Proceedings of the 2nd International Conference on Business and Policy Studies
DOI: 10.54254/2754-1169/9/20230387

Post-apocalyptic Food Production and Distribution Modalities Driven by Private Sector Businesses

Hanyun Li[1,a,*], Rong Zhao[2,b], Yize Lin[3,c], Muming Chen[4,d], and Jianing Lu[5,e]

[1]Jinling High School, No. 169 Zhongshan Road, Nanjing, 210005, China
[2]Canadian International School Kunshan, Kunshan, Jiangsu, 215300, China
[3]Shanghai World Foreign Language Academy, Shanghai, 200233, China
[4]International Department, Wuxi No.1 High School, Wuxi, 214031, China
[5]Dulwich International High School Suzhou, Suzhou, Jiangsu, 215021, China
a. lihanyun0548@126.com, b. Zhaorong_0515@163.com, c. tonycykablyat@163.com
d. 2026250716@qq.com, e. 10317393232@qq.com
**corresponding author*

Abstract: Facing the emergence of more world issues, preparing for the arrival of post-apocalypse becomes necessary. Among various problems people might face, lack of food sources is the most critical one. This paper examines how relatively sensitive and responsive private sector businesses can lead and collaborate with other segments of society to build a sustainable long-term food production and distribution system when the post-apocalypse comes. This 2-period system introduces the role of the Chamber of Commerce, and describes the progress of redistribution of resources and cooperation between companies. The feasibility of the system is assessed from different perspectives with the prediction and analysis of possible problems. The profit motives of companies taking part in the system are also studied.

Keywords: post-apocalyptic, food system, private sector businesses

1. Introduction

Post-apocalyptic reconstruction has not been viewed as the primary tenet of the country and citizens' way of life because it's considered to be a topic far from reality. In recent years, people have gradually started to realize the burden on the Earth and the uncertainty about the future of human beings. To perpetuate the destiny of human beings, it is necessary to establish measures and preparatory systems to survive the post-apocalypse while restoring the Earth. When social structure collapses, the most urgent thing to address is the source of food.

In most cases, the responsibility for solving post-disaster problems is given to the government. Dire situations often result in ineffective and slow government actions, so it becomes risky to pull all hope on the government. It is impossible to get enough resources and re-achieve to a basic standard of living if only the government deploys supplies and settles the population. Therefore, if private sector businesses, which are more responsive and have an easier flow of resources, are involved in reconstruction, the entire food production and distribution system will become more efficient and sustainable.

DOI: 10.54254/2754-1169/9/20230387

This paper will elaborate on the precaution private sectors should take on food distribution when post-apocalypse comes. Based on the case of Hurricane Katrina, responses from the government system will be illustrated with the introduction of the FEMA system. Drawbacks of the existing system will be analyzed. The post-disaster system and its efficiency assessment will be described. The principle of using culinary money in the second period of the system will be introduced. Preparation steps will be listed through an explanation of what the agricultural sectors should do to prepare for the apocalypse. This paper will also focus on possible conflicts and communication problems with solutions inside the governance system. Essential steps private sectors should take in response to disasters and reinvention are also discussed. At last, the corporate profit motive will be illustrated from two perspectives, incentivized by government policies and the desire to improve the brand's image or gain social capital by pursuing their social responsibility.

2. Literature Review

With the emergence of topics about the apocalypse and zombies, people are increasingly concerned about the health of the Earth and the fate of human beings [1]. The boom of those topics is not only due to people's panic toward the uncertainty of the future, but also the dissatisfaction with what has already happened in recent years [2]. In the face of rapid global warming, in which the sea level is rising at an alarming rate and threatening human beings [3], the 2009 Climate Summit in Copenhagen agreed that the world should cooperate to keep the global temperature rise below 2 degrees Celsius [4]. At the time of the COVID-19 outbreak, most countries did not have complete preparedness measures to deal with emergencies, which led to a deformed social structure and an unpredictable economic crisis [5]. Potential social problems of many countries or organizations were aroused in advance. People's lives are threatened facing unknown impacts [6]. Many industries and institutions urgently need to make transformations to stay afloat during the pandemic or during world disasters in the future [7]. All those existing social problems and phenomena are warning people that the world needs a universal pre-disaster preparation system [8].

When disasters strike, the government is often slower to act because of differences in trust in the government, which affects the efficiency of its response to disasters [9]. When the government makes policies to deal with disasters, they cause great panic and confusion, which is not beneficial for people's survival and the building of trust and cooperation between people [10]. Potential problems in the government system lead to a lack of coordination and efficiency, resulting in time-consuming implementation of solutions and slowing down the process of social recovery [11]. In 2005, Hurricane Katrina struck New Orleans, the United States, and its surrounding areas. On the Gulf Coast and its inland, more than 1,000 people died. According to CRS's estimation, about 700,000 people are severely affected, especially the blacks, the elderly, and the young. The disaster left a large number of people with low and no income displaced, unable to achieve a normal standard of living even after the disaster [12]. When people were hit by Katrina, there was a lack of communication between all levels of the federal government, compassion on the part of government officials, and responsibility for the actions taken [13].

Among the preparations governments make before a disaster are rehearsing experiential training [14], through consistent communication and education with GIS maps for the public [15], and ensuring that the military and police are heavily deployed in areas facing disasters. Local governments have the primary responsibility for arranging and collaborating in the face of a disaster. The government requires large gathering areas such as schools, office buildings, and shopping malls to holding simulated natural disasters once or twice a year to help people flee to safety in an orderly manner. They have also developed GIS maps for the public to include emergency sites such as hospitals, shelters, police stations, and fire stations. Moreover, to cope with emergency situations, the military and police play a vital role to maintain law and order conditions. The reason is that "Military

DOI: 10.54254/2754-1169/9/20230387

exercises often simulate public health crises and test armies' abilities to set up an operation in tough conditions, with limited resources and at short notice" [16]. The government can also pre-packaged food in centralized granaries and distributes it to temporary decentralized distribution centers throughout the city through the military or transport teams according to the amount needed by each household for a week, and then each household goes to a specific location to pick up food and some of the resources needed to live.

Regardless, these previous strategies still have some loopholes and concerns. Experiential training is limited to sudden natural disasters and the corresponding strategies, such as earthquakes, tsunamis, and fires. People are more focused on the current period of occurrence rather than the future. For long-term and larger-scale disasters, previous people did not consider a corresponding strategy. The drawback of GIS maps is that their technology is considered expensive software, and it also requires a tremendous amount of data input to prevent geographic inaccuracies. When the impact of a disaster is more extensive, the geographic error will be greater. In extreme situations, the technical input of GIS maps is difficult to adopt, and people in some remote areas will not receive relevant emergency information. As the government prepares food in centralized granaries, a massive amount of food could be looted or stolen. In order to prevent information dissemination bias and undesirable consequences, this paper will further develop a comprehensive long-term strategy.

3. Drawbacks of the Existing System

The food distribution system includes three stages, pre-production (agriculture inputs), agricultural production (growing), and supply chain (processing, storage, and transportation). When disaster strikes, the original food distribution system cannot function properly or sustain citizens. Most people in private sector businesses depend entirely on the government. The government provides food supply to each shelter or community. The food mostly comes from inventories because food packaging and processing are shut down due to risk brought by disasters Charities and some businesses may raise food or provide transportation support to help refugees.

Apparently, there are several drawbacks in this system. First, the existing system ignores the significance of fixing or exploring lands remaining to develop sustainable agricultural businesses. Currently, the government or people expend inventories. The total amount of food that can be processed becomes less and less, and the system can hardly sustain people in the long run when facing larger scales of disasters. Second, people depend too much on the government during and after the disaster. There is no integrated system for coordinating people, especially those from private sector businesses, to do specific work in units. In the existing food distribution system, the labor force mostly comes from volunteers organized by the government or non-profit organizations. The labor resource is so scarce in the post-disaster stage that it is impossible to hold a candle to all refugees.

In general, the existing system is mostly used for common short-term disasters, which means it can barely cope with worse situations in post-apocalyptic situations.

4. Post Food Production and Distribution System Design

In the initial stage of a disaster, it is necessary to shift most resources and labor toward food supplies [17]. The most urgent thing for people is to create a sustainable food production and distribution system pushed by private sector businesses. To promote mutual cooperation between companies, it is necessary to establish a geographically based Chamber of Commerce. As people's living conditions improve and people's sense of independence increases, modifying the post system on the original basis to better fit the development of society will make the whole system more sustainable [18]. Therefore, the post system is divided into two periods.

DOI: 10.54254/2754-1169/9/20230387

During Period 1 when the social system and government system are just corrupt, all agricultural companies should unite together, cooperate with other types of companies in the Chamber of Commerce, and follow the system to avoid chaos and violence. The total resources will be redistributed as most people and companies have the awareness that survival is far more important than individual profits currently. Period 2, in which the economy gradually repairs and becomes dynamic, begins when food supplies are no longer scarce and society is more stable.

4.1. Growing

Existing farmland, people's gardens or vegetable gardens, and land near water sources are considered "growing areas", which are used for food production. People who are responsible for planting are called "farmers". Before assigning employees or letting original owners of the land be responsible for food production, experts from the Chamber of Commerce should spread farming knowledge and skills to the public to increase productivity. Since more lands are considered growing areas, architectural companies should use their materials to mix out the best loam for farming. Genetically modified crops grown in laboratories of major companies should maintain or even increase yields, reducing the pressure of lack of food. Farmers should give priority to growing food with the highest energy conservation rate, for example, potatoes and avocados.

4.2. Sources

In agriculture, the three most important sources are seeds, water, and equipment for production. Agricultural companies can get seeds from seed banks. Products available in supermarkets and farmland can also be used as seeds, especially tuber vegetables such as potatoes and yam. As for equipment, all kinds of production and manufacturing companies should produce planting tools first to support food production. Farmers responsible for land that is initially used as gardens can irrigate crops by using rainwater or lightly contaminated wastewater. People should also build huge containers underground using plastic or bricks to store rainwater for irrigation.

4.3. Processing

Since cooking meals require more energy and resources, it's recommended that food should be processed into cans in MRE form [19] by production lines in larger companies. Using cans is also convenient for distribution. Grain foods are either processed into cans or kept in their original forms, depending on the state of resource tightness.

4.4. Packaging

Food and other edible necessities, vitamins, for example, are packaged in form of cans, pills, vacuum bags, etc. Processing lines of large companies, such as PepsiCo and Cargill, can take care of the food processing and packaging section. The amount of food in each unit package is equivalent to the amount needed by an adult during a meal. The packages of foods, such as cans and plastic bags for uncooked grains, should be reused in order to save resources.

4.5. Transportation

Transportation lines in large companies, Amazon, for example, are used in preference. When they are short of labor or vehicles, they can hire transportation teams that consist of refugees. In the early stage, cars are mainly used to help redistribute resources in order to maximize the output of agricultural products.

DOI: 10.54254/2754-1169/9/20230387

4.6. Storage

Normally, during wars or disasters, there are resource-gathering points or granaries for people who need help or for those who work in the government system. While in our post system, public granaries will not be built. Any excess food produced in the processing section will be distributed among companies by proportion. Foods are stored in each company. Those companies separated according to working type or fields distribute the MRE food during each mealtime to their employees. If people have unfinished food, they keep the surplus by themselves.

4.7. Distribution

Society is divided into groups based on companies. Companies count the number of employees who work for them, and report to the Chamber of Commerce. The amount of food distributed to each company is based on its population. Since the food is portioned according to the amount of a person's meal, companies distribute MRE food in form of cans or bags to each employee.

4.8. Adjustments in Period 2

In the 2nd period, society starts to use culinary money for trade [20]. Farmers are in charge of food growing. Others are employed and get paid monthly by culinary money. The amount people contribute to their companies determines the amount of culinary money they receive. Agricultural companies no longer have unconditional access to resources from other companies in the Chamber of Commerce. They need to pay for other needed resources using culinary money or borrowing labor force.

5. Assessment

The evaluation was done using the Architecture Tradeoff Analysis Method (ATAM). The first is a time measure of the overall system cycle, which represents the effectiveness of the system.

The fastest crop harvesting cycle is 30 days [21], plus the time required for food preparation and distribution in the city, so the process takes at least one month. It will take at least a year to get back to normal life and meet the basic needs of people. In period 2, when the initial system is working well and the food problem is alleviated, people will start trading and swapping resources in cooking currency. It takes at least about a decade for the market to self-regulate because the shock of a disaster is devastating and takes a long time to recover.

5.1. Participants Roles

According to the classes shown in Figure 1, the Chamber of Commerce belongs to the top. They are organizations made up of large corporate companies in a region that act as a large channel for information exchange and resource interchange. The Chamber of Commerce helps corporations work better with each other to maintain the balance of the market and the overall system. In the early stages, regardless of the industry, the main thing is to tilt towards agriculture to keep the food system stable, but in later stages, the Chamber can trade with each other through cooking currency.

The second class belongs to small businesses and self-employed individuals who have partial resources that can be borrowed to supplement the Chamber's resources when they are insufficient. The third class is the family-based workers who are employed in the first two companies. They work more and get more, and by giving their labor they can exchange it for an equal amount of food to sustain their families. The fourth class is the number of homeless, or individuals without the ability to work. They can only form a group by themselves to obtain food and resources. The Chamber also provides small portions of food to special populations to gain social reputations.

DOI: 10.54254/2754-1169/9/20230387

Figure 1: Pyramid of rights hierarchy in the system.

5.2. Feasibility

Corporations can leverage the Chamber's established relationships, channels, and public relations resources of other members of the business community to help coordinate issues in the course of their operations. Moreover, the existing mode of operation and placement in the company also saves time and effort in implementing the work, and family-based workers can join the work directly.

5.3. Portability

Food and resources are transported by the large transport companies in the Chamber of Commerce. When resources are not sufficient, unused vehicles can be rented by self-employed businesses, thus maximizing transportation capacity and labor to efficiently complete the transportation work. However, there are still geographic limitations to the system, and the harsh external environment has led to the abandonment of public and developed transportation such as airplanes, which has resulted in geographic limitations to nutritional intake, food diversity, and distribution, and presents a significant challenge to resource sharing.

5.4. Reliability

Overall, the stability and sustainability of the food system are high. Everyone gets more for more work, which prevents the imbalance between input and output. Also, working as a family in a company makes it easier to bring families together, which increases safety and cooperation. Because families are closer and more familiar with each other, it is easier to agree on the distribution of food and workforce, which improves the efficiency of food distribution. However, the problem encountered is that the food system is less fault tolerant. If a company hoards a large number of goods internally, then there is a possibility that the executives within may be privy to food. When resources are not equally distributed, the company may come to squeeze working people as a result. Eventually, there will be a crisis of trust among people, leading to disunity and eventual failure of cooperation. Furthermore, with limited resources, conflicts of interest can arise between companies, which is likely to impact the next session of the system.

5.5. Security

For food storage, the system is set up not to store food in public granaries, but to distribute it to individual companies at specific times and redistribute it to each family based on the labor contributed, which prevents large amounts of food from being stolen and looted, or prevents an

DOI: 10.54254/2754-1169/9/20230387

imbalance between the labor paid and the resources earned. From a health perspective, canned food is produced in an eschatological situation, rather than ready-made meals or pickled foods, and therefore has a high and varied nutritional content, a delicious flavor, and a long shelf life. Although canned foods have many benefits, people's food and nutritional needs cannot be met by a variety of canned foods. In addition, people cannot ignore the issue of water hygiene and single intake. If people live near rivers and use water for drinking, washing clothes, bathing, growing crops, etc., then the water becomes dirty and has the potential to spread viruses that can lead to disease and infection.

5.6. Suggestions for System Improvement

At the time of the apocalypse, people's sense of panic can lead to excessive behavior, such as going to supermarkets and grabbing supplies. Therefore, the Chamber of Commerce as the highest authority executor has the responsibility to order the supermarkets to close temporarily, and all supermarket personnel can join together to form a group to distribute and maximize all resources fairly.

Since the companies in the Chamber exchange resources, it may lead to negative circumstances such as companies concealing goods, exploiting workers, and uneven distribution of resources. To solve this problem, each company should have complete records of resources and distribution, and make the information completely transparent to the public. In this way, if working people discover the problem and report it to the Chamber's relevant departments, they will investigate those involved in hiding the supplies. If confirmed, the Chamber has the right to disqualify the company from the Chamber's resource exchange program.

Moreover, the working mode can also be changed to be more flexible. Except for the front-line agricultural workers and technicians, the entire enterprise has no permanent employees and is converted to a rolling work pattern. Rolling shifts are temporary measures in special circumstances, i.e., no prescribed shifts and times, making full use of labor and material resources with relatively flexible time. labor people who have registered in this enterprise arrange the scheduling schedule to work on time, and if there are people with outstanding abilities, they can sign long-term contracts and agreements with the company to ensure the stability and sustainability of work.

To address water quality issues and prevent the spread of disease, plumbing companies and crews throughout the city and region need to improve the cleanliness and utility of water in the first place by repairing pipes and finding large filters. Next, transporters can take patients to medical departments and use available medical resources to resuscitate them in hospitals or makeshift sheds. Ultimately, the Chamber should incentivize technology developers and pharmaceutical companies to continue creating vaccines, drugs, and vitamins to prevent disease infection and improve the overall immune system.

6. Disaster Preparation

To let readers apply the system more quickly, this paper lists a simple post system operation process in a series of steps.

Step 1: Establish a Chamber of Commerce and gather large companies

Step 2: Divide people by companies based on job types

Step 3: Companies need to count the number of employees and their families with living addresses, and report to the Chamber of Commerce.

Step 4: Distribute resources the Chamber of Commerce holds to different sections of agricultural business, which is the most urgent part of survival

Step 5: Let various companies with redistributed resources work together to form an integral food production and distribution system

DOI: 10.54254/2754-1169/9/20230387

Step 6: The Chamber of Commerce uses existing work systems/lines from large companies to complete each part of work in post system. When labor is scarce, the Chamber can cooperate with teams of retail employees.

Step 7: Companies with a wide variety of skills and resources work with agricultural companies to produce and process food as best as they can.

Step 8: When production progresses, the food production and distribution system, and the living conditions of inhabitants become more stable, the masses should agree on the amount of a unit of culinary money and other public rules, and experience trading in culinary money. The trading is coordinated by the Chamber of Commerce.

7. Corporate Profit Motives

The responsibility of corporations to support basic human rights has already been mentioned in the Global Compact Principles and the UN Guiding Principles [22]. The corporations' duty is to help react to the disaster and help people in local communities from the dispossession of their fundamental human rights within their ability if the government cannot react to the disaster in time. This also means that this responsibility is only temporary and the effort the corporation should take is limited. The principle's effect on regulating the corporations to pursue their social responsibility is little as the duration and extent of the effort the corporation should take is little. What's more, the definition of "within their ability" is also hard to determine which shrinks the effect of the principle to an even lower point. So relevant policies should be made in order to encourage their action and compensate for their cost.

Some mild policies can also be taken by the government to incentivize corporations to take responsibility. Tax laws are a fairly common practice. Government can reduce the taxable income or decrease the total amount of tax through tax credits. For example, corporations will get their tax credit after doing socially responsible actions including donating to the disastrous areas or hiring employees that are negatively affected by the disaster. Further investment in disastrous areas can also be subsidized. The decrease in tax payments will in turn increase the profit made by the corporations which will encourage them to accomplish their duty.

Other than the policies, for the large corporations involved in the Chamber of Commerce, reputation is also quite a significant concern. Doing socially responsible behaviors is the best way of gaining a reputation. Being exposed by the media to society for their responsibility will leave potential customers and employees with a good impression, making them more likely to engage in the activities of the corporations. Such as Walmart, during Katrina, the corporation cooperated with public disaster response agencies using its private distribution network [23]. However, the extent of these benefits is still to be discussed. Whether the business will gain profit, at last, is unclear [24]. Therefore, this might not motivate the large corporations in the Chamber of commerce.

For small businesses, social capital will be an important concern. Social capital--refers to the trust, social norms, and networks that affect social and economic activities [23]. When they participate in the post-apocalyptic recovery, their overlapping relationship with local residents is increased. Thus their trust will increase. According to the economist Albert Hirschman, there are two basic options that individuals can choose when faced with declining quality in an organization, "exit" or "voice." "Exit" means to stop purchasing the service of the corporation and replace it with some other corporation while "voice" means to participate eagerly to drive the change of the corporation. According to one commentator, strong social networks raise the cost of exit from a community and increase the probability that residents will exercise their voice to join rebuilding efforts [25]. And participate in post-apocalyptic recovery can create social capital. For example, during Katrina, a bar named Johnny White's stayed open even during the official curfew times [26]. It contained panicked people who fled from their homes to safe places only to find that no governmental protection can be

DOI: 10.54254/2754-1169/9/20230387

provided to them. The bar became a shelter for not only normal residents but also rescue workers and journalists to relieve their pressure after watching the desperate scenes. A place for disaster victims to meet and receive instructions for governmental instructions is created. Connections between disaster victims, rescue workers, and other people are strengthened, and social capital is created through this. Consumer loyalty for this bar has been built up since then.

8. Conclusion

To be well-prepared for future disasters and post-apocalypse, this paper has developed a detailed plan for the proper distribution of food and supplies. Considering the traditional methods of reconstruction are not efficient enough, an improved food production and distribution system should be designed. Therefore, this paper elaborates on how private sector businesses lead different parts of society to cope with the trouble of food scarcity in the post-apocalypse.

The existence of the Chamber of Commerce aims to gather the most resources and labor forces to build a sustainable food system. In detailed descriptions of all sections inside this 2-period system, food is produced by labor forces gathered and led by agricultural businesses, processed and packaged into more convenient forms, and distributed using existing transportation resources from large companies. During the second period when society's structure and food supply were more stable, people are allowed to use culinary money to trade, which functions as stimulating the economy. By introducing the working mode between different units of people in society, the whole system becomes more integral, and the operation mode is easier to understand. Considering the gap between the concept of the system and people's perceptions, the paper analyzes different kinds of buy-in challenges and conflicts when motivating people to participate in. Workable solutions are also provided based on current government policies and research. The paper describes simplified steps for future Chambers of Commerce to follow in order to reduce difficulties in implementing the system. To make the system more feasible and to encourage more companies to take responsibility for protecting human beings' future, the paper provides corporate profit motives from two perspectives, which are incentives by government policies, the desire to improve the brand's image, and the willingness to gain social capital.

The future of this topic is really promising for bringing protection to people's living conditions and making sure the world can function properly at any circumference. Also, the feasibility is quite large since some methods mentioned in this paper have already been put into action during periods of Covid-19 and other disasters.

8.1. Limitations

The post food production and distribution system are conceived as part of the preparation for post-apocalyptic reconstruction. However, since large-scale disasters are not frequent, the system can hardly be applied in real life for improvements.

Since there are differences between this system and the food supply system in ordinary life, it's might be difficult for people to fully understand and cooperate with this improved post-apocalyptic food system. If people have relied on government initiatives for so long that they cannot accept private sector businesses as the new leading force. If the system creates a monopoly after being applied, there will be unhealthy competition causing higher prices, less supply, and illegal underground trading. The equality of human rights and opportunities might not be ensured.

It is worth mentioning that the world order will react differently to a tsunami, earthquake, storm, or flood than it does to infected viruses, which only the contactless communication system can function properly, while other transportation, assembly, production, research, and development are

DOI: 10.54254/2754-1169/9/20230387

interrupted to prevent further spread and greater risk. In this way, implementing the system in all kinds of situations is unrealistic.

Reference

[1] Whiley, Harriet, et al. (2018). Zombie apocalypse: Engaging students in environmental health and increasing scientific literacy through the use of cultural hooks and authentic challenge based learning strategies. Journal of University Teaching & Learning Practice, 15.2 (2018): 4.

[2] Lauro, S. J., & Embry, K. (2008). A Zombie Manifesto: The Nonhuman Condition in the Era of Advanced Capitalism. Boundary 2, 35(1), 85–108.

[3] Strauss, B. H. (2013). Rapid accumulation of committed sea-level rise from global warming: Fig. 1. Proceedings of the National Academy of Sciences, 110(34), 13699–13700.

[4] Cassegård, C. (2015). Towards a Post-apocalyptic Environmentalism? Mobilizing Ideas. https://mobilizingideas.wordpress.com/2015/05/04/towards-a-post-apocalyptic-environmentalism/.

[5] Shehzad, K., Xiaoxing, L., Bilgili, F., & Koçak, E. (2021). COVID-19 and Spillover Effect of Global Economic Crisis on the United States' Financial Stability. Frontiers in Psychology, 12.

[6] Venkatesh, V. (2020). Impacts of COVID-19: A research agenda to support people in their fight. International Journal of Information Management, 55, 102197.

[7] Dwivedi, Y. K., Hughes, D. L., et al. (2020). Impact of Covid-19 pandemic on information management research and practice: Transforming education, work and life. International Journal of Information Management, 55(102211), 102211.

[8] Su, Z., McDonnell, D., & Ahmad, J. (2021). The need for a disaster readiness mindset: A key lesson from the coronavirus disease 2019 (COVID-19) pandemic. Infection Control & Hospital Epidemiology, 1–2.

[9] Rieger, M. O., & Wang, M. (2021). Trust in Government Actions During the COVID-19 Crisis. Social Indicators Research.

[10] Aronson, E. (2008). Fear, Denial, and Sensible Action in the Face of Disasters. Social Research: An International Quarterly, 75(3), 855–872.

[11] Nolte, I. M., Martin, E. C., & Boenigk, S. (2012). Cross-Sectoral Coordination of Disaster Relief. Public Management Review, 14(6), 707–730.

[12] Gabe, T., et al. (2005). Hurricane Katrina: Social-demographic characteristics of impacted areas. Washington, DC: Congressional Research Service, The Library of Congress.

[13] Baker, C. R. (2014). Breakdowns of accountability in the face of natural disasters: The case of Hurricane Katrina. Critical Perspectives on Accounting, 25(7), 620–632.

[14] ITS. "ITS Deployment Evaluation." Www.itskrs.its.dot.gov, www.itskrs.its.dot.gov/.

[15] GovPilot. "Disaster Preparedness: How Local Governments Build Resilient Communities." Www.govpilot.com, www.govpilot.com/blog/disaster-preparedness-how-local-governments-build-resilient-communities.

[16] European Parliament. (2020) The Role of Armed Forces in the Fight against Coronavirus. www.europarl.europa.eu/RegData/etudes/BRIE/2020/649401/EPRS_BRI(2020)649401_EN.pdf.

[17] Hillcoat, J. (Director). (2009). The Road. Dimension Films.

[18] Lewis Dartnell. (2014). The knowledge: how to rebuild our world from scratch. The Bodley Head.

[19] Hefnawy, M. (2011). Availability of Shelf-Stable Foods: Advances in Production of Meal Ready to Eat (MRE). Advances in Food Protection, 171–196.

[20] Romic, J. (2020). Guerilla Gardening: Recovering After the Zombie Apocalypse.

[21] Ly, L. (2021). 10 Fast-Growing Vegetables You Can Harvest in 40 Days or Less. Garden Betty. https://www.gardenbetty.com/fast-growing-vegetables/

[22] Telesetsky, A. (2015). Beyond voluntary corporate social responsibility: Corporate human rights obligations to prevent disasters and to provide temporary emergency relief. Vand. J. Transnat'l L., 48, 1003.

[23] Kuo, S. S., & Means, B. (2011). Corporate social responsibility after disaster. Wash. UL Rev., 89, 973.

[24] Klein, N. (2007). The shock doctrine: The rise of disaster capitalism. Macmillan.

[25] Aldrich, D. P. (2010). Fixing recovery: Social capital in post-crisis resilience. Journal of Homeland Security, Forthcoming.

[26] Oberman, M. (2005). Lone bar keeps its doors open in New Orleans. Www.iol.co.za. https://www.iol.co.za/news/world/lone-bar-keeps-its-doors-open-in-new-orleans-252587.