Vol. 4, No. 12; 2020

ISSN: 2456-7760

# ISSUES AND OPPORTUNITIES FOR AGRICULTURE SECTOR DURING GLOBAL PANDEMIC

Stavros Kalogiannidis,
Adjunct Lecturer

Department of Regional and Cross Border Development,
University of Western Macedonia, Greece,
ORCiD: https://orcid.org/0000-0002-2337-5775

Katerina Melfou
University of Western Macedonia, School of Agricultural Sciences,
Department of Agriculture
Terma Kontopoulou, 53100 Florina, GREECE

#### Abstract

The global pandemic negatively impacted various sectors of the economy. The responsive measures of government to combat global pandemic resulted in various travel restrictions and temporary lockdown of markets. The travel restricts created disturbances in supply chain due to which there are unnecessary wastages of supplies and increasing stocks at warehouses. Several business sectors faced huge losses and closed down their organizations. The agriculture sector faced limited restrictions due to the approval of government for agriculture sector as essential and exemption from any travel movement. There are huge cereal stocks and production stocks but we can say that COVID impacts are limited on agriculture sector as compared other sectors of the economy. There are various challenges and opportunities for agriculture sector which will be discussed in detail in this essay.

**Keywords:** Agricultural sector – Covid 19 – Social economy – Food production

#### Investigating issues of COVID on global agriculture sector

# Impact of COVID on agricultural income and production

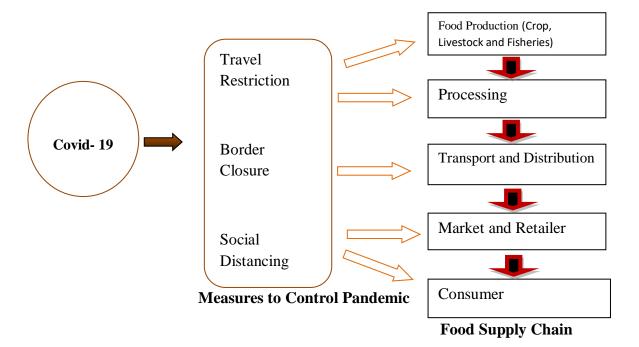
The government responsive measures of travel restrictions created a shortage of labour in various sectors including agriculture sector. In some countries, COVID phase 1 aroused during peak season where there is high demand of labour to execute farming process. Europe registered numerous COVID cases due to which Schengen and Europe were closed (Dev,2020). The fruit and vegetable production of Europe was adversely impacted through shortage of labour. European countries are highly dependent over fruit and vegetable sector which are labour intensive sector. The travel restrictions created a huge mess over there resulting in high loss of finance and productivity. The agricultural income in Europe slumped down during the first wave of pandemic in various European countries. Lack of labour in harvesting season resulted in global under production (Sharma, et.al2020).

The increasing surplus of food and agriculture stock resulted in loss of perishable products. The disruptions in supply chain are impacting farm incomes negatively. Some countries faced the

Vol. 4, No. 12; 2020

ISSN: 2456-7760

shortage of farm intermediate inputs. These intermediate inputs are utilized in farming. Various less developed countries faced lack of availability of sourcing inputs die to travel restrictions. The impact on intermediate inputs for developed countries is negligible. For example, the global supply of farm pesticides is declined sharply due to restriction on movement of people and travel. The pesticide plants were shut down completely as there are surplus stocks and supply chains are closed. The developing countries productivity including agricultural incomes will impact negatively in coming years. The lack of pesticides and farm inputs may results in empty lands. The borders were closed down temporary to mitigate the challenges of pandemic. The farm inputs such as seeds were not imported or exported due to which productivity is declined sharply (Sharma, et.al2020). Governments around the world and the international community have worked to alleviate the immediate effects of the pandemic crisis. This was done mainly by developing countries (Kalogiannidis, et.al2020).



#### **Decline in consumer demand**

The principal significant rush of disturbance to the food and horticultural area from COVID-19 came about from two enormous and unforeseen interest stuns. Closure and stay-at-home requests over the nation brought about a critical decrease in demand for food eaten in cafés, cafeterias, and other food away from home settings. Simultaneously, interest for food bought in staple stores and markets spiked (Siche,2020). In mid to late March 2020, deals in basic food item sources expanded 90% comparative with the year earlier, with the biggest additions coming in classifications, for example, paper items (e.g., tissue), solidified food, bundled nourishments, and meat prior to descending fairly in April. Online food deals rose at the beginning of the closures and have kept on expanding through the hour of this writing in May 2020. The stock-outs that

Vol. 4, No. 12; 2020

ISSN: 2456-7760

happened in numerous basic food item stores were remarkable and brought up issues about the reasonability of purchaser conduct in the middle of the pandemic. What drove buyers' loading up conduct? While customer silliness may have had a few task to carry out in the sudden spike in demand for supermarkets and attending loading out conduct, there are an assortment of sensible clarifications and some unexpected results that we investigate in this part (Gray, 2020). About 54% of purchaser food spending happens on food consumed from home. In this way, one purpose behind the staple stock-outs is essentially that purchasers moved food interest from cafés to merchants who were not ready for the interest spike. Notwithstanding, there is a few proof to propose that total interest for certain items really rose in late March notwithstanding the conclusion of cafes which is predictable with the idea that shoppers were not simply moving interest starting with one area then onto the next but instead were loading up, purchasing more than expected, and potentially "accumulating." Accumulating conduct can result if enormous gatherings of purchasers face comparable data or face comparable impetuses. Customers may have sensibly foreseen diminished versatility in the coming weeks either in view of diseases or government stay-at-home requests, driving buyers to "push ahead" purchasing conduct and fill storerooms. Also, if shoppers envision more exorbitant costs or restricted accessibility later on, they have a motivation to purchase more today(Kerr,2020). The pandemic moved where customers purchase food as well as what they purchase, which has potential wellbeing suggestions. The impact on fortification of food decision is likely questionable. There has been a decline in away-from-home food buys and an expansion in home cooking. Food cooked at home is typically viewed as more empowering than food destroyed from home. Nonetheless, during the pandemic, there has been an expansion in deals of prepared, comfort nourishments, which were on the decrease before the pandemic. Since numerous customers don't have cooking abilities, they may need to depend on prepared nourishments. It too creates the impression that buyers need natural, comfort nourishments in the midst of vulnerability. Besides, there is episodic proof that being home all day makes individuals nibble more. Paradoxically, request for supper units, which are commonly viewed as more stimulating than profoundly handled nourishments, has been developing. So, the pandemic has likely influenced dietary amount and quality, however in total ways that are hard to observe at the current second (Mukherjee, et.al2020).

#### **Food security**

Of prompt concern is the interruption to food frameworks and effect on food security. Food circulation channels of practically all nations over the pay range have been profoundly disturbed, with solid negative ramifications for the most powerless(Rozaki,2020). There is far reaching media inclusion of unexpected declines in food security due to:

- ➤ loss of pay from laborers who are completely or mostly furloughed influencing their capacity to buy food
- > stay-at-home requests and limited actual admittance to food markets and additionally indigenous food gathering exercises;
- > conclusion or decreased limit of organizations that help food social security nets, for example, food banks and school taking care of projects; and

Vol. 4, No. 12; 2020

ISSN: 2456-7760

- Market disturbances, for example, issues with the capacity of stores to quickly restock from concentrated appropriation frameworks following extraordinary interest (for example alarm purchasing) for storeroom staples.
- > wastage of new vegetables, leafy foods because of failure by ranchers or business visionaries to move them from purpose of creation to neighbourhood markets or general stores in close by towns or urban communities.

#### Framework flexibility

A third concern is framing framework strength to the COVID-19 pandemic. Which frameworks are versatile, and which are most certainly not? Are little farmers, that fundamentally use family work as are less subject to remotely employed work, stronger than enormous homesteads which rely upon outside work? What innovative measures could to be embraced to decrease reliance on human work and addition proficiency in cultivating? What are the short-and long haul results of inconsistent admittance to strength devices and measures? By what means will neighbourhood, territorial, public and worldwide farming frameworks react to huge misfortunes of rural creation during the pandemic? Which countermeasures against the infection will have long haul impacts? How might we reorient our agrarian frameworks to work ideally in a post-COVID-19 world? What is the function of agrarian approach in boosting strength of farming frameworks? Do our approaches need to change going ahead or would we say we are now well prepared to protect our rural frameworks from comparable stuns later on? What does the COVID-19 pandemic uncover about the general working of our rural frameworks? (Rawal,et.al2020)

#### Farming framework availability

The COVID-19 pandemic is affecting worldwide connections a long ways past the agri-food area's workforce. This incorporates declarations of fare limitations over a few nations that limit worldwide agri-food exchange and market access. The agri-food area is exceptionally associated globally. Ports that shut down or lessen action, immeasurably decreased cargo limit on business trips for horticultural merchandise, and other wide worldwide gracefully fasten interruptions because of the COVID-19 emergency can possibly restrict basic admittance to agrarian data sources and markets (Ker and Cardwell 2020). This may contrarily affect agrarian efficiency for flow and future seasons. The suddenness and seriousness of these closures leave little degree for recognizing reasonable homegrown substitutes for the time being nevertheless may prod less dependence on worldwide agri-food esteem chains later on. A few countries are additionally investigating more homegrown 'food sway' to address arising homegrown food security worries because of COVID-19. This activity has genuine ramifications for our current globalized agri-food exchanging framework and is conceivably one of the main effects on the current food framework.

#### Opportunities for agriculture sector due to COVID

In the midst of COVID-19, as a worldwide pandemic, there have been not many possibilities that emerge from the emergency in the field of agribusiness. The idea and commitment of a person in-home nursery and housetop cultivating have been rising since the time individuals are kept to remain at home and there's absence of abundance nutritious vegetables. The cultivating practices

Vol. 4, No. 12; 2020

ISSN: 2456-7760

of planting of blossoms and vegetables increased a lot of significance where all the relatives are effectively locked in. Also, the significance of means cultivating has arisen.

# **Opportunity for small farmers**

The framers tried group approach in various countries. Prior to lockdown, small farmers are deprived of privileges of agriculture sector. During lockdown, small farmers grouped up their farming to get fair pricing in the market. This method is proved to be helpful in various regions for small farmers. The concept of group farming is arise due to travel restrictions. When travel restrictions are relaxed, wholesalers demand high amount of vegetables due to hoarding behaviour of customers. So, small farmers collectively satisfy the demand for vegetables with a fair price (Morsy, et.al2020). The demand for dried vegetables such as mushroom, peas and frozen vegetables significantly increased during lockdown. Framers grabbed this opportunity and avoided the loss of vegetables and agricultural incomes. The demand for milk and related products is also high. The framers having livestock enjoyed a great opportunity during COVID due to increasing demand for milk products and immunity booster food (Farell, et.al2020). There is a high demand for nutritious products rather than junk food which benefited some farmers. Because of COVID-19, there's absence of work to perform rural work in the ranch like there's trouble in accessibility of the work during the reap of the standing harvests alongside planting and relocating. In any case, this has opened the entryway for the motorization approach in the rural area with groundbreaking change where bits of apparatus can be utilized in the plausible regions having bigger hectares of land to direct farming exercises, for example, the planting of seeds to the collecting of the harvests.

# Rising demand for local food

With various restrictions and increasing health concerns, demand for organic and local food significantly increased. The regional and local farming products are demand more as compared to other products. People demanded nutritious and regional food from local framers. Framers gained this opportunity by utilizing previously stored seeds. Informational and technology supported these small farmers to sell their produces. Travel restrictions and lockdown affected the supply chains (Rowan and Galankis 2020). In this era, famers highly utilized social media tools to popularize their nutritious produces. Framers directly contacted customers and delivered products to their homes with the help of information and technology. The utilization of information and technology in agriculture somehow transformed this sector. Farmers are now aware of their opportunities and how to utilize them accurately. Through social media, direct contact between farmer and customer is developed which helped in removing agents and middlemen of fruit/vegetable markets. Now with direct contacts with customers, farmers can get best price for their hard work.

Notwithstanding gigantic misfortunes in humanity influencing different areas around the world, an individual can likewise observe the silver fixing that can come over with the upliftment of lockdown because of COVID-19. As majority of the economies are agribusiness driven, thus a key arrangement and projects could assume a key part to keep up the status in the agrarian area. Each level of government ought to adjust more the exercises in horticulture with the goal that it will have the option to support independence (Narula,2020). Also, it has been accepted that an

Vol. 4, No. 12; 2020

ISSN: 2456-7760

enormous number of travellers will return and participate in agribusiness. Thus, legitimate strategies, spending portion, endowments on data sources, items, and guaranteed markets are most extreme to see an insurgency in agribusiness in spite of COVID-19 emergency. It's significant that a strong food framework should be created with significance on the worth chain that guarantees the market of framers produce (Narula, 2020).

#### **Import Substitution**

The greater part of the products devoured in the nation is bringing in from different nations including agribusiness merchandise such as Wheat, Beer Barley, Dairy items and others. Most exporter nations may not ready to give the item on the off chance that the circumstance exacerbated later on (Timilsina, et.al2020). Various countries are taking significant intercessions by giving farm trucks, encouraging water siphons, provide guidance for uncovered land should be furrowed and encouraging different elements of creation for the creation. These empower the nation to adapt up from the stuns of desert insect pervasion, import and existing pandemic. As explained earlier, due to disturbances in supply chains of food and agriculture, there is total blockage of supplies from other countries. The travel restriction spurred the demand for import substitution which is a very positive impact of Covid on farm and agriculture products. People are substituting their demand with local food and products. The overall increase in import substitution increased the demand for local food and agriculture in almost all countries. For example majority of the junk food cafes and restaurants are closed down in India due to increasing costs and declining incomes. These stores are not able to recover their rents which results in permanent closure of their eating hubs (Timilsina, et.al2020). These permanent closures will be taking one more year to set up their business and revive their organizations. Hence, this pandemic brought some opportunities for agriculture sector.

#### Rising Advancement in agriculture sector

Majority of the farmers in developing countries are relying upon downpour for delivering different harvests. In this condition, it is troublesome to adjust the interest of consistently expanding populace relative flexibly side by delivering once every year. Challenge by itself offers a chance to make novel plans to make area of economy strong (Morton,2020). The pandemic is a chance to hit the reset button, with researchers and social researchers having a significant impact. Also, advancement is going on: China is putting resources into drones, unpiloted vehicles and other horticulture advancements to diminish human contact. In Africa, cell phones are improving admittance to business sectors, costs and climate information, just as encouraging cash moves. The public authority of Ethiopia has mainstreaming the advancement by infusing on present day data sources, for example, water system siphons and farm haulers to fill the hole that have been experienced before this year. This may make extreme food weakness as a set of experiences by exceptionally expanding the degree of profitability of contributions too as yields in not so distant future (Lal,2020).

#### **Modernizing Agriculture Sector**

After Covid-19 occurred in the nation, administration has given due consideration by quickening water system undertakings to make individuals stronger, encouraging water siphons and work vehicles to ease endeavors should be applied to produce different rural items to repay creation

Vol. 4, No. 12; 2020

ISSN: 2456-7760

and items stuns due desert beetle invasion and import boycott. For example to help modernization of farming area In the Oromia locale of Ethiopia, the rural authority is encouraging admittance to horticultural sources of info and giving credits to work vehicles for enormous ranchers in coordination with its endeavors to utilize model ranchers that are flooding to build creation (Lal,2020). After this pandemic, t is worth noting fact that there is great need for modernizing the traditional methods of farming. The post pandemic period will going to impact agribusiness adversely if the modernization is not applied. Various counties introduced farm advances with the help of infrastructure improvement, data sharing and disruptions in agribusiness channels. The post pandemic period will be treated through smart solutions for issues of agriculture business. These responsive measures are already implemented by framers by utilizing social media in their farming process and developing direct contact with farmers (Morton,2020). After all agricultural cooperatives were and remain the only mechanism for gaining bargaining power of small and weak producers, which is the main reason for creating cooperatives (Kalogiannidis,2020).

#### **Conclusion**

The above essay discussed the various issues and opportunities in agriculture sector due to the global pandemic. This essay concluded that agriculture business is the only sector which is limited affected by global pandemic. Despite the limited impacts, this reported discussed that the supply chains of agriculture are seriously impacted by creating global decline in demand for agriculture products. The consumer behaviour is highly impacted such as rising hoarding behavior of consumer. There is lack of intermediate inputs which resulted in lack of productivity. Apart from this, study concluded that COVID provided opportunity of small farmers, subsistence farming import substitutions and advances in agriculture sector. This study recommends modernization and agriculture sector by transforming traditional methods of farming to modern methods to cope up with post pandemic period.

#### References

- Dev, S. M. (2020). Addressing COVID-19 impacts on agriculture, food security, and livelihoods in India. *IFPRI book chapters*, 33-35.
- Farrell, P., Thow, A. M., Wate, J. T., Nonga, N., Vatucawaqa, P., Brewer, T., & Eriksson, H. (2020). COVID-19 and Pacific food system resilience: opportunities to build a robust response. *Food Security*, *12*(4), 783-791.
- Gray, R. S. (2020). Agriculture, transportation, and the COVID-19 crisis. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie*.
- Kalogiannidis, S. (2020). Economic Cooperative Models: Agricultural Cooperatives in Greece and the Need to Modernize their Operation for the Sustainable Development of Local Societies. *International Journal of Academic Research in Business and Social Sciences*. 10(11), 452-468. DOI:10.6007/IJARBSS/v10-i11/8035
- Kalogiannidis, S., Chatzitheodoridis, F., Kontsas, S. (2020). An Eclectic Discussion of the Effects of COVID-19 Pandemic on the World Economy During the First Stage of the Spread. *International Journal of Financial Research Vol. 11, No. 6, Special Issue;*

Vol. 4, No. 12; 2020

ISSN: 2456-7760

## 2020. 137-153. DOI:10.5430/ijfr.v11n6p137

- Ker, A. P., & Cardwell, R. (2020). Introduction to the special issue on COVID-19 and the Canadian agriculture and food sectors: Thoughts from the pandemic onset. *Canadian Journal of Agricultural Economics/Revue canadienne d'agro economie*.
- Kerr, W. A. (2020). The COVID-19 pandemic and agriculture—Short and long run implications for international trade relations. *Canadian Journal of Agricultural Economics/Revue canadienne d'agro economie*
- Lal, R. (2020). Home gardening and urban agriculture for advancing food and nutritional security in response to the COVID-19 pandemic. *Food Security*, 1-6.
- Morsy, H., Salami, A., & Mukasa, A. N. (2020). Opportunities amid COVID-19: Advancing intra-African food integration. *World Development*, 105308.
- Morton, J. (2020). On the susceptibility and vulnerability of agricultural value chains to COVID-19. *World Development*, *136*, 105132.
- Mukherjee, A., Kumar, U., Shubha, K., & Anand, S. (2020). Implications of COVID-19 on agriculture in eastern region. *Food and Scientific Reports*, 1(5), 63-66.
- Narula, R. (2020). Policy opportunities and challenges from the COVID-19 pandemic for economies with large informal sectors. *Journal of International Business Policy*, *3*(3), 302-310.
- Rawal, V., Kumar, M., Verma, A., & Pais, J. (2020). COVID-19 Lockdown: Impact on Agriculture and Rural Economy. *Society for Social and Economic Research*.
- Rowan, N. J., & Galanakis, C. M. (2020). Unlocking challenges and opportunities presented by COVID-19 pandemic for cross-cutting disruption in agri-food and green deal innovations: Quo Vadis?. *Science of the Total Environment*, 141362.
- Rozaki, Z. (2020). COVID-19, Agriculture, and Food Security in Indonesia. *Reviews in Agricultural Science*, 8, 243-260.
- Sharma, R., Shishodia, A., Kamble, S., Gunasekaran, A., & Belhadi, A. (2020). Agriculture supply chain risks and COVID-19: mitigation strategies and implications for the practitioners. *International Journal of Logistics Research and Applications*, 1-27.
- Siche, R. (2020). What is the impact of COVID-19 disease on agriculture?. *Scientia Agropecuaria*, 11(1), 3-6.
- Timilsina, B., Adhikari, N., Kafle, S., Paudel, S., Poudel, S., & Gautam, D. (2020). Addressing impact of COVID-19 post pandemic on farming and agricultural deeds. *Asian Journal of Advanced Research and Reports*, 28-35.