

Food insecurity: The defining challenge of century ahead.

OUTLINE

1. Introduction

Food insecurity is a defining challenge of century ahead, as it is a threat to human health, national security, and economic development of country. It has become a challenge due to wars, extreme weather changes, and lack of modern agricultural technologies. By building climate-smart agricultural infrastructure and innovative techniques, food security can be achieved.

2. Rising threat of food insecurity in Pakistan

3. How food insecurity is a defining challenge of century ahead,

a. Population explosion demands higher food availability resulting in increased hunger levels

b. Prevalance of malnutrititions especially among women and children

c. Increased hunger results in crimes and ultimately civil unrest

d. Human resource development is at stake.

e. Reduced standards of living due to soaring food prices

f. Economic crisis emerges in the country

g. Increase in poverty and inflation

h. Increased risk to the security of country amid rising non-state actors' interventions

i. Risk and threat of famine

4. Factors which lead to food insecurity making it a challenge of century ahead

a. Wars and conflicts disturb the global supply chains

b. Extreme weather changes resulting in reduced production of food

c. Limited access and utilization of modern agricultural technology

d. Incapability to import food supplies due to economic crisis

e. Growing water scarcity resulting in reduced productivity

5. How the issue of food insecurity can be solved

a. Adapt climate-smart agriculture infrastructure

b. Innovative agricultural techniques
'must' be utilised to enhance
productivity.

c. High-yielding biofortified
seeds must be used.

6. Conclusion

ESSAY

Food security is the moral right of everyone who are born into this world (Norman Borlaug). The author stresses that food security is the equal right of every human being. But, food availability and its security is the biggest issue of today's world. Food insecurity is slowly becoming a challenge for the generations ahead. It is surging rapidly due to increased number of population, augmented intensity of climate-related disasters, and growing water scarcity. Therefore, it is becoming a threat by influencing the health of humans especially children and women by causing malnutrition. Poverty and inflation is touching sky and living standards of people are at stake. Ultimately, it is risking human resource development and the economic development of country. Subsequently, food insecurity is a defining challenge of century ahead, as it is

threat to human health, national security, and economic development. It has become a threat recently due to wars and conflicts, extreme climate changes, and lack of utilization of modern agricultural technologies.

By building climate-resilient agricultural infrastructure and innovative techniques, the issue of food insecurity can be solved.

Pakistan is facing rising threat of food insecurity due to number of reasons. According to Global Hunger Index 2022, Pakistan is ranked at 99th out of 121 countries. These are alarming numbers which keep on rising.

Despite being an agricultural country, Pakistan is facing severe food insecurity. According to international food assessment by agricultural department of US, a total of 38% of Pakistan's population is going to be insecure. Pakistan is considered

to be among top ten countries in production of food commodities. Due to natural disasters and lack of technological innovation, Pakistan is facing severe food shortage. It has surged to the extent that it is becoming a challenge of century ahead. As, it is impacting every sphere of society. So, it is a challenge and threat to the future generations.

Food insecurity is becoming a defining challenge of century ahead due to increased number of population of Pakistan.

Increased number of people would require more food commodities.

According to Pakistan Bureau of statistics, Population of Pakistan is 240.43 Million in census 2023.

Amid rising population, Pakistan is ranked at 99th out of 121 countries in global hunger index.

It is proved that food insecurity

is becoming a challenge for the century ahead.

There are many challenges due to food insecurity, one of which is prevalence of malnutrition in population especially children and women. Malnutrition then leads to occurrence of other chronic diseases. Resultantly, human health is at stake. The acute malnutrition analysis by the integrated food security phase classification has found that almost 2.14 Million children in Pakistan are suffering from acute malnutrition. The malnourished children then becomes a liability for state which is a greatest threat for the progress and development of the country.

Food insecurity is becoming a challenge, as increased hunger results in crimes and ultimately civil unrest in the country. Due to unavailability of food,

hunger levels are at higher rate. It makes the people to get food either by hook or crook. This results in increased crimes in the country. According to Citizen Liaison Committee, almost 60,000 cases of street crimes had occurred in 2023 in Karachi only. This much increased number of crimes is a threat for the country. It is not only a challenge for the present, but a threat to the century ahead.

Food insecurity is a defining challenge of the century ahead, as it impacts the human resource development. In Pakistan, almost 40% children are stunted and 5% do not reach their 5th Birthday. Due to food insecurity and shortage, human resource is not developing. According to human development index, Pakistan is ranked at 161 out of 191 countries. These are the worrying facts.

which is threatening the future of our coming generations and ultimately of country.

People are facing reduced standards of their living due to food insecurity. Amid soaring food prices, people are unable to spend their earnings on other needs of life except food commodities.

The important aspects of life i.e. education and health are ignored.

According to State bank of Pakistan,

the food inflation has surged to 39.4% in urban and 40.8%

in rural areas. Due to this much

prices hike in food supplies, even

middle class people are hesitant

to spend enough on health

and education. Therefore, food

insecurity is becoming a challenge

of century ahead by impactay

the living standards of people

i.e. health and education of

society is at risk.

Food insecurity is becoming

a challenge for century ahead through increase in poverty and inflation. More number of people are pushed to poverty due to food shortage and rising commodity prices. According to world Bank, almost 10 Million people are at edge of falling below poverty lines. And the core inflation of Pakistan has risen to 20.4%. Due to food unavailability to large number of people and soaring inflation, there is a risk of increased number of people to fall prey to poverty. It is becoming a challenge for Pakistan to get this much population out of poverty.

A threat to the national security of country is a challenge due to food insecurity. Hunger levels are surging in Pakistan which is proved to be a big factor in convincing people to fall prey to cunning activities of

violent non-state actors. This is becoming a threat to the Pakistan. Extreme poverty anywhere is a threat to national security everywhere (Kofi Annan). So, food insecurity can help in increase in terrorist activities in the state. It is becoming a threat for the national security of Pakistan.

One of the challenges inflicted by food insecurity is a risk and threat of famine in the country. Food insecurity results in unavailability of food to greater number of people. This results in increased chances of famine. According to Food and Agricultural organization, almost (222 Million people are suff). 49 Million people are in 46 countries can be pushed to famine, if not controlled. This is an alarming situation globally. Famine is considered to be a

greatest risk factor for the health of people and development of country. So, food insecurity is a challenge not only for the present era but also for the century ahead.

There are many factors which lead to food insecurity making it a challenge for the century ahead. One of which is the wars and conflicts among countries globally. Russia-Ukraine war is considered to be a recent cause for food insecurity in the world. Due to wars, there is disruption of global food supply chains and increased sanctions on the warring countries. According to WFP's East Africa region, the price of a local basket of food has increased ~~from~~ by 55% over the past 12 months. Due to decreased exports from Russia and Ukraine, food prices has surged and result in food insecurity. So, the wars and

the conflicts are one of the greatest factors in contributing to the food insecurity of the world.

Another factor leading to food insecurity is the extreme weather changes globally. Due to rising temperatures on the Earth ~~due~~ via human activities, the tendency of climate change events has increased drastically. Resultantly, the natural disasters are ~~inde~~ destroying the agricultural infrastructure badly. According to UNDP, (almost) climate-related disasters have costed almost 9.1% of GDP of Pakistan annually. The agriculture, livestock, food, and fisheries have suffered severe damage due to floods in Pakistan in 2022. Agriculture, livestock, and food have suffered a total damage of almost \$80 billion in the floods of 2022 (Planning Commission of Pakistan). Therefore, the natural climate-related disasters are considered to be a causal factor

towards exacerbating food insecurity in Pakistan.

These are many factors contributing to the food insecurity in Pakistan, one of which is the lack of access to the utilisation of modern agricultural technology. Pakistan is still using the agricultural technology utilised in 1970s and 1980s by the world. Due to failure of upgradation to modern technology, the production rate is far less than the corresponding increase in population. So, it is considered to be a factor in food insecurity. Pakistan is lacking far behind the world in digitisation of agriculture, modern climate-resilient infrastructure, and innovative techniques in farming. That is why, Pakistan faces severe food insecurity in the world.

One of the other reasons of food insecurity in Pakistan

is the poor economic conditions of the country. Pakistan is facing severe economic crisis which paralysed its capability to import the food supplies. According to State Bank of Pakistan, GDP has just grown by 0.6% in 2023. The foreign exchange reserves of Pakistan are at its lowest. The worsened economic situation of the country has made it incapable to import food commodities according to the population. This is considered to be one of the factors in surging food insecurity.

There are many factors which lead to food insecurity and one of which is the growing water scarcity. The increased water scarcity results in reduced productivity of agricultural commodities. Water is considered to be the essential ingredient for optimum food production. The dearth of water supplies will result

in decreased productivity of food supplies. According to United Nations, almost 50% increase of agricultural production is needed in 2050 which will result in water withdrawals of 30% higher. Almost 40% of water withdrawals would be suffered by global croplands. This much impact on global agricultural productivity due to water scarcity would result in severe food insecurity globally.

There are many ways through which the issue of food insecurity can be solved one of which is to adapt the climate-resilient agricultural infrastructure. It is important to build climate-smart infrastructure to save the agricultural production from severe repercussion of climate-change disasters. Innovative technologies like genomics must be utilised which uses seeds resistant to the damaging

to the climate disasters. So, it is substantial to incorporate innovative techniques to build climate resilient infrastructure for achieving efficiency in agricultural productivity.

One of the other solutions through which the issue of food insecurity can be solved is the utilization of innovative agricultural techniques for the optimum agricultural infrastructure.

In the 21st century and rising threat of population explosion, it is imperative to incorporate digitization of agriculture, use of genomics and drones in inspection of crops. Case study of Green Revolution in Ayub Khan era in which by incorporating ^{wheat} technology, almost crop production had increased from 3.25 Million tonnes ^{in 1962} to 12 Million tonnes in 1980. So, lessons must be learnt from Green revolution of

1962 and agricultural production must be increased.

Another way-forward through which the issue of food insecurity can be solved is the use of high-yielding bio-fortified seeds in agriculture. A large number of children and women are facing malnutrition and a large population is facing food insecurity. So, it has become imperative to use biofortified seeds for nutrient-rich increased productivity.

In 2023, almost 13 Million families have benefitted by utilization of zinc-enriched bio-fortified seeds of wheat crops.

It must be increased to larger scale to augment the production further.

In a nutshell, the issue of food insecurity has augmented to the extent that it is becoming a challenge to the century ahead. Amid increased

food insecurity recently, a large number of population would succumb to poverty. It is the high time to find a solution to save people from the threat and impacts of food insecurity. The incorporation of climate-smart agricultural infrastructure and high yielding biofortified seeds has become essential to stop the further augmentation of the issue of food insecurity.

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