

# Contemporary Challenges in Agriculture for Farmers

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**Abstract:** *Agriculture is the considered backbone of the any economy of the country. In other words where per capita real income is low the emphasis is laid on agriculture and other primary industries. There are many obstacles and challenges which are faced by farmers in agriculture sector such as small land holdings climate change lack of finance water scarcity and irrigation problem limited essays of technology and research etc. This also leads to mental distress and suicide challenges for rural farmers.*

**Keywords:** Agriculture, Farmers, Challenges, Rural area, Economic development

## 1. Introduction

India is a country that mostly relies on agriculture for economic growth. Indian rural civilization is primarily characterized by joint families closed relationships are total dependent on agriculture. According to the ministry of statistics and program implementation Government of India agriculture and its allied sector contribute 17% to the gross domestic product GDP for the year 2009 and 2017 moreover it provides about two third of the employment in India directorate of acoustics 2016 agriculture is the principal livelihood option for over 58% of rural households in India (FAO, 2015). However there is a need to respond to growing demand climate and soil changes mainly the risk and pressure of human interference with agriculture production systems (FAO, 2019). At present, the main challenges are to take measures to identify new approaches to crop diseases and pests, reduce pesticides and agricultural practices and activities harmful to humans and the environment, and redesign agricultural management models in the information age (Nyaga et al, 2021). Sustainable and reliable modern agricultural production can be achieved regardless of the reoccurrence of challenges such as climate change or disasters such as pandemic (Pouvreau et al, 2018). The COVID – 19 pandemic has also led to the loss of researches the closure of many research laboratories, the cancellation of many global research conferences and the reduction of direct contact between the teachers which has passive destroyed the existing agricultural and food research system (Capell et al, 2020; Tokel, 2021).

### Challenges faced by farmers in agriculture

The sector in India is now facing the following major obstacles:

**Lack of access to credit and finance:** it might be difficult for small and marginal farmers to obtain credit and financial services. That inability to invest in cutting edge farming equipment, high quality crops, and fertilizers limits their potential to increase output.

**Small holdings:** Average farmers have modest land holdings which results in dispersed and unprofitable farming methods. Because of this they find it difficult to accept contemporary agriculture practices and technologies which lower production.

**Updated farming practices:** Traditional and out of date farming techniques are still used by a sizeable percentage of Indian farmers. The adoption of improve farming practices is hampered by limited access to knowledge ignorance of contemporary methods and opposition to change.

**Water scarcity and irrigation:** India's agriculture is dependent on the monsoon it is susceptible to droughts and erratic rainfall patterns important issues include managing water resources and gaining access to irrigation infrastructure especially in areas with scarce water supplies. However, changing climate conditions impeded the continuous water availability in most countries of the world, which further impacted the sustenance of conventional irrigation practices (Du et al.2015).

**Soil degradation and land erosion:** Inadequate soil conservation practices over use of chemical fertilizers and pesticides and improper length use practices all contribute to soil degradation and erosion in addition to diminishing agriculture output, this results in decrease soil fertility and greater susceptibility to pesticides and disease. Soil organic carbon is one of the important indicators of soil quality which controls many soil properties such as nutrients cycling soil structure maintenance and pesticides and water retention. During green revolution decades, injudicious application of agrochemicals led to an alarming situation for the soil system (Srivastava et al.2016).

**Inadequate agriculture infrastructure:** A lack of storage and cold chain facilities bad rural roads and restricted market essays all contribute to post harvest losses in agriculture. These inadequacies in the infrastructure ray the cost of production and make it harder for farmers to obtain just prices for their goods.

**Market volatility and price fluctuations:** Farmers in India frequently experience price volatility due to a lack of efficient market linkages, intermediaries, and price information. They get exposed to price gouging and risky investment return as a result. The actual distance between grain producing areas and consumers the lack of transport options the fluctuations of grain prices the concentration of power in global green trade the impact of climate and the failure of the safety net of low income urban residence

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specially in times of crisis often limit the access to food (FAO, 2019).

**Climate change and natural disasters:** The Nations agriculture business faces through problems as a result of the countries increasingly unpredictable weather patterns climate change and the incidence of natural Catastrophe including floods cyclones and droughts. These currencies in crop losses livestock death and greater farmer vulnerability.

**Limited essays to technology and research:** Limited access to new technology scientific research and agricultural extension services is restricted which makes it more difficult to implement novel practices. Better education, training and access to technology solutions there are affordable and specifically design for farmers are all necessary.

**Lack of farmers empowerment:** Farmers frequently have insufficient voices and representation during the policy making process limited farmers empowerment and participation lead to policies and initiatives that do not adequately address their unique concerns.

**Chemical fertilizers and pesticides:** A two fold increase in the food production during the first 20 years of the launch of green revolution in India this radical growth was achieved by 74 and 375 fold increase in the consumption of chemical fertilizers and pesticides respectively. (Singh et al.2016). The extra the external input drive and approach reduce the importance of internal regulation in the agro ecosystem functioning biological interactions soil health and over all environment sustainability (Shrivastav et al.2016).

### Role of Agriculture in Economic development

Simon kuznets has described four possible types of contribution that the actual sector is capable of making for overall economic development:

- 1) Product contribution that is making available food and raw materials.
- 2) Market contribution that is providing the market for production goods and consumers goods produced in the non - agricultural sector.
- 3) Factor contribution that is making available and capital to the known agricultural sector.
- 4) Foreign exchange contribution.

## 2. Conclusion

Lack of infrastructure particularly in rural regions, and little knowledge are the current problems facing Indian agriculture. Infrastructure related issues such as those with irrigation; markets and transportation are extremely expensive for farmers to deal with. Furthermore there are no such suitable delivery methods. there are numerous plants to advance agriculture. However there is no efficient distribution methods that can boost localized output cut expenses or raise price realization. Furthermore the problems only get worse without government assistance for the Indian agrarian problem but it requires careful analysis innovations and stronger rules to prevent both business entities and farmers from suffering significant losses.

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