

14th June 2023.

Mock-Test.

___/___/20__

Kaynat Iqbal - 331 batch

Essay,

Lack of Agriculture Modernization and Population Explosion.

Outline

1. Introduction

Thesis Statement: Lack of agriculture modernization and population explosion are the two interconnected challenges faced by a country. Lack of modernization in the agriculture sector has direct implications on the population bulge. These challenges can be overcome by bringing innovation in the agriculture sector.

2. Correlation between lack of agricultural advancement and population growth.

3. Causes of lacking agricultural modernization

1) a) Lack of progressive farming techniques.

b) Poor irrigation system.

c) Limited investment in the construction and

1-1-2025
maintenance of infrastructure.

d) lack of modern fertilizers.

e) Untrained and illiterate farmers.

f) Urbanization

g) lack of effective measures to deal with climate change.

4) Effects of ^{the} lack of agriculture modernization on population bulge.

a) ^{Increasing} Unemployment.

b) Growth in the poverty.

c) Food insecurity.

d) Agricultural dependency on other states.

5) How agriculture sector can be modernized by empowering the population

a) Educating youth bulge

b) Women empowerment.

c) Modern irrigation techniques

d) Effective policy making

e) Implementing introducing soil testing and weed detection techniques

f) Increased agricultural resilience

5) Conclusion

_ / _ / 20_

Population explosion is a double edged sword. It can have positive as well as negative implications. If the population of a country is innovative, educated and modern, it can turn the country into paradise through its teamwork. On the other hand, if population is weak, ineffective, uneducated and lack modern skills, it can have negative impacts on the growth of a country. Lack of ~~no~~ modernization in the agricultural sector boosts up the economic crisis and food insecurity in the country. As a result, population in such countries have to face severe challenges. There are various factors behind the lack of advancement in the agriculture ^{sector} culture including: absence of progressive farming techniques, poor irrigation system, limited investment in the construction and maintenance of infrastructure, lack of modern fertilizers, untrained and illiterate farmers and climate change. There can be drastic effects of the lack of

advancement in the agriculture on the population bulge. It results in increasing unemployment which further fuels the economic growth of a country resulting in food insecurity for the masses and agricultural dependency on other states. It should be taken into consideration that lack of agricultural modernization and population explosion are the interdependent challenges faced by a country. Lack of modernization in the agriculture has direct implications on the population of a country. Thus, effective measures should be taken that involve the collective approach towards modernizing the agriculture sector by empowering the population bulge of the country.

The world development report 2023 by the world Bank, has detailed that populations across the globe are aging at a faster and unsustainable rate. Low income countries are facing rapid population growth, and conditions make job and social benefits

— 1 — 1 — 65

difficult for this reason. Especially for the agrarian states, lack of modernization in the agriculture sector has direct consequences on the population of a country. Absence of advancement in the agriculture sector affects the livelihood of the working class.

Although, there are many causes of the lack of agriculture modernization, the chief among them is low budgetary allocation in the agriculture sector. A low investment indicates that government is not taking effective measures to enhance the agriculture sector with modern skills and techniques. Agriculture growth shrank to 1.55 pc from 4.27 pc last year in Pakistan. (Economic survey 2022-23). This depicts the negligence of the government from the advancement in the agriculture sector.

Lack of progressive farming techniques is another factor behind the lack of progressive farming techniques. Progressive farming techniques involve soil testing before using the land for agriculture, using

— 1 — 1 — 305

Chemical fertilizers, manpower, selective breeding, agricultural equipments such as harvesters, winnowing machines, and threshers. If such progressive farming techniques are not utilized in the agriculture sector, then it will hamper the agriculture modernization and thus population suffers.

Old methods of irrigation is another reason behind lack of advancement in the agriculture sector. Lack of drip irrigation and common use of surface or flood irrigation lead poor growth of agriculture sector. It wastes a lot of water and crops do not get enough water. Thus, lack of drip irrigation method by allowing water to drip slowly to the roots of the crops is the reason behind absence of modernized agriculture system.

Moreover, limited investment in the construction and maintenance of infrastructure also hinders the advancement in the

_ / _ / 20_

agriculture system of a country. According to Committee on World Food Security (CFS), responsible investment in the agriculture and food systems is essential for enhancing food security and nutrition. Thus, limited investment in the construction and maintenance of infrastructure plays a major role in the lack of agriculture modernization.

Untrained and illiterate farmers are one of the major reasons behind lack of advancement in the agriculture sector. Agriculture performance in Pakistan remained subdued and the major cause behind this is untrained and illiterate farmers. Farmers are mostly unaware of how to use modern technology and enhance the productivity. They do not understand the different techniques for the enhancements of growth in the agriculture. Farmers are not aware of the modern strategies of harvesting and irrigation. They just know how to grow

crops but do not know ^{the} law of demand and supply. They are not aware of even latest methodologies of selective breeding and effective farming.

Lack of agriculture modernization has direct impact on the population bulge. For agrarian countries, in which agriculture is the backbone of the economy, the lack of advancements ^{in agriculture system} to meet the needs of the growing world results in economic crisis. Unemployment is increased ^{because} of lack of advancement in the agriculture. Population pressure, technological limitations, environmental constraints are the causes of unemployment in farming.

Increase in unemployment fuels the growth of an economy resulting in the rapid growth of poverty. Because of absence of modernization, old methods of agriculture are still followed. The lack of updated and modern techniques in the agriculture sector causes

— 1 — 1 — 6/5

large number of people without job which consequently increases the growth of poverty.

~~As~~ ^{due to} the absence of advancement in the agriculture sector, less yield is produced. Outdated methods of farming result in the loss of productivity, which further ~~push~~ ^{results} in the dependency of food on other states. Because of food insecurity, it becomes difficult to fulfill the needs of the increasing population. ^{Such} the country needs to import food products which results in trade deficit.

There are various methods through which agriculture sector can be modernized by empowering the population bulge. Population explosion can prove a positive point for a country in which there is maximum literacy rate, people are dedicated and determined and work collectively for the growth of the state.

The education of the youth bulge

— 1 — 1 — 50

is the major force behind the advancement of the agriculture sector. The more the educated population, the more innovative and modern will be the agriculture sector.

Mostly agriculture land is available in the rural areas, where almost 70% of the population is illiterate. Especially, women have no right to education in the rural areas. Such women need to be empowered with education and skills in order to modernize the agriculture system.

The participation of women equipped with education and modern skills proves beneficial for the modernization of the agriculture system.

Besides education, modern techniques of irrigation such as drip irrigation should be introduced in the system to strengthen the agriculture system of a state.

Moreover, effective policy should be implemented regarding the growth of agriculture sector. Agriculture system should be evolved by following the steps

of the countries which have modern agriculture system. According to Ray Dabo, "Evolution is the upward movement towards improvement that occurs because of adaptations and learning". So, modern techniques like soil testing and weed detection should be adopted in a country in order to modernize its agriculture system.

In conclusion, boosting labor productivity, empowering women, adaptation to urbanization, increasing agricultural resilience, and allocating handsome fund in the agriculture sector can strengthen the ~~the~~ country by modernizing agriculture systems.