

Geographical Analysis of the Need for Agricultural Modernization in Bihar

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Abstract: Not only in the whole of India but also at the regional level, after the Industrial Revolution, the society's attitude towards agricultural work became negative. Physical attraction was mainly responsible behind this, but in the context of population growth in Bihar, in the context of nurturing the people's power structure. The need for agricultural modernization has become a pressing question.

Key words:- Agriculture road map, resources, food security, food chain, herbivores, people's rights model, modernization, cooperation, export, water life, greenery, attitude, education.

Introduction

There is an initial basic need of human beings for which man has been struggling with nature since his origin. However, in primitive times when man lived in the caves of the mountains, at that time man did not develop attraction towards trees and plants for food. And humans were insecure about their diet as a mobile organism. Gradually the population of humans kept on increasing and in the context of increasing population, the resources related to food of humans kept on decreasing. As already mentioned, in the said time The food related needs of human beings were not cognized from the perspective of plants. Since the food resources started decreasing, the question arose about saving the existence of human beings. Human beings themselves became aware and thought that our food resources i.e. the herbivores which are provided by trees and plants. With this thought, man's attraction towards agriculture increased. Gradually this attraction became a part of man's food chain and food system. Now man has to protect himself from wild animals. There was security, there was freedom from victims of violence.

In this way gradually humans started living a permanent life. Since the nutritional instinct of humans had increased in a stable and peaceful environment. As a result, human population started increasing and agricultural activities combined with human activities and an agricultural culture developed. History is witness to this. In India, this agricultural culture is five thousand years old, while globally this agricultural activity is 7000 years old in the context of Babylonian civilization. In the beginning, especially with the invention of iron around 1400 BC, forests were rapidly destroyed and Agricultural culture was completely established. But in the Indian context, there was a second revolution of population growth around 800 BC, in which various dynasties were established in India. Lichhavi dynasty and Anga dynasty were established. Rapid development of residential settlement took place under the patronage of these dynasties. Due to which, in the context of agricultural land, there was a feeling of private land consolidation among the public. The history of population growth and development testifies that agricultural land is decreasing with time, while agricultural technology is becoming perfect due to the increase in population. After independence, the government became conscious of the first five-year plan. The presented research paper is dedicated to the need of agricultural modernization in Bihar state of India, as we know that Bihar, which is deprived of mineral resources, is rich from the point of view of agricultural resources, on the other hand, the cost of living in Bihar is so low that the population Growth is crushed in front of the public rights index, in order to support the life of this increasing population, the then Bihar government made the Agriculture Cabinet Policy in 2008 for the overall development of agriculture and allied sectors, which is known as the Agriculture Road Map. Till now 3 Agriculture The road map has been completed. The fourth agricultural road map was

inaugurated by the current President of India in Patna on 18 October 2023. This fourth agricultural road map is dedicated to the modernization, technicalization and industrialization of agriculture and allied sectors of Bihar. The presented research essay is basically based on secondary data, but primary facts were also brought out through the questionnaire. It is understood that this primary fact became the main basis of research analysis.

Objectives of Research

1. The main objective of the presented research paper will be to show the policies of Bihar government towards agricultural modernization.
2. The main objective will be to objectively evaluate the agriculture related policies of Bihar Government.
2. Analysis will be done towards increasing population and food security in Bihar.
3. Why agricultural modernization is necessary in Bihar will be unveiled.
4. Social and agricultural attitudes will be exposed as barriers to agriculture in Bihar.
5. Flood and drought disaster in Bihar will thus be shown as agricultural modernization.
6. Its objective will be how to best utilize the agricultural land in Bihar.

Research Hypothesis

1. The barriers to agricultural modernization in Bihar are, on the one hand, the frequency of floods and droughts, and on the other, negative agricultural attitudes and conditions.
2. The agricultural pattern of Bihar indicates intensive discharge agricultural pattern.
3. The agricultural land of Bihar has high level of fertility, which the farmers of Bihar will not be able to make the best use of.
4. The agricultural roadmap of Bihar government will help in making the model of agricultural modernity of Bihar.

Relevance, Usefulness and Importance of Research

The presented research paper will be relevant in the future perspective of Bihar in this form that it will create positive thinking among the farmers towards agricultural modernity and will give impetus to it. The presented research paper will be useful in the sense that this research analysis will open the eyes of the workers in agriculture and allied sectors. The importance of this research paper will be in the form that on one hand it will objectively mirror the efficiency of the government's policy, due to which the agricultural policy makers of Bihar will be conscious of their policies and implement them. On the other hand, this research will help the progressive farmers of Bihar. You will be inspired after reading the letter.

Research Method and Data

The presented research is basically based on the secondary data of Bihar Government, but with the aim of getting feedback on the agricultural policy of Bihar Government, an attempt was made to know the sentiments of the farmers by going to some selected research areas through questionnaire method, as a result, primary facts were created. This research analysis has been prepared and finally objective research summary has been presented. The presented research report presents 100 percent originality.

Research Area

Although the entire state of Bihar i.e. an area of 94 thousand square kilometers is included in the presented research paper, but only in a select few, the formats of modernity are adopted towards agriculture and allied sectors. The presented research analysis has been done keeping in view these areas only, out of which Vaishali The main ones are Nalanda district, Muzaffarpur, Darbhanga, Patna, Nalgachia, Purnia. In these districts, meaningful efforts towards agricultural modernization were made at the government level and are being made at the farmer level.

Research Analysis

Since Bihar government is dedicated to the overall agricultural development of Bihar. Only agricultural resources are found in abundance in Bihar, hence the Bihar government does not even have the means to run its

economy. For objective analysis of the presented research paper, it would be more meaningful to first present the agricultural roadmap proposed by the Bihar government. Apart from this, it would be more appropriate to analyze the policies of the agricultural roadmap in different formats. The need for agricultural modernization of Bihar government will be analyzed under various headings: -

1. Agriculture Road Map of Bihar
2. Analysis of different formats of agricultural roadmap.
3. Agricultural Roadmap and Agricultural Modernization.
4. Need for agricultural modernization in Bihar.

1. Agricultural Roadmap of Bihar:-

In the last 5 years, the contribution of agriculture sector in the state's gross domestic product has increased. However, as a result of all-round development of the state's economy, the contribution of agriculture, animal husbandry and fisheries sector in the gross domestic product has decreased from 26.29% to 20.99%. Bihar is being considered as the region of second green revolution across the country. The geographical area is 93.60 lakh hectares, out of which about 56.60 lakh hectares, the state has been divided into 4 regions from the agro-climatic point of view. There is abundance of natural resources necessary for development. I The land is deep and fertile, quality water is available in abundance and the farmers of Bihar are very hardworking. The first Green Revolution took place as a result of the development of dwarf varieties of paddy and wheat in the country. This success was mainly in the western part of the country. The health of the soil here, the availability of water and the possibilities of quality products are diminishing day by day. As a result, the food security of the country has been questioned. Bihar remained deprived of the first Green Revolution. In recent years, the agricultural sector As a result of the support being received by Bihar, Bihar is standing on the threshold of Rainbow Revolution. Honorable Chief Minister says that it will not be the same as it was before the Green Revolution. The Rainbow Revolution will be sustainable and evergreen based on inclusiveness. Since 2008, there will be a phase of agricultural development in the state. A new era began. Schemes for the benefit of farmers were started. To give a solid foundation to agricultural development, Udhyan Mahavidyalaya was established in Nalanda, Farmers Commission was formed and Agricultural Science Center and Agricultural Technology Management Agency (ATMA) were established in all the districts.) was decided to be formed. It was decided to revive Bihar State Seed Corporation and State Agricultural Sector and a new thinking started in the field of production, processing, storage and marketing of foundation seeds and certified seeds.

Agricultural Road Map Program was started in the year 2008, which was an important decision for the overall development of agriculture. The seed displacement rate of paddy increased 40 times to 38% in Kharif 2011, which was only 10% in the year 2005-06. The displacement rate increased to about 35% in Rabi 2011-12, which was only 11% in the year 2005-06. More than 2300 agricultural graduates have joined the moribund agricultural extension system as subject matter experts and more than 7000 farmers have joined as farmer advisors. It has got a revival in the year 2011-12. A major program of Sri method cultivation of paddy and wheat has been implemented. The structure has been promoted in the form of green manure. Cultivation of hybrid rice varieties has been increased from 4 lakh hectares. Has been done in more area.

The prescribed scale of productivity in the first agricultural road map could not be achieved. The level of productivity is much higher than the reported productivity. As a result, debate has started regarding the authenticity of the data. Remote sensing to assess crop cover and production. A pilot program has been started for the use of the technology. If this pilot is successful, this technology can be widely used in the compilation of agricultural statistics data. In the year 2004-05, food grain production had reached the lowest level of 79.00 lakh metric tons. I All men and women and landless agricultural labourers, sharecroppers, farmers taking land on rent, small, marginal and extremely marginal farmers, farmers with large land holdings, fishermen, cattle rearers, poultry farmers, nomadic people, people with small gardens as well as rural people. And such people from tribal families will be included who are involved in multidimensional business of agriculture and beekeeping, sericulture or making vermicompost, etc.

2. Analysis of Different Formats of Agricultural Roadmap:-

The first part of the research analysis shows the overall commitment of the Bihar government towards agricultural prosperity and modernity in Bihar. After observing the policies, it becomes clear that for the rapid frequency of crop production. Integrated ideas are being provided among the farmers for agriculture. Villages have been selected for the production of improved fir seeds. Selected farmers of selected villages have been trained for seed production. Along with the seeds, which soil will be useful for which crop and will be responsible for the health of the soil. Laboratory for basic soil testing has been started in every district. With this, farmers will be made aware of the scientific approach and will be told to add the right nutrients. Apart from this, there is gradually increasing shortage of agricultural labor in Bihar. To fulfill that deficiency, use of agricultural machinery for agricultural activities will be promoted and it has been said that grants will be given for its purchase. For the last two decades, elections have been conducted for the meaningful agricultural produce exchange organization Pax. Which protects farmers from exploitation by moneylenders. Along with agriculture, allied sectors like animal husbandry and fisheries can be developed and more profits can be taken at less cost. This is the reason why Bihar rural development and fisheries are getting strong support for the last ten years. The need for connectivity is essential for the development of agriculture. So that raw materials can be transported during agricultural work and produced goods can be transported after agriculture is completed. Products like vegetables, dairy, fish are perishable. It is mandatory for it to reach the markets immediately. The Bihar government and the central government have jointly connected the remote villages of Bihar with the district headquarters and the state headquarters.

As we know, water is needed to increase the productivity of agriculture. Especially for commercial vegetable crops and hybrid seeds, a large amount of water is required. Famous soil scientist Professor Randhawa has said that when the soil is irrigated, crop productivity increases by 6 times. To provide irrigation facility to crops, the target is to provide water to every agricultural area of Bihar by 2025. With this view, Bihar government has started Jal Jeevan Hariyali Programme.

As we see the agricultural pattern of other states of India, the adjustment between the private sector and the government sector i.e. the state in which the cooperative sector is developed has achieved the maximum development in agriculture and co-operative sectors. Gujarat, Rajasthan, Haryana, Punjab and Western Uttar Pradesh are examples of this. In Bihar, this legislation was considered necessary for agricultural development. As a result, efforts are being made for development in the cooperative sector.

Agro-based industry is an important part in the field of agricultural development. At present, agriculture-based small regional industrial models are being implemented in Bihar under the Chief Minister Udyami Yojana. This model will become an example for the development of Bihar.

As we know that the Food Security Act has been implemented in India, under which it is the responsibility of the government to provide food to the people of Bihar both evenings in the light of this Act. To meet such a big challenge, the agricultural model of Bihar has been developed. needs to be modernized.

As we know that energy is required to carry out any human activity and at present Bihar has become self-sufficient in energy. This is the reason why farmers of Bihar have been provided facilities in the field of energy. is going

In order to maintain the climate in a comfortable pattern in Bihar, the forest cover has been increased from 7% to 18% in the last 20 years so that the irregularity of monsoon can be prevented. To protect agriculture from atmospheric disaster, high forest cover has recently been established in Purnia district. Technological weather radar has been installed. Thus, it is clear that the Bihar government is fully committed to giving a new shape to the need of agricultural development in Bihar.

3. Agriculture Roadmap and Fourth Modernization of Agriculture

As revealed from the newspapers, on 18 October 2023 in Patna, the capital of Bihar, the Honorable President of India inaugurated the fourth Bihar Agriculture Roadmap (2023-28). After working on the last three agricultural roadmaps, the Bihar government has got the task of developing agriculture. Expected success has been achieved in the perspective. Now the Government of Bihar is determined to give the intensive discharge farming format to commercial farming format, industrial farming format. For this, high agricultural technology

will be required in the field of agriculture. Large amount of agricultural capital. Investment will be required. Agricultural trained labor will be required on a large scale. Technically trained agricultural managers will be required to manage agriculture. Only then will the agricultural pattern of Bihar be transformed into a technical, industrial and commercial pattern at a modern level. All the strategies of the fourth agricultural roadmap have been prepared, which have been completely uploaded on the internet by the Bihar government.

4. Need for agricultural modernization in Bihar

As we know that Bihar is a state of farmers. Because natural mineral resources are distributed in small quantities in modern Bihar. There are some agricultural areas in Bihar which are either affected by floods or drought. This is the reason. The population density of the state of Bihar is only 142%. This shows that the average land pattern of Bihar is not multi-cropped. Due to not being multi-cropped, nutrition of the dense population of Bihar becomes a challenge. On top of that, the Government of India Having discipline of Food Safety Act. As we know the population density in Bihar is higher than all the states of India.

The population density here is found to be 1102 persons per square kilometer, which may have increased further in the present time. Due to the increase in residential land in the states with such dense density, the agricultural land is decreasing, which is due to the discharge of population of Bihar. In the future, it can create a dire and chaotic situation. In this context, it becomes inevitable to modernize the agricultural system of Bihar. Both of us, the authors of the research paper, Dr. Jyotsna and Dr. Namrata Anand, in their respective P.HD thesis. I have given high discussions in the context of modernization of population and have given advice for appropriate agricultural and human resource development.

Conclusion

After appropriate research analysis, this fact becomes completely clear that modernization of agriculture is not only necessary but also mandatory for the integrated human development of Bihar. For this, the biggest hindrance before us will be the social attitude which can be trained through education and transformed into a positive regional society. Attitudes can be changed. The government and administration will also have to go to the village level and support the farmers. At the same time, agricultural experts will have to reach the agricultural fields and solve the problems. Crop diseases, crop productivity, soil health etc. There is a need to give positive advice in the field. The government will also have to complete the work through a single window scheme in the context of agricultural equipment and other agricultural grants. The agricultural village of Bihar is still untouched by the influence of science and technology propaganda. The more confidence the farmers gain through work, cooperation and training. There is a saying popular in Magadha region:-

“Excellent cultivation, medium arrow

Lowly servitude, begging.

Appropriate proverbs from the scriptures show the superiority of agricultural activities. But the present mentality is odd. Everyone needs food but no one would like to do agriculture.

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