

Day: _____

Date: _____

Topic: Agricultural Decline in Pakistan and How to Counter it.

Outline :

1. Introduction

1.1 Hook - Ancient civilizations thrived on agriculture

1.2 General Statement(s)

1.3 Thesis statement

Unfavorable climatic conditions, Lack of reliable income streams for farmers, Outdated agricultural practices, Inconsistent government policies and Lack of water storage infrastructure compounded with ^{climate} ~~water~~ crisis has led to decline in Agriculture in Pakistan. However this can be countered by Mitigating Climate change, developing infrastructure, Incentivizing Investments in Agricultural sector, Incorporating Technology and Shifting to modern agricultural practices

→ Dilemma of Agricultural Decline in Pakistan.

2. Risky Agriculture Market.

2.1 - Uncertainty in Return on Investment.

2.2 - Farmers & production cycle effected.

2.3 - Farmers investing less on quality seeds and fertilizers as a result.

2.4 - Shift on growing minor crops rather than major.

2.5 Exploitation of Middlemen.

3. Lack of Government's Patronage.

3.1. Lack of Agricultural Loans.

3.2. Lack of policies ^{for pricing &} to effectively use agricultural land.

~~3.4 Development of housing schemes on agricultural land.~~

4. Shift in Mindset

4.1. Agriculture considered a backward profession.

4.2. Urbanization - People shifting from rural to urban areas for different (other than agriculture)

Sources of income.

4.3 Development of ~~agricultural~~ ^{housing} schemes in agricultural land.

5. Outdated agricultural practices.

5.1. Flood irrigation.

5.2. Monocropping & Over tilling

5.3. Indiscriminate Chemical Usage.

5.4. Labour intensive practices.

5.5 Burning crop residue.

5.6 Not making data driven decisions.

6. Lack of Water storage Infrastructure & Climate Change.

6.1 Sudden onset disasters.

- Floods, heatwaves, Glacial lake outbursts, etc.

6.2 Slow onset disasters.

- Water stress, Salinity, Dessertification.

6.3 Lack of Water storage Infrastructure to Mitigate Climate Effect.

- Dams, Canals, etc.

7. ~~Transition~~ Repercussions of Climate Decline

7.1 Food Insecurity.

7.2 Economic effects - Lowered Agricultural Exports,

7.3 Decline in Quality -...

7.4 Transition ...

8. Ways Forwards -

8. Government Interventionism.

8.1. Developing policies and their effective implementa

8.2. Incentivizing Investment - Loans, Quality seeds, fertiliz

8.3 - Regulation of Market prices.

8.4. Strict supervision of effective use of
agricultural Land.

8.5. Programs to educate people.

9. Updating Methods of Crop Selection:

9.1. ^{Government} ~~Make~~ Overlooking selection of crop for
growth for sufficient diverse crop production

9.2. ^{Incorporating AI and} ~~Using~~ technology and making data
driven decisions for crop selection.

9.3. ~~Incorporating AI~~

10. Changing Outdated Practices.

10.1 Drip Irrigation

10.2 Pest Integrated Management.

10.3 Investing in Machinery

10.4. ~~Diversifying crop production~~ in a

11. Infrastructure Development.

11.1 Building Dams and Canals.

11.2 Banks and Diversions.

2. Conclusion.

Essay:

Since the dawn of civilization, Mesopotamia, Egypt and The Indus Valley have thrived and flourished due to their agriculture and development of their agrarian economies. But the very same Indus Valley and the areas around it in Pakistan are facing an agricultural crisis. In this rapidly advancing globalized world, outdated agricultural practices, Lack of reliable income stream for farmers, inconsistent government policies, Lack of water storage facilities amalgamated with climate crisis have led to the Agricultural decline in Pakistan. This predicament is ^{not only} causing serious economic and social problems like food insecurity, and decline in agricultural exports ~~and~~ but also highlighted ~~the~~ ^{our} structural and technological limitations and outdatedness in this contemporary competitive world. But it is never too late to amend the dysfunctions of ~~our~~ and shift to better solutions. Pakistan can solve this agricultural dilemma by incentivizing investments in agricultural sector, increased government interventionism to regulate crop production development of effective policies, mitigating climate change by infrastructure development, ~~and~~

incorporating technology and eschewing outdated practices.

Firstly, Pakistan's risky agriculture market is one of the root causes of underlined issue. The untoward vicissitudes in the crop prices not only burdens the farmer but also disrupt the entire production cycle. Farmers are either left with little or no profit due to drop in prices, or the market uncertainty leads to unreliable income stream for farmers due to which they opt for low quality seed, low mediocre fertilizers and other cost cutting practices to lessen costs pre-production. This not only leads to lower quality crops but also difficulties in selling the crops in market. Local markets as well as in exporting market. Some farmers shift from major crops to minor crops to avoid monetary losses. In addition to that the middlemen (arhtis) exploit the farmers with high commission fees and buying farmers in much lower than market prices. All of these and many other market related issues leave the farmers in a mire of financial loss, an unending cycle of suffering not just for the farmers but also the agricultural sector of Pakistan.

Secondly, the government's indifference toward the agricultural issues leading to the waning agricultural sector are an underlying issue. Lack of policies to assure return on investment from market for farmers, absence of effective price regulations in markets, lack of loans for farmers and ~~or~~ insufficient ~~and~~ quality control of seeds and fertilizers are some of the issues not effectively tackled by government. The aforementioned issues cause financial losses at individual and national level. and leave many people linked to the agriculture field to consider alternate sources of income. This exodus of farmers from cultivation and the one's left in sector stuck in a quagmire ~~has~~ ~~altogether~~ due to government's apathy is causing the degeneration in the farming sector.

Additionally, the shift in people mindset is one of the causes of this downfall in Agriculture of Pakistan. Once a country whose majority was linked to agriculture has now masses who consider farming a backward profession. ~~All those who~~ All the youth, after getting education has the desire to shift ~~to~~ to corporate jobs, businesses or other occupations but not farming. leaving a huge vacuum in farming sector. Also due to better facilities available in cities people tend to shift to urban area ~~not only~~ increasing

the size of metropolitan areas. ~~engul~~ These rapid urbanization has expanded horizontally at manifolds engulfing the irrigable lands, once surrounding the cities now converting into housing schemes.

The far stretching highlyly fertile rice fields of Gujranwala and many of the mango farms of Multan are a distant memory, now converted to housing societies to accomodate the growing populations of cities. This change in mindset to leave farming and villages is depriving Pakistan's agriculture sector of farmers in upcoming generations and plethoras of irrigable land both contributing to to the death spiral of Pakistan's agriculture.

Moreover, the outdated agricultural practices in Pakistan play an important role in the regression of agriculture Pakistan. Use of Flood irrigation not only wastes 40% of the water but also increases salinity in the soil. Monocropping, cultivation of a same crop again and again deprives soil of its nutrients rapidly. Over tilling, excessive plowing of soil, ~~ma~~ creates a hardened layer under the surface overtime and hinders the growth of roots. Use of reactive chemicals and pest sprays damages the yeild of the crop.

Labour Intensive practices, where machinery is effective, leads to inefficiency and delays in production cycle.

Burning crop residue to get rid of wastes also damages ~~make~~ the soil's nutrient value. All these together lead to decrease in the produce of crop, leading

Day: _____

Date: _____

~~to~~ a factor contributing to the retrogression of agriculture,

unfavourable
Last but not the least; the climate change causing disasters like flood, ~~GLAB~~ Glacial Lake outbursts, etc are effecting ~~di~~ agriculture in Pakistan drastically. Floods in 2022

and 2025 alone effected 33 million and 69 million people respectively damaging not just their homes and livestock

but also devastating the crop. Due to floods, very frequent in Pakistan in irrigable land, it is very difficult to initially grow the crop due to the silt and debris floods bring along. Same is the

case with Glacial lake outbursts. Heatwaves makes the crops wilted and other than

these sudden onset disasters, other slow onset disasters like Salinity,

Desertification and water stress also have a negative impact on crops. They hinder the proper ~~gro~~ and healthy growth of a plant. Moreover, the floods caused by India's release of water in rivers in seasons when our crop is ~~re~~ almost

ready for harvest and blockage of water when it is needed together with

climatic floods highlight the lack of water storage infrastructure to mitigate

these water related disasters.

All these causes have bring Pakistan to a very alarming agricultural decline which is contributing further to create more economic and social problems like food insecurity, decline in exports, etc. But there is always hope to make things better. As where there is a will there is a way. All these problems do have solutions and are resolveable if there is strength in the ^{both} people and government to bring ~~the~~ a positive change.

The most important.