

Food Crisis

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Abstract: The main purpose of this study is to analysis the food crisis, causes and Prevention on it. A food crisis occurs when rates of hunger and malnutrition rise sharply at local, national, or global levels. (C. Peter Timmer 2009). Food crisis is an extreme shortage of food and which caused by high food prices. The world population increasing rapidly over the growth of food grains and as consequence food crisis arises. Many causes to arise food crisis such as drought, flood, cyclone, global warming etc. E.g. Recently Kerala is suffering from food crisis by flood. Sometimes food crisis arises not due to food storage, there is enough food in the stock but some people are in starvation due to some failure of distribution system. Food crisis is a serious global problem given its devastating impact on the population and on government. Only increasing in the supply of is not sufficient for solving the food crisis to maintain the food security. There are some strategies to prevent the food crisis including technological, agricultural, social, political and economic.

Keywords: Global food crisis, Food security, malnutrition, Global warming, Storage, Agriculture Technology

1. Introduction

A food crisis occurs when rates of hunger and malnutrition rise sharply at local, national, or global levels. 75% of the world poor is rural people (A.D Janvry).The food crisis situation seen in 2017 & 2018, increase in basic food price. A food crisis which has left another 952 million hungry, according to the United National Food and Agriculture Organization (FAO). As its director general, Jacques Diouf put it, “The number of people suffering from malnutrition before the rise in the price of food in 2007 was 850 million”. A figure that has risen to 1.2 billion hungry in 2017 according to the US department of agriculture. The last few year, there has been a significant increase in global food prices due to several structure. The global cereals price increase 150% during 2005. The increase in food price in India was much lower as compared to sharp increase in global price in due to various measures. Poor people spend 60 to 70 % of their income on food and they have little capacity to adopt as price rise and wages may not be adjusts (S.Mahendra Dev2011). Major aspect of rising of global food prices include, long term supply problem, rise in oil price, change in demand, depreciation in dollar export restriction of developing countries. Three basic essential thinks are required for survival: Food, clothing, and shelter. The main reason for food crisis is population and poverty, one third of global poverty is located in India (The main cause is not only the rising population but also the wealth of our new millennium has tended to increase in in-equality than to reduce poverty. Bairagya .R and Sarker.J 2017). The price of food is rising once again and fast. According to the United Nation Food and Agricultural Organization (FAO), the global food price rose 6% in July.Eliminating hunger and malnutrition and achieving wider global food security to overcome the food crisis.

2. Causes for Food Crisis

There are number of social factors causing food crisis including increasing food prices, over population economical environment and natural calamities. Rising in the cost of food, especially staple food such as rice, wheat, and corn

2.1 Increasing the Prices of Food Grains

Food prices have been fluctuating wildly, hurting both consumer and producer. Global wheat and maize prices rose for the third consecutive month in March and average more than 10 percent above their levels in December 2017. According to FAO of United Nations showed a 1.1% rise in its food price index in March to 172.8 points. At this level it was 0.7% above its value of the corresponding month last year. The cereal price index average 165.6 point in March about 2.7 % higher than February and as much as 12.1% above its value in March 2017. Apart from wheat and cereals the Dairy Price Index averaged 197.4 points in March, up 3.3% from February and slightly above its level in corresponding period.

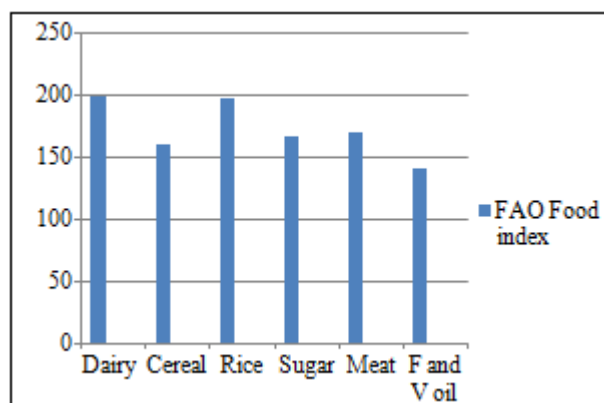


Figure 1: FAO food index

Production of food grains is also affected by food crisis. Food grain output is increases 0.9% to 277.49 million tones, exceeding the previous 275.11 million tones, during 2016-17

2.2 Tables

Table 1: Grains and there Production (million metric tons)

| Grains | Production (2017) |
|---------------|-------------------|
| Corn | 388 |
| Rice (milled) | 477.7 |
| Wheat | 749.5 |
| Barley | 149.9 |
| Oats | 23.51 |
| Rye | 12.38 |

2.3 Growth of Population

Rapid growth of population over the world is its main causes of food crisis. Shortage of food gives rise to famine, food riots, these calamities are eliminating and natural balance between population and food supply. Population growth has been the most discussed demographic dimension of the food crisis because of its very direct impact on the growth in food demand. The world population grown from 7.61 Billion in 2018 is expected to reach 8.6 Billion in 2030, 9.8 Billion in 2050 World population percentage by country, in July 2018 Impact of population growth on food supplies and environment, as the world population continues to grow geometrically, great pressure is placed on land, water, energy, and biological resources. The most significant contributor to increasing demand is a population that's climbing toward 9.6 Billion in 2050.

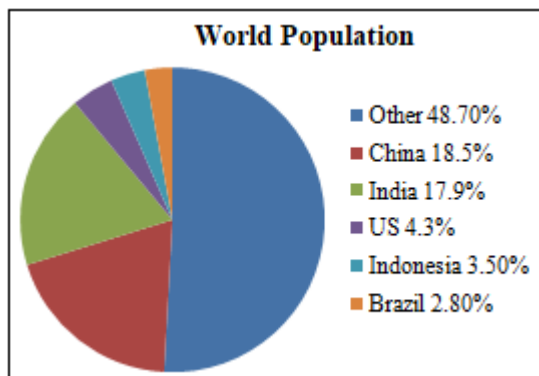


Figure 2: World population

FAO estimates that there are 868 million undernourished people, 98 percent of whom live in the developing world.

2.4 Natural Calamities

Natural calamities particularly causes on food crisis, typhoons, floods and droughts affected on agriculture food security and natural resources. The agriculture sector including crop livestock, fisheries and forestry absorb approximately 22% of the economic impact caused by medium and large scale natural hazard and disaster in developing country (FAO UN 2015). Flood causes more than half of the total damage and loss to crops which are also vulnerable to storms and drought. (Mostly significant natural disaster world wide from 1980 to 2017)

Table 2: Years on countries calamities happen

| Year | Country | Calamities |
|------|----------------|------------------------|
| 1990 | Iran | Earthquake |
| 1991 | Bangladesh | Tropical Cyclone |
| 2003 | Central Europe | Heat Wave |
| 2004 | Thailand | Earthquake |
| 2005 | Pakistan | Tsunami and earthquake |
| 2008 | Myanmar | Cyclone |
| 2008 | China | Earthquake |
| 2010 | Haiti | Earthquake |

Source: Munich Reinsurance Company 2017

Around 85% damage caused to livestock and food is due to drought. In 2018 Haiti earthquake Haiti received 340000 pounds of food aid from the United States. In many

countries, climate change is exacerbating already tough conditions. In 2011, Persistent lack of rain caused crop failure and heavy livestock losses in part of Ethiopia, Somalia and Kenya.

Table 3: No. of earthquake in 2017

| Country | No. of earthquake 2017 |
|-------------|------------------------|
| China | 157 |
| Indonesia | 113 |
| Iran | 106 |
| Turkey | 77 |
| Japan | 61 |
| Peru | 44 |
| USA | 41 |
| Italy | 33 |
| Afghanistan | 32 |
| India | 32 |

2.5 Public Distribution System

Not only that sometime food crisis arises not due to food shortage, there is enough food in stock though some people are in starvation due to some failure public distribution system. The crisis not a food crisis it is a policy crisis of the government (BairagyaRamsundar 2017). The central and state government shared the responsibility of regulating the PDS. The Public Distribution System (PDS) has one of the most crucial element food policy and food security system in India, but Indian government has been deliberately weak the public distribution system under World Bank pressure to benefits the agribusiness corporation. 2005 to 07 India a shortage of wheat because systematically the food grain (wheat and rice) Buffer stocks were lowered through below target off takes of grain by the government from the farmer.

2.6 Biofuel

The impact of biofuels on food security and food prices rises is also causes of food crisis. The increase in price of fossil fuel is directly impact on food crisis. Biofuels have forced global food prices up to 75% for more than previously estimated according respectively world biofuel production increased by 3.5% 2017, well below 10 year average of 11.4% but the fastest for 3 year. The US provided largest increment (950 thousand tons of oil equivalents). By fuel type, global ethanol productions increased by 3.3% contributing over 60% to total biofuel growth. Biofuel production in 2017 (1000 metric tons of oil equivalent)

3. Prevention for Food Crisis

Eliminating hunger and malnutrition, and achieving wider global food security are among the most intractable problems humanity faces. The major problem remains poverty and inadequate incomes. Agriculture development has a key role into play in generating the income needed to ensure food security. Support domestic food production stabilizes and guarantees fair prices and consumers by re-establishing floor prices and publicly owned national grain reserves. If we keep the average or reasonable prices of each an every product the rate of malnutrition will decrease. The straight forward way to take over on food crisis to have a rapidly rising labor productivity through economic growth

and food price stable. It should implement on the global scale then automatic hunger will reduce. There is need to reduce production of carbon emissions and pollution to reduce the resultant climatic changes through concerted and individual effort. The World Bank is substantially increasing its commitment for food production in world. The International

Fund for Agriculture Development (IFAD) is also working on agriculture issue very effectively (Peter McPherson 2008).

4. Conclusion

The Objective of this study to examine causes of food crisis and overcome on it. The stability of society is to save food. Food crisis influence both by nature and human action. In other words food shortage will produce different kinds of social, national, global problem. Food crisis is a serious problem, which influence the relationship between the people's livelihood, social stability, prosperity and development around the world. All social behavior or social system will fail to build until of food crisis. Social and climatic disasters usually combine to create situations of resources poverty that set stage for a chronic food. If the Public Distribution System we do properly we can save the food crisis. The non-governmental organization have proposed an approach that, based on food sovereignty and right to food addresses the underline causes of hunger and applies the principle of responsibilities, participation and non-discrimination. The chronic malnutrition and the food crisis which are often political, social, economic inclusion and discrimination. For this purpose it is necessary to give underprivileged rural population fair access to productive resources land, water, etc. The objective of this paper is to fight against hunger and it is based on three pillars food assistance, food security and the right to food.

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