



**PERFECTION  
IAS**

# **50** DAYS PLAN

Mains Answer Writing Program  
for **BPSC 67**

**INDIAN ECONOMY**

19. What are the specific Problem of Agriculture Backwardness in state of Bihar? How far Mechanisation and Technology can solve the measure problem?

बिहार में कृषि के पिछड़ेपन की विशिष्ट समस्या क्या है? मशीनीकरण और प्रौद्योगिकी किस हद तक इस समस्या का समाधान कर सकते हैं?

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19. What are the specific Problems of Agriculture Backwardness in state of Bihar? How far Mechanisation and Technology can solve the measure problems?

**Approach**

**Introduction:** Give brief introduction about role of agriculture in Bihar economy.

**Body:**

- Brief about what are the specific problems being faced by the state.
- Brief discuss the measures required.
- Discuss government steps taken to solve the problem with the use of technology .

**Conclusion :**Optimistic conclusion summarizing the above-mentioned suggestions.

**Introduction**

The economy of Bihar is dominated by agriculture, which contributes over a quarter of the state income and accounts for employment of about 70 per cent of the rural workforce. Hence, robust growth of the agriculture sector holds the key to the economic and social development of the state. However, the Government of Bihar has launched multiple initiatives under the agriculture roadmaps for the holistic development of agriculture with an emphasis on increasing productivity growth and improving farmers' income.

**Body****Causes of agriculture backwardness in state of Bihar**

- 1. Agriculture in Bihar is mainly dependent on monsoon.**
  - Bihar has abundant water resources. It receives 999mm of average rainfall.
  - However, the variation in the onset of monsoon on year to year basis results in flood and the drought-like situation in Bihar simultaneously. Still, the agriculture of Bihar is highly dependent on south-west monsoon.
- 2. Seed related issues**
  - Due to exorbitant prices of seeds, a majority of farmers, especially small and marginal farmers are deprived of good quality seeds.
  - Due to the stable price of urea and high prices of Potash and Phosphorous, farmers use more urea than Potash and Phosphorous.
- 3. Landholdings in Bihar are very small, about 3/4<sup>th</sup> land holdings are less than one hectare.**
  - The size of landholding is very small in Bihar that compels the small cultivators to resort to the subsidiary occupation. More than 91 percent of all holdings fall in the category of marginal holdings with farm size less than 1 hectare.
  - Each such holding is again fragmented in small pieces. Land records are obsolete making any institutional investment virtually impossible. Small farm agriculture creates serious problems for economy of scale.
- 4. Traditional system of agricultural practices are still prevalent in Bihar.**
  - Most of the agricultural operations in Bihar are carried on by human hand using simple and conventional tools and equipments like wooden plough, sickle, etc.
  - Little or no use of machines is made in ploughing, sowing, irrigating, thinning and pruning, weeding, harvesting threshing and transporting the crops.
- 5. Poor farmers can't afford HYV seeds, fertilisers, tools etc**
  - Due to exorbitant prices of seeds, a majority of farmers, especially small and marginal farmers are deprived of good quality seeds.
- 6. Declining investment in agriculture**
  - Due to high risk and uncertainty in the agro-climatic zones, prices, productivity, etc, the financing in the farm sector has become a problem.



- The slow pace implementation of Kisan Credit Cards leaves the small farmers highly dependent on non-institutional credit sources.
- The moneylenders demand exorbitant interest rate and farmers get trapped in huge debt cycles.
- 7. Lack of adequate facilities of irrigation, electricity, marketing, transportation etc.**
  - Road connectivity, storage godown and power availability to agriculture sector are inadequate to usher accelerated agriculture development in the state. More than half of Bihar's villages are have connectivity issues which limit market access.
  - Floods, water logging, poor drainage, and inadequate public investments on expanding and maintaining surface irrigation systems, are some serious issues plaguing the agriculture in Bihar.
- 8. Problem of flood and drought affects agriculture badly every year.**
  - State agriculture is dependent on Monsoon. A heavy rainfall leads to flood and a deficient rainfall could lead to drought. The paradox of flood and drought occurs simultaneously almost every year making agriculture highly vulnerable and unstable.
  - Extremely volatile agricultural output mainly due to shocks from regular monsoon flooding in some parts of the state and periodic drought in others, have become common.
- 9. Technological factors**
  - Despite having agricultural universities, colleges and research centres, the productivity of crops is low in Bihar due to loss adaptation to modern technologies by farmers.
  - Consequently, the yield of almost all major crops is lower than the all-India average.
- 10. Wastage of water**
  - The current method of flood irrigation in Bihar results in about 35% loss of water.
  - About 60% of the water diverted or pumped for irrigation is wasted via runoff, evapotranspiration, percolation and seepage.

**Mechanisation and Technology can solve the problem in the following manner :-**

- Qualitative increase in crop productivity may be emphasized as there is limited scope for increase in area, quality of production and value addition has to be emphasized.
- Seed is critical for the development of agriculture, so there is a need to substantially increase investment in public sector seed production, processing and marketing.
- Generation of appropriate agricultural technology and its dissemination to the farmers is necessary for agricultural development. There is a need to set up investment in agricultural research, education, extension.
- Agriculture marketing will be one area which need focussed attention, structural innovations to foster agriculture marketing.
- Procurement of food grains must be assured and to make it effective FCI and CWC must create adequate storage infrastructure.
- Use of modern agricultural technology is important for increasing production and productivity.
- Organic farming may be promoted.

**With the use of above mentioned measures recently the Government of Bihar achieved the milestones in agriculture sector :-**

- The Government of Bihar has brought three Krishi Roadmaps since 2007 to boost agricultural sector in Bihar. These roadmaps led to tremendous achievements.
- On 2nd January, 2020 the Government of India has conferred Krishi Karman Award to Bihar, for its achievement in Productivity of Maize and wheat.
- CM of Bihar recently launched Horticulture Mission, there is a provision of grants for promoting roof top horticulture in five cities of the state including Patna.
- To boost organic farming in the state Government of Bihar brought Bihar State Organic Mission which is being implemented for the period of 2019-20 to 2021-22. Under this mission adoption and certification programme is being run to grant certificate to farmers for adoption of organic seeds

**However, apart from above mentioned milestones Government of Bihar launched various schemes for agricultural development, these are following below :-**

**1) Jal-jeevan Hariyali Campaign**

- Under the Jal-jeevan Hariyali Campaign, Government of Bihar recently launched Jalvayu Ke Anukul Krishi karyakram (Climate Resilient Agricultural Programme) (Climate Resilient Agricultural programme).



- In phase I of this programme 40 villages of 8 districts will be developed as Model climate resilient agricultural villages. This programme is being implemented by Dr. Rajendra Prasad Central Agricultural University (Bihar), Bihar Agricultural University and ICAR-Research Centre for Eastern Region and CIMYT-BISA
- 2) **Bihar Shatabadi NalkupYojna**
  - A subsidy scheme is being implemented by Government of Bihar (GoB) to boost ground water irrigation facility in the State under this scheme.
  - Gov of Bihar provides subsidy for boring tube well, up to Rs. 15,000 (for less than 70 m tube wells) and Rs. 35,000 (for less than 100 metre tube wells).
- 3) **PM Krishi SinchayiYojana(PMSYI)**
  - Central government provides 55% of subsidy to marginal farmers (having less than 1 hectare of farm lands) and 45% subsidy to farmers having more than 1 hectare farmland for implementing micro-irrigation and drip irrigation system in the country.
- 4) **Pradhan Mantri Kisan Samman Nidhi Yojana (popularly known as PM-KISAN)**
  - In this scheme central government provides Rs. 6000 per annum to every farmer in the country in three equal instalments of Rs. 2000 to provide a small help to farmers for cropping.
- 5) **Pradhanmantri Fasal Bima Yojna (PMFSBY)**
  - It was launched by Government of India to protect farmers from loss happened due to any kind unforeseen natural disasters, which devastate crop in farmlands.
  - It aims to cushion farmers against crop loss. The central and state governments pay more than 95% of the premium amount while the farmer bears 1.5-5% of the premium.
  - Prior to 2020, the scheme was mandatory for farmers who availed institutional finance, but that was changed and made voluntary for all farmers.
- 6) **Bihar Rajya Fasal Sahayata Yojna**
  - It is launched to provide assistance to farmers in case of failure of standing crop due to adverse weather.
  - The state govt. will provide compensation amount of Rs 7500 to Rs 10000 per hectare on the basis of threshold yield rate, Bihar became the first state to launch its own Fasal BimaYojna in the country.
- 7) **Bihar Krishi App**
  - Bihar Krishi App is an Agriculture app in Hindi which has been specifically designed for farmers of Bihar. It aims to assist them in their journey towards better and innovative farming while boosting their incomes.
  - This agriculture app in Bihar will make sure every farmer in Bihar has access to the latest agricultural technology it contains video and text on every side of agriculture.
  - The app helps farmers in several manners, including crop management, horticulture, opportunities in agriculture sector, weather related information, advice of experts on questions asked by farmers and even specific information about the quality of soil one in practising farming and use of fertilisers needed for the given soil.
- 8) **Subsidy**
  - Besides subsidy on boring tube wells, state government also provides diesel subsidy to farmers for running tube wells for irrigation purposes. In this scheme state government provided Rs. 263.60 crore in 2018-19.
  - To boost mechanisation of agriculture in the state, Government of Bihar provides subsidy on buying modern agricultural equipment's.
  - Input subsidy is also being provided by state Government for adoption of organic farming in horticulture especially vegetable cultivation. This input is provided twice in a year.

### **Conclusion**

Agricultural sector has an immense potential in the state, it alone can lead the state on the road of development. It will create better employment opportunity and check the migration of the state, increase the income of rural population, enhance purchasing power.

