husbandry, and 7% from agricultural services. All three

segments have been growing at almost equal growth rates since 2015 (National Statistics Office of Georgia, 2021).

### Influence of local food consumption on the trade balance in Georgia

Additionally, it is worth mentioning that during 2020 country has produced enough products locally to even be able to increase its exports abroad compared to the other years. According to 2020 data, 942.2 million USD worth of agri-food products were exported from Georgia, which is 6.0% more than in 2019 (National Statistics Office of Georgia, 2021). Mainly exported goods included: wine (22%), alcoholic beverages (14%), mineral and fresh water (12%), nuts (10%), non-alcoholic carbonated beverages (3%), and cigarettes (3%) (National Statistics Office of Georgia, 2021). In 2020, the main export markets for agri-food products were the following: Russia (\$ 287 million), the European Union (\$ 163 million), Azerbaijan (\$ 100 million), Ukraine (\$ 93 million), Armenia (\$ 54 million), Kazakhstan (\$ 35 million) and Belarus (\$32million) (National Statistics Office of Georgia, 2021).

In 2020, compared to 2019, the increase in exports of agri-food products is mainly due to the increase in exports of nuts, fish oil, peaches and lentils, fish meal, and frozen meat of cattle. Imports of agri-food products in 2020 increased by 4% compared to the same period in 2019 and amounted to 1.207 million US dollars (Ministry of Environmental Protection and Agriculture of Georgia, 2021). Compared to 2015, the negative foreign trade balance in agri-food products decreased from -494 million USD to -265 million USD. The decline was 53.6% (Ministry of Environmental Protection and Agriculture of Georgia, 2021).

### Influence of local food consumption in reaching 2030 Sustainable Development Goals in Georgia

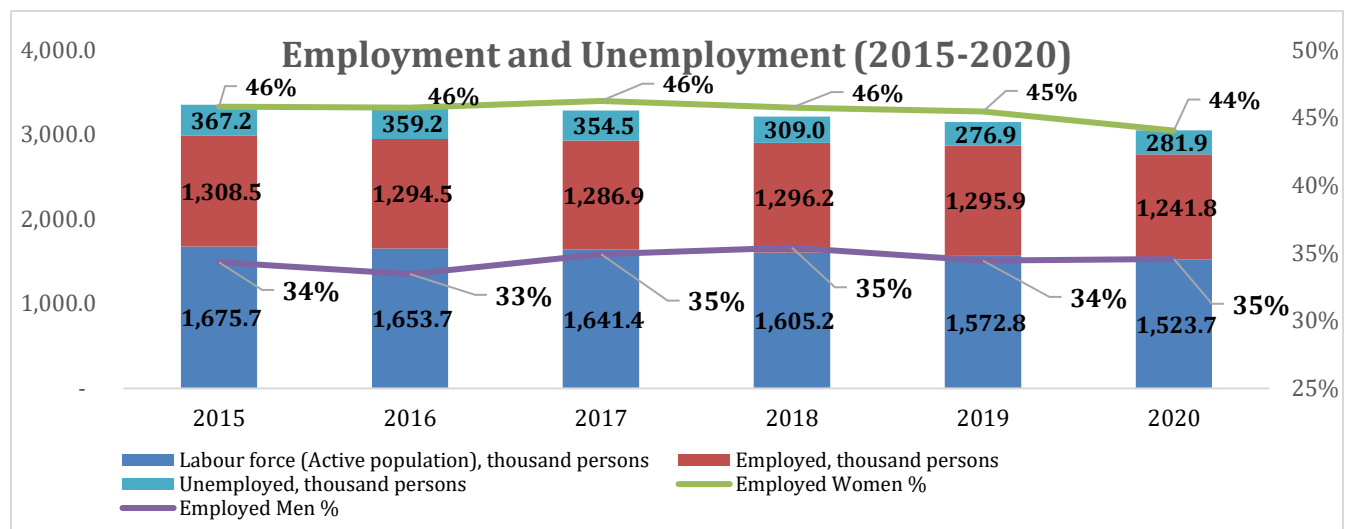
From the data collected from the National Statistics Office, the study assessed the extent to which local food consumption is related to meeting the 2030 Sustainable Development Goals (SDGs). Accordingly, in the framework of the present study, those goals of sustainable development were identified to which the growth of local food consumption in Georgia directly contributes to the decreasing pattern of hunger in Georgia, creation of more working opportunities, and stimulation of economic growth. (United Nations, n.d.).

According to the data of 2020, the economically active population in Georgia was equal to 1,523.7 thousand people ((National Statistics Office of Georgia, 2020). The distribution of employees by type of economic activity shows that the number of employed people out of those was 1,241.8 thousand people, of which 508.2 thousand are employed in rural areas (40.9% of employees) ((National Statistics Office of Georgia, 2020). The same data showed that the distribution of the labor force in rural territories aged 15 and over was 1,241.8 thousand people

((National Statistics Office of Georgia, 2020). 51% of rural employees are self-employed and 49% are self-employed ((National Statistics Office of Georgia, 2020).

On Figure 4 can be seen the distribution of employed and unemployed citizens, characterized by gender as well (FAO, 2018):

Figure 3. Rate of unemployed and employed people in Georgia between 2015-2020 (persons, percentage)



Source: FAO, 2018

Figure 4 shows that the employee rates by gender are as follows: 44% of the total employees are women and 56% are men, with gender inequality in the unemployment rate being quite high between women and men, namely women 16.2% and men 20.2% (FAO, 2018). It should be noted that the Food and Agriculture Organization of the United Nations (FAO) report “Gender, Agriculture and Rural Development – Georgia” states that 59% of self-employed women engaged in small family farming are unpaid (FAO, 2018). Overall, the annual unemployment rate for 2020 is 18.5 percent, which is 0.9 percentage points higher than the corresponding figure for the previous year. It should be noted that according to the data published by the Statistics Service, the trend of employment rates for 2015-2020 is almost unchanged (FAO, 2018).

### Local food consumption expenditures in Georgia

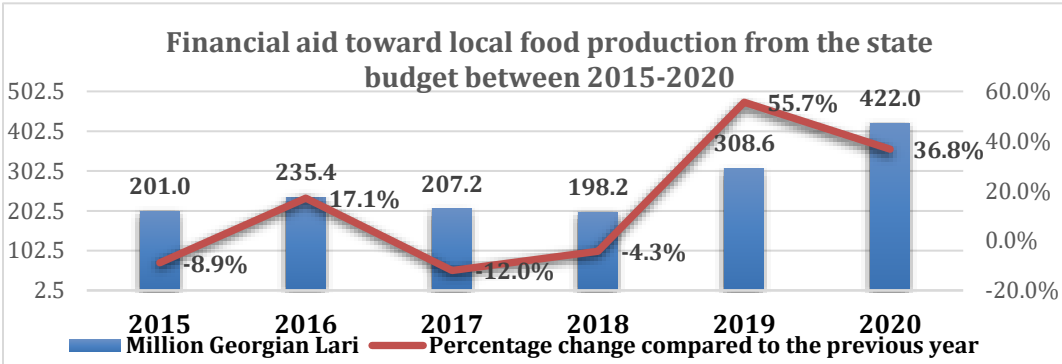
According to the National Statistics Office between 2015-2020, the local food consumption expenditures account for an average of 40% of the total population expenditures, increasing from 36% to 42% in 2015-2020 ((National Statistics Office of Georgia, 2020). It is worth noting that the share of the population living below the absolute poverty line in 2020 was 21.3 % ((National Statistics Office of Georgia, 2020). In comparison to the given number, the share of the population



below the absolute poverty line globally (%) - \$ 1.9 per day (2011 PPP) – according to 2019 data is 3.8% (World Bank, 2020). The rates indicate how many people did not have access to the necessary minimum living conditions (World Bank, 2020).

Based on the above indicators, it was clearly stated that Georgia’s agriculture may still be a priority in terms of GDP and economic growth due to which the state has been trying to encourage local food production for many years. Different funding opportunities are created yearly to support local food production and make a higher amount of locally produced food available for Georgian citizens.

Figure 4. Financial Aid towards local food production from the state budget between 2015-2020



Source: Ministry of finance of Georgia, 2020

Figure 5 shown above represents the amount of financial aid which was provided by the state towards the improvement of local agriculture and food production between 2015-2020. During a pandemic, representatives have realized the positive effect that local food consumption was having on GDP, which resulted in the highest annual spending on the sector of agriculture between 2015-2020, making it equal to 422 million GEL spent (Ministry of finance of Georgia, 2020).

As it can be seen, the government of Georgia tries to encourage local food production and consumption and understand the importance it has for the citizens and how big of a part of GDP it is. The state managed to cut down the foreign trade balance of agri-food products during 2020 with the restrictions created by Covid 19. However, it is worth mentioning that, Georgia cannot afford to switch to the usage of locally produced goods completely.

**The food Self-Sufficiency Index in Georgia**

Statistical data regarding the country’s availability to produce locally instead of importing the goods usually can be checked by The Global Food Security Index, which is an index accessing “issues of food affordability, availability, quality and safety, and natural resources and resilience”

for 113 countries (Economist Impact, n.d.). However, it does not get calculated for Georgia (Economist Impact, n.d.). The fact of it being import-dependent can be checked by the food self-sufficiency rate. This is an index which “shows the ratio of domestic food production to the domestic food supply” (Gov Base, 2020). This means that the higher the index, the higher is the possibility of the country to supply enough food for its citizens. The low index indicates that the country is import-dependent, which can be seen in the case of Georgia. National Statistics Office of Georgia analyzes the index for only 12 products. For the last time, the index was calculated in 2018 and the results of it can be seen in Table 2 below (Georgian Farmers' Association, 2020).

*Table 2. The average rate of the food Self-Sufficiency Index in Georgia between 2016-2018*

<b>Products</b>	<b>The average rate of The Food Self-Sufficiency Index in 2016-2018</b>
Wheat	16%
corn	71%
Potatoes	101%
Vegetables	63%
Grapes	162%
Meat (general)	49%
Beef	77%
Pork	42%
Lamb meat	206%
Poultry	34%
Milk and dairy products	82%
Eggs	99%

*Source: Georgian Farmers' Association, 2020*

As it can be seen in Table 2, for such products as wheat, poultry, pork, and generally meat, with the index of 16%, 34%, 42%, 49% the country is completely dependent on imports due to its low quality in Georgia (Georgian Farmers' Association, 2020). These products can not be grown/raised locally with the amount of quality to switch completely to local food consumption. However, according to The Food Self-Sufficiency Index, there are still products that Georgia can completely produce locally and cut down on their imports. Those are eggs, potatoes, grapes, and lamb meat, with 99%, 101%, 162%, 206% respectively (Georgian Farmers' Association, 2020).

### **Chapter 3. Changes experienced by farmers and consumers during Covid 19**

While only looking at the statistical numbers, it can be thought that during Covid, local food production has not suffered and actually did not get negatively affected by pandemic according to the increased numbers. However, since the country was facing a very serious epidemiological situation and many people were restricted to even moving, it would be hard to believe that local small farmers did not face any difficulties.

In the scope of research, with the aim of identifying the impact of a pandemic on local food production and seeing how the Covid 19 has changed the behavior of consumers and producers from a more personal perspective, additionally to the statistical data, face-to-face interviews were conducted with 9 small farmers residing in Georgia. 5 of those are producing their goods in the east part of the country, particularly in the region of Marneuli and Kakheti. Farmers were specializing in the production of grapes and pumpkin respectively, while the other 4 were from the west part of Georgia, producing goods in the region of Imereti. Farmers from Imereti were currently engaged in the production of local herbs. The number of participants was limited due to the challenge of online communication. Participants of the interviews were contacted direct, through online channels and were asked to participate in short interviews to help see their perspective of what could be done to increase the local food consumption in Georgia during Covid-19 and what challenges they experienced themselves while distributing goods to the locals during 2020. The number of farmers interviewed was limited due to the difficulties with finding the participants and scheduling suitable time for meetings for both parties (interviewer and interviewees) was a complicated procedure, due to the different residing countries and time difference between Hungary and Georgia, however, the research showed interesting results.

During the interview participants were asked to talk about their experience in local food production; how long they have been involved in farming and what was their experience. After gathering some information about the background of the producers, the questions became more specific, asking about the changes of their business production during Covid-19, and how they viewed the effects of the pandemic, were they positive and negative, logically followed by a question asking about specific challenges they faced during the last year. Lastly, farmers were asked to share their desire for what could be done in Georgia to encourage local food consumption. Those questions were asked to identify the wishes and challenges directly from people in order to be able to find solutions for those.

According to the farmers, Covid-19 had a significant negative effect on agriculture, production, and consumption of goods that they were producing from their own experience. They believed restrictive measures and the challenges which the citizens of Georgia faced during a pandemic, such as financial difficulties, transportation-related problems, etc. changed their everyday life, resulting in less demand for local food. From one side, they mentioned that more people came back to the rural territories of Georgia during 2020 due to the closing of the cities, and those people started growing food for their own consumption, which was the only positive side of Covid-19 related to local food consumption in their perspective. However, while talking about the negative

side, each of them shared different experiences and challenges, which could be grouped in below 3 categories where a more detailed description of issues is written.

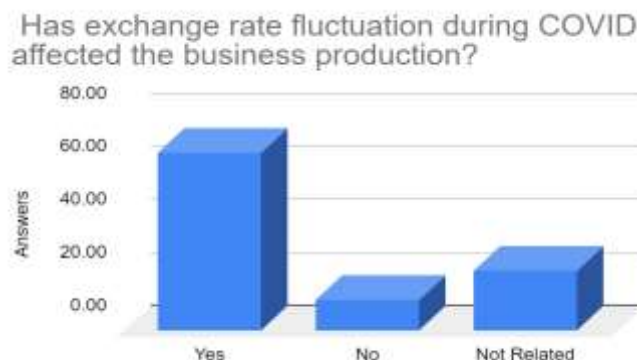
- **Issues with Supply Chain**

- 6 out of 9 farmers have mentioned that the supply chain has created issues for them while producing and selling goods to customers during 2020. 60% of farmers interviewed from the eastern region of the country have mentioned that they could not import the needed seeds to continue cultivating their products timely due to which they had experienced a delay in their work operation, resulting in bad harvest and reduced purchase of the goods. Farmers could not obtain enough products by the time of harvest. An example can be mentioned farmers from Marneuli who imported the seeds for pumpkins. According to them, Covid had a quite negative influence on their business. All the restrictions which were created in the country significantly delayed the operation of the supply chain, almost making it impossible for them to grow pumpkins and then distribute them to consumers during the expected time period. Delayed operation time and challenges in the supply chain, as well as the increased time amount of delivery of the imported seeds, decreased the productivity of their work. Even when the restrictions were eased, they did not hold enough products to supply the loyal customers they had from previous years. They named 2020 as one of the worst years of their careers.
- The issue experienced by the farmers located in the western regions of Georgia was quite the opposite. All of the farmers interviewed in Imereti were specializing in the production of local herbs for which they could access the seed locally and grow them. The amount of food grown and time frame did not suffer due to the Covid-19. However, the problem arose when they had to supply herbs to local people. According to the general experience of those farmers, it became harder for them to enter cities, where they were selling the goods on the local markets as the transportation and traveling during 2020, was very limited. The roads were closed, they had to remain at home, in the territory of villages where they live, which not only decrease the consumption of goods they produced, but as 2 of 4 farmers have mentioned, part of their harvest had gone bad and they had to throw the food away even without having opportunity to use it.

- **Exchange rate fluctuation**

Another issue highlighted during the interview by participants was the negative influence on the finances of farmers caused by exchange rate fluctuations. The negative experience can be explained by them with the fact that during Covid-19, currencies worldwide have experienced significant fluctuations which were having an influence on Georgian Lari as well. The numerical representation of their answers can be seen on Figure 6 presented below:

Figure 5. Effect of exchange rate fluctuations on the interviewed farmers during Covid (persons)



As it can be seen on Figure 6, out of 9 farmers 6 agreed that the currency fluctuation has affected their business, while the rest 33% did not experience any change or for them, it was not a relatable question.

Those farmers who did experience the changes in the production have explained in detail how the exchange rate was related to their business operation. 5 of them stated that it became harder for them to pay for the loans to the banks. Since they have taken out loans not in local currency, but in USD or EUR, all the changes happening around the world with the exchange rates and its effects on Georgian Lari, which weakened during the pandemic increased the payment amount for them. Furthermore, created restrictions and problems they faced had decreased their income, due to which loans became a big burden. Local food producers have also mentioned that getting a new loan from a bank was complicated and additionally they had to lengthen their loan repayment deadlines.

1 of the farmers highlighted that due to the weakening of the local currency, not only it became harder for him to pay loans, but he had to use the service introduced by banks to the consumers which enabled them to change the payment length and the deadline of the loan repayment.

The real numbers were analyzed as well to conclude how the exchange rate fluctuations looked in 2020 and if Georgian Lari really had depreciated.

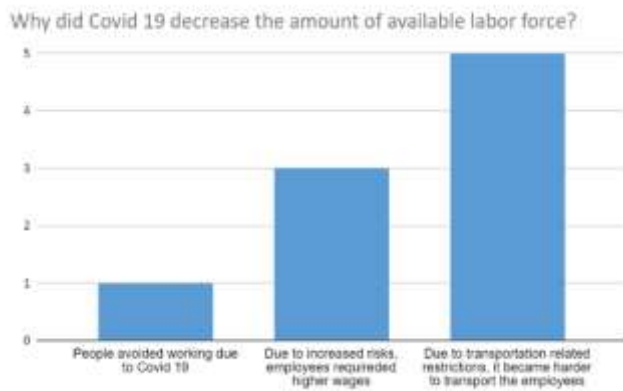
According to the statistical data, in 2020, the Lari did depreciate against the US dollar. In 2020, the GEL exchange rate against the US dollar depreciated by 14.3 percent compared to 2019 and amounted to 3.28 GEL per US dollar (National Bank of Georgia, 2020). The nominal effective GEL exchange rate, which is the average GEL exchange rate at the exchange rates of trading partners, depreciated by 5.6 percent (National Bank of Georgia, 2020).

- **Shortage of employees**

Shortage of the available employees was another issue that farmers have mentioned during the interview. Not only they faced issues with the available workforce during the Covid-19 pandemic, but generally. Before the pandemic as well, the number of people ready to work was decreasing as more people were moving to the city. However, as to what caused the shortage of

employees during Covid-19, farmers described different problems related to the labor force, which were later classified into 3 categories which can be seen below on Figure 7:

Figure 6. Reasons behind a decreased number of labor force according to interviewed farmers (persons)



On Figure 7 are shown the 3 answers which farmers mentioned while talking about the labor-related issue. The most common answer, with 5 answers was the reason stating that for employees it became complicated to reach the work location as due to the restrictions, the transportation possibilities were limited. Not only the road and entrances between the cities were closed, but the public transport was not operating as well. For the employees which did not own their own car, it was not worth working for their salaries, as the transportation costs would have exceeded the income.

The other 2 reasons included the required higher wages from the side of employees and refusal to work because of the risks created by the virus. As to the first reason, farmers lost the employees since they could not afford to pay the higher salary for them, which was required with the arguments of increased prices of living and transportation during Covid, as well as the risks which employees were facing while coming to the job. Lastly, only one participant of the research said that he lost his employee to the fear which he experienced while coming to work. The bad epidemiological situation made him leave the job temporarily in order not to communicate with people and decrease the risk of getting Covid 19.

After identifying the challenges which were created for the farmers, they were asked to talk about the changes which happened in their behavior or in the behavior of clients.

As to the changes in producers, farmers mentioned that they have started looking for ways of distributing their goods which they have not used before. Some of the popular answers included using social media platforms to distribute the products. Creating the Facebook page and offering products to the consumers through online channels such as Soplidan.ge were commonly mentioned. Delivering products through the Glovo was another service that 1 of the participants undertook and tried during Covid-19.

Participant also mentioned that they have started offering delivery of the products themselves in order to sell the existing harvest and get some sum of money back. An interesting

answer was heard from 1 farmer living in Imereti, who mentioned that currently, he was working on his own website where he wanted to offer the goods he was producing to the consumers.

Farmers also talked about the changes in the behavior of customers. In their experience, amount of people shopping in the local market decreased a lot during Covid. People were restricted to move and additionally, customers feared the communications. The majority of the farmers' loyal customers decreased the times they shopped for the goods significantly, avoiding going out and face-to-face interaction even when the restrictions were eased. Not only decrease, but producers have mentioned that some of their customers completely stopped coming to the markets for the products. Instead of that, people moved to their countryside houses and villages to remain far from the territories where the virus was peaking and consumed the goods which they grew themselves or just stopped purchasing goods on the local market and switched to ordering food.

At the end of the interview, farmers were asked to share their opinion on what can be done by the government to help the local farmers and encourage local food consumption during Covid. To this question, farmers also had quite a similar opinion. They believed that existing aid programs and development programs which were created during Covid to encourage the production of local food were not enough. State and banks have to offer more finances, loan opportunities with low-interest rates, and financial help to the farmers and consumers to push the consumption and ensure that citizens of Georgia have a chance to keep their business running and be able to distribute the goods to clients locally and them being able to purchase those.

Based on the interview, it can be learned that making a conclusion based on only statistical data is not usually the best source of identifying what actions can be taken in order to reach a selected goal. It is important to see what is the experiences people face in real life to make a true conclusion and set the correct course of action. By combining the results identified by numbers and the opinion of people, a true answer can be found without leaving one of these 2 important segments out.

## **Chapter 4. Conclusion**

Sustainability became the point, the method which's framework considers the world's ecosystem, social and economic development and understand that those impact each other and have equal importance. One of its underlying goals, local food consumption is a significant part of the development of the country and reaching sustainability as it was seen by the research. Worldwide demand for locally produced foods continues to rise as the world's population grows in tandem with rising wages and industrialization, raising worries about diet sustainability and environmental sustainability

The paper aimed to identify the solution to the question of what can be done to increase local food consumption in Georgia during the Covid. During the research, it was concluded that consuming local food and encouraging local production positively impacts the country not only from the sustainability point of view but from the economic growth and unemployment rate

reduction as well, supporting the 2030 Sustainable Development Goals and sustainable food consumption.

By the analysis of data, considering agriculture's share in GDP, the prices, the export-import difference existing related to local food consumption, it was shown that local food consumption was actually experiencing decline between 2017-2019, however, everything changed during Covid. Surprisingly, local food consumption happened to be one of the few segments of GDP which actually positively increased during the Covid pandemic. More products were produced and consumed locally. Additionally, during Covid, Georgia managed to produce enough goods locally to not only support local consumption however to import those goods abroad as well, significantly decreasing the trade balance in 2020 as it was seen previously. It happened due to the migration of people from cities back to the villages. People started producing food locally to consume while they were living in the rural area, which shows us that having a higher number of people residing in the villages of Georgia actually increases local food consumption. The Covid-19's influence on local food consumption resulted in real growth of local food consumption of 3.6% compared to 2019 according to statistical data.

This conclusion can be used to identify some actions which would positively impact local consumption and answer the question of the research: what actions can be taken in Georgia to reconnect consumers to the locally produced food and create a growing pattern of local food consumption?

. Government can finance the development of rural territories so people do not have a necessity to move to cities in order to get a good education or medical care. Creating more education opportunities, having free colleges where people could increase their knowledge regarding the local food production and creation of business from it, would motivate more people to remain in villages, get an education and develop their business locally. This action would increase the number of farmers, resulting in more local food available and consequently higher consumption. It would also help decrease the number of imported goods as more locally produced ones would be available in-country.

Additionally, training people in the field of local food consumption would create more people who have the knowledge and expertise to work for already established farmers. As it was seen from the answers of the farmers interviewed in the scope of research, they do have challenges with employing people who understand the work process of farms. Supporting the increase of those available employees would help farmers produce food more efficiently not only during Covid-19 but in the future as well.

Furthermore, above mentioned initiate would have an extra positive side effect. As mentioned in the revision of data gathered from the National Statistics Office of Georgia, 41 percent of Georgia's population lives in rural areas and their share of total employment is 40.9%, which underlines the fact that people who live in the villages have a high possibility of finding a job. By educating people, more citizens would become self-employed by starting their own business or employed by others. Also, the entablement of colleges would create more job opportunities for experienced farmers who would share their experience with others, which



would result in a lower unemployment rate, increasing the employment statistics of the country. As an extra benefit, the above-mentioned activity would support the 2030 Sustainable Development Goal of economic growth and unemployment rate reduction as local food production supports the economic growth of the state. Agriculture accounted for 8% of GDP, with small farmers and the rural population accounting for almost 10 percent of food provided in Georgia and the rate would be further increased.

Local food can be supplied to the nearby located orphanages, nursing housed shelters for homeless people by the government. These actions would create a positive impact on locally grown food consumption and additionally, it would decrease an absolute poverty line from 21.3% helping the country reach zero hunger goal from the 2030 Sustainable Development Goals.

Another answer would be to create appropriate conditions for the creation of new jobs in rural and the development of rural territories. Promoting local entrepreneurship, economic diversification, having targeted measures for agricultural development, and attracting investment in the sector would increase the local food production in the country, creating a chance of decreasing imports and consuming more local food. Such programs should provide co-financing for rural economic and environmental activities.

Providing free fuel or fuel discount cards for the owners of the farms can be another action initiated by the Georgian Government. Additionally, ensuring that local farmers know about the possibilities created by the state and can use those would be another task of the responsible community.

Government can create local food fairs, where farmers would be able to present their products to local consumers. The fairs are attractive places to visit not only for business owners, where they can promote food they produce but for the local people. Fairs would raise interest in the local food for the clients, as they would be able to talk to farmers during the fair, try the products for free and motivate them to consume more locally produced foods instead of imported ones.

The results gathered from the interview also showed that farmers observed the changes in the purchasing behavior of consumers. While the farmers were allowed to go back to local markets to supply food to the community, customers were avoiding the markets, due to the fear of catching the virus. Government can create a regulation, according to which farmers and customers entering the market would need to show documents proving that they are not infected or that they have the immunity protection against Covid-19. This regulation would decrease the risks associated with entering the market and communicating with sellers and increase the number of people who would go to the local market to purchase food, additionally creating an extra campaign to promote the vaccination.

It has to be mentioned that an increase in local food consumption can be considered a temporary trend created due to Covid. As the world goes back to normal, Georgian will return to their usual habits, decreasing the local food consumption again. If all the regulations and actions implemented would focus on maximizing the local food consumption during Covid-19, in a few

years when the Covid-19 will turn into the virus humans cohabit with, the consumption of local food can go quite down. In order to avoid that, initiatives of the government of Georgia should not be limited to only supporting farmers during Covid. The country has to have strategic short- and long-term plans, clearly highlighting all the steps which should be done in order to increase the local food consumption in the region. Creating such opportunities in Georgia as cheap loans and grant programs for local producers. In the long-term Georgia can also create more warehouses on the territory of the state to collect, store and distribute goods. Having those ideas and goals written in the strategic documents would help the country focus on what needs to be done and create a country with high sustainable development potential.

Despite the obvious positive trends, short-term causal measurement of Covid-19 results with quantitative indicators and a total net negative effect cannot be assessed at this stage, as the study was conducted directly during the Covid period in 2020. Vaccines are currently available in Georgia and the immunization process is active. The spread of new strains remains a substantial risk, so it will take 2-3 years for the Covid-19 sector to fully adapt to the impact and for the research to understand what true influence Covid-19 had on the local food consumption sector in Georgia. This fact can be considered as a limitation of the paper.

Encouraging local food consumption has a variety of positive effects. Georgia and the representatives of state have to understand the importance of local food consumption and all the positive impacts it has on citizens, the country's development, and general in reaching environmentally sustainable society and use it. Georgia has to continue the promotion of usage of locally produced food, using the positive situation created by the Covid, ensure the continues positive pattern in the local food consumption rate with the aim to create a healthier, more sustainable, and economically strong country

## Appendix

### Questionnaire of the research

1. Can you please introduce yourself?
2. How many years have you owned a farm?
3. What types of local food do you produce?
4. What do you enjoy about producing local food?
5. Do you sell food that you produce, or do you grow it for personal consumption?
6. Where do you sell food which you produce? (Refers to the previous question, if the answer was yes)
7. What challenges have you experienced with local food production and consumption during Covid-19?
8. Did you have to change any regular behaviors related to food production/distribution due to Covid-19?
9. Have you observed any changes among the consumers regarding the local food consumption during the last 2 years?
10. What do you believe can be done to increase local food consumption in Georgia?

## References

- Alexandre Maia Vargas, A. P. d. M., 2021. The Role of Local Seasonal Foods in Enhancing Sustainable Food Consumption: A Systematic Literature Review. *Foods*, Volume 10.
- Anon., 2020. Moschis, George P; Mathur, Anil; Shannon, Randall. *Scholarly Journal*, 12(13).
- Ben Purvis, Y. M. & D. R., 2018. Three pillars of sustainability: in search of conceptual origins. *Sustainability Science*, Volume 14, p. 14.
- Bulut, Z. A. et al., 2018. *SUSTAINABLE CONSUMPTION OF FOOD*, Izmir: Erasmus+ KA2 Strategic Partnership for Adult Education.
- CSR Journal, n.d. <https://csrjournal.com/>. [Online]  
Available at: <https://csrjournal.com/ustojchivoe-razvitie-koncepciya-principy-celi>  
[Accessed 03 11 2021].
- FAO, 2010. Definition of “sustainable diets”. In Proceedings of the International Scientific Symposium “Biodiversity. *FAO*.
- Feenstra, G., 2002. Creating space for sustainable food systems: Lessons from the field. *Agriculture and Human Values*, p. 99–106.
- Food and Agriculture Organisation of the United Nations, 2017. *The future of the Food and Agriculture. Trends and Challenges*, Rome: Food and Agriculture Organisation of the United Nations.
- Gonzalez Fischer, C. & Garnett, T., 2016. Developments in national healthy and sustainable dietary guidelines: a state of play assessment. *FAO*, p. 80.
- Jarvie, M. E., 2016. *Brundtland Report*, s.l.: World Commission on Environment and Development.
- Lin, R., 2014. *The Local Food Movement*, s.l.: s.n.
- Martinez, S. et al., 2010. *Local Food Systems: Concepts, Impacts, and Issues*, s.l.: s.n.
- McGill, n.d. <https://www.mcgill.ca/>. [Online]  
Available at: <https://www.mcgill.ca/foodservices/sustainability/green/local>  
[Accessed 04 11 2021].
- Nations, F. a. A. O. o. t. U., n.d. *Sustainable food systems. Concept and Framework*, s.l.: United Nations.

Ofstad, S., Westly, L. & Bratelli, T., 1994. *Symposium: sustainable consumption : 19-20 January 1994 : Oslo, Norway*, Norway: s.n.

Origin Green Ireland, n.d. <https://www.origingreen.ie>. [Online]  
Available at: <https://www.origingreen.ie/what-is-origin-green/sustainable-food-production/>  
[Accessed 03 11 2021].

Ozturka, S. B. & Akoglu, A., 2020. Assessment of local food use in the context of sustainable food: A research in food and beverage enterprises in Izmir, Turkey. *International Journal of Gastronomy and Food Science*, Volume 20.

Reisch, L., Eberle, U. & Lorek, S., 2013. The Role of Cultural Sustainable Food Consumption: An Overview of Contemporary Issues and Policies. *Sustainability: Science, Practice and Policy*, 9(2), pp. 7-25.

Roberts, T., 2017. *The Local Food Movement as A Catalyst for Community*, s.l.: s.n.  
Ruth-McSwain, A., 2012. Eating Green: Coverage of the Locavore Movement. *The Journal of Extension*, 50(5).

Seyfang, G., 2009. *The New Economics of Sustainable Consumption*. 1 ed. London: Palgrave Macmillan.

Smithers, J., Lamarche, J. & Joseph, A., 2008. Unpacking the terms of engagement with local food at the Farmers' Market: Insights from Ontario. *Journal of rural studies*, 24 (3).  
Trading Economics, 2020. <https://tradingeconomics.com/>. [Online]  
Available at: <https://tradingeconomics.com/european-union/gdp-per-capita#:~:text=GDP%20Per%20Capita%20in%20European%20Union%20averaged%203926.81%20USD%20from,of%2010065.11%20USD%20in%201960.>  
[Accessed 03 11 2021].

Transparency, 2020. <https://www.transparency.ge/>. [Online]  
Available at: <https://www.transparency.ge/en/post/trends-georgias-agriculture-sector-2012-2019>  
[Accessed 03 11 2021].

United Nations, 2015. <https://www.un.org/>. [Online]  
Available at: <https://www.un.org/development/desa/disabilities/envision2030.html>  
[Accessed 04 11 2021].

United Nations, n.d. [https://www.un.org.](https://www.un.org/) [Online]  
Available at: <https://www.un.org/sustainabledevelopment/development-agenda/>  
[Accessed 03 11 2021].

United Nations, n.d. <https://www.un.org/>. [Online]  
Available at: <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>  
[Accessed 03 11 2021].

Univeristy of Alberta, n.d. <https://www.mcgill.ca/>. [Online]  
Available at: <https://www.mcgill.ca/sustainability/files/sustainability/what-is-sustainability.pdf>  
[Accessed 03 11 2021].

Vargas, A. M., Pinto de Moura, A., Deliza, R. & Cunha, L. M., 2021. The Role of Local Seasonal Foods in Enhancing Sustainable Food Consumption: A Systematic Literature Review. *Scholarly Journal*, 10(9).

Vargas, A. M., Pinto de Moura, A., Deliza, R. & Cunha, L. M., 2021. The Role of Local Seasonal Foods in Enhancing Sustainable Food Consumption: A Systematic Literature Review. *Foods*, 10(9).

Ажукене, Й. et al., 2010. *Устойчивое потребление*, Vilnius: s.n.  
იაშვილი, ი., 2020. *საქართველოს საზოგადოებრივი გეოგრაფია*. თბილისი: s.n.  
საქართველოს გარემოს დაცვისა და სოფლის მეურნეობის სამინისტრო, 2021. *საქართველოს აგროსასურსათო პროდუქციის ექსპორტ-იმპორტი*, s.l.: s.n.  
საქართველოს საკანონმდებლო მაცნე, 2020. <https://matsne.gov.ge/>. [Online]  
Available at: <https://matsne.gov.ge/ka/document/view/31966?publication=33>  
[Accessed 04 11 2021].

საქართველოს სტატისტიკის ეროვნული სამსახური, 2018. *საქართველოს ბუნებრივი რესურსები*, თბილისი: s.n.

საქართველოს სტატისტიკის ეროვნული სამსახური, 2020. <https://www.geostat.ge/>. [Online]  
Available at: <https://www.geostat.ge/media/40515/GDP-at-constant-prices.xlsx>  
[Accessed 04 11 2021].

საქართველოს სტატისტიკის ეროვნული სამსახური, 2020. [www.geostat.ge](http://www.geostat.ge). [Online]  
Available at: <https://www.geostat.ge/media/40514/GDP-at-current-prices.xlsx>  
[Accessed 04 11 2021].

საქართველოს სტატისტიკის ეროვნული სამსახური, 2021. <https://www.geostat.ge/>. [Online]  
Available at: <https://www.geostat.ge/ka/modules/categories/41/mosakhleoba>  
[Accessed 04 11 2021].

საქართველოს სტატისტიკის ეროვნული სამსახური, 2021. *www.geostat.ge*. [Online]  
Available at: [https://www.geostat.ge/media/38890/1.General\\_Agro\\_Sector\\_Statistics\\_ENG.xls](https://www.geostat.ge/media/38890/1.General_Agro_Sector_Statistics_ENG.xls)  
[Accessed 04 11 2021].