



Land Use Planning and Sustainable Rural Development: A Geographical Study of Jagatpur Development Block (Unchahar Tehsil, Raebareli District), Uttar Pradesh

Dikshant

Research Scholar, Department of Geography, Prof. Rajendra Singh (Rajju Bhaiya) University, Prayagraj, Uttar Pradesh, India, E-mail: scholargeos@gmail.com, Research Supervisor:

Prof. (Dr.) Radha Krishna Dubey

Professor & Head, Department of Geography, MDPG College, Pratapgarh, Uttar Pradesh, India

DOI : <https://doi.org/10.5281/zenodo.22086508>

ARTICLE DETAILS

Research Paper

Received: 21-06-2026

Accepted: 28-07-2026

Published: 21-08-2026

Keywords:

Land Use Planning; Sustainable Rural Development; Agricultural Development; Cropping Pattern; GIS; Jagatpur Development Block

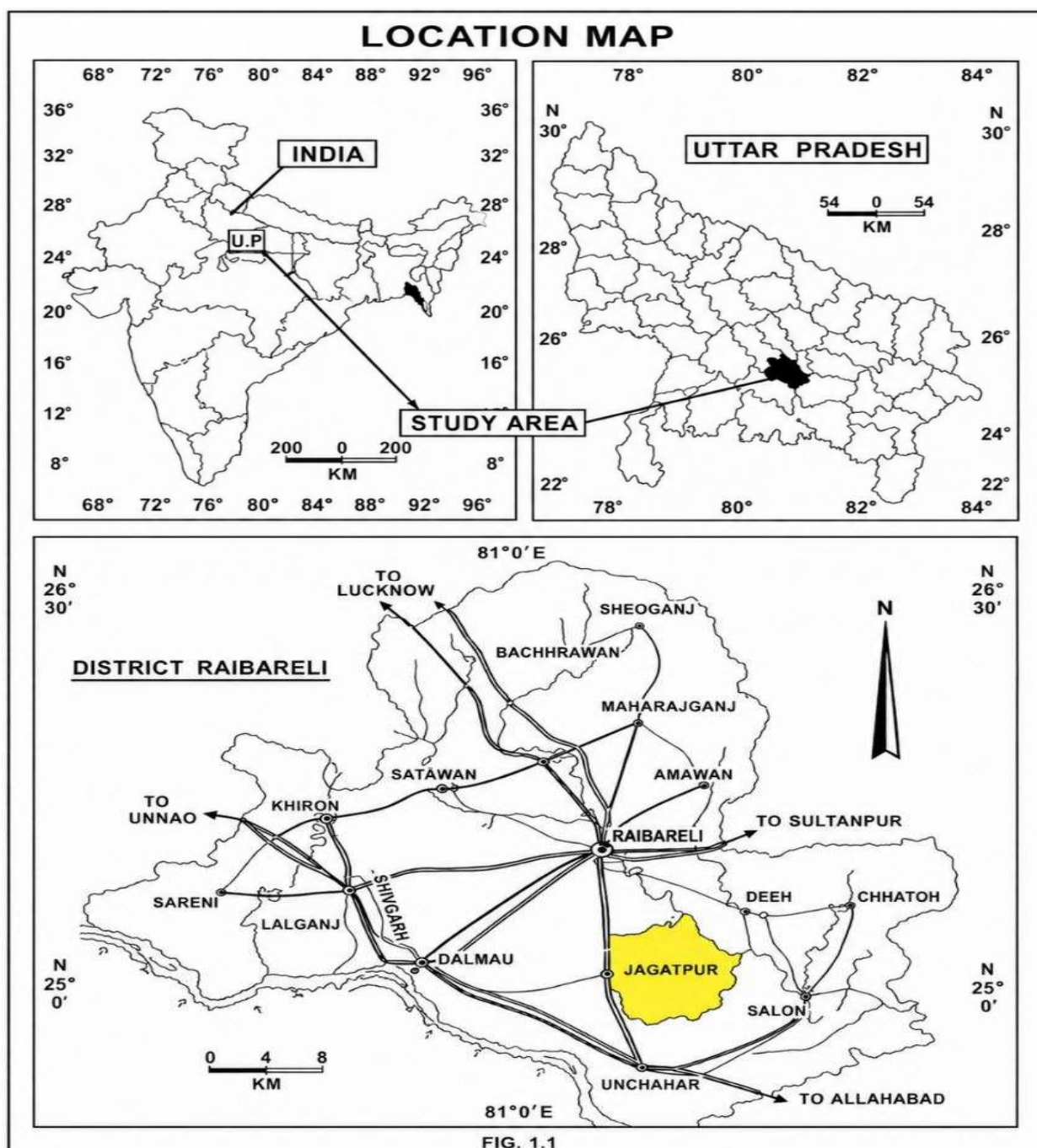
ABSTRACT

In an agriculture-based economy, the primary and sustainable focus of sustainable rural development is agricultural development. This agricultural development is linked to land use planning, as the goal of sustainable rural development can only be achieved through land use planning. Despite extensive government efforts and facilities, the lack of planned land use in Jagatpur Development Block leaves the goal of sustainable rural development far behind. This research paper analyzes the proposal to develop agriculture in Jagatpur Development Block through land use planning and subsequently establish the dimensions of sustainable rural development. Jagatpur Development Block is located in the southwestern region of Rae Bareli District, Uttar Pradesh. Agriculture and the rural economy based on it remain backward. The presented research paper is analyzed against this conceptual background to achieve sustainable rural development in this backward economic region dominated by rural landscape.

Study Area: General Introduction of Jagatpur Development Block, Raebareli District

Disclaimer: The opinions, interpretations, conclusions, recommendations, analyses, and statements expressed in this research article are solely those of the author(s) and do not reflect the views, policies, or positions of the Publisher, Chief Editor, Editors, Editorial Board, Reviewers, or their affiliated institutions. The author(s) are solely responsible for ensuring the originality, authenticity, and integrity of the manuscript and for ensuring that it is free from plagiarism, AI-generated content, copyright infringement, data falsification, and any other form of academic misconduct.

Jagatpur Development Block is located in the southern part of Raebareli district and forms part of the central-southern region of Uttar Pradesh. It extends between $25^{\circ}56'$ to $26^{\circ}10'$ North latitude and $81^{\circ}50'$ to $82^{\circ}3'$ East longitude, covering a total area of 112.37 sq km. Its northern boundary is demarcated by Sadar Tehsil of Raebareli, eastern boundary by Salon Tehsil, south-eastern boundary by Pratapgarh district, south-western boundary by the Ganga River, and north-western boundary by Dalmau Tehsil. Geographically, this region forms an important part of the vast Gangetic plain. The area is drained by the Ganga River and its small tributary streams. The climate of the region is generally temperate and monsoonal, and the soils are regional in nature.



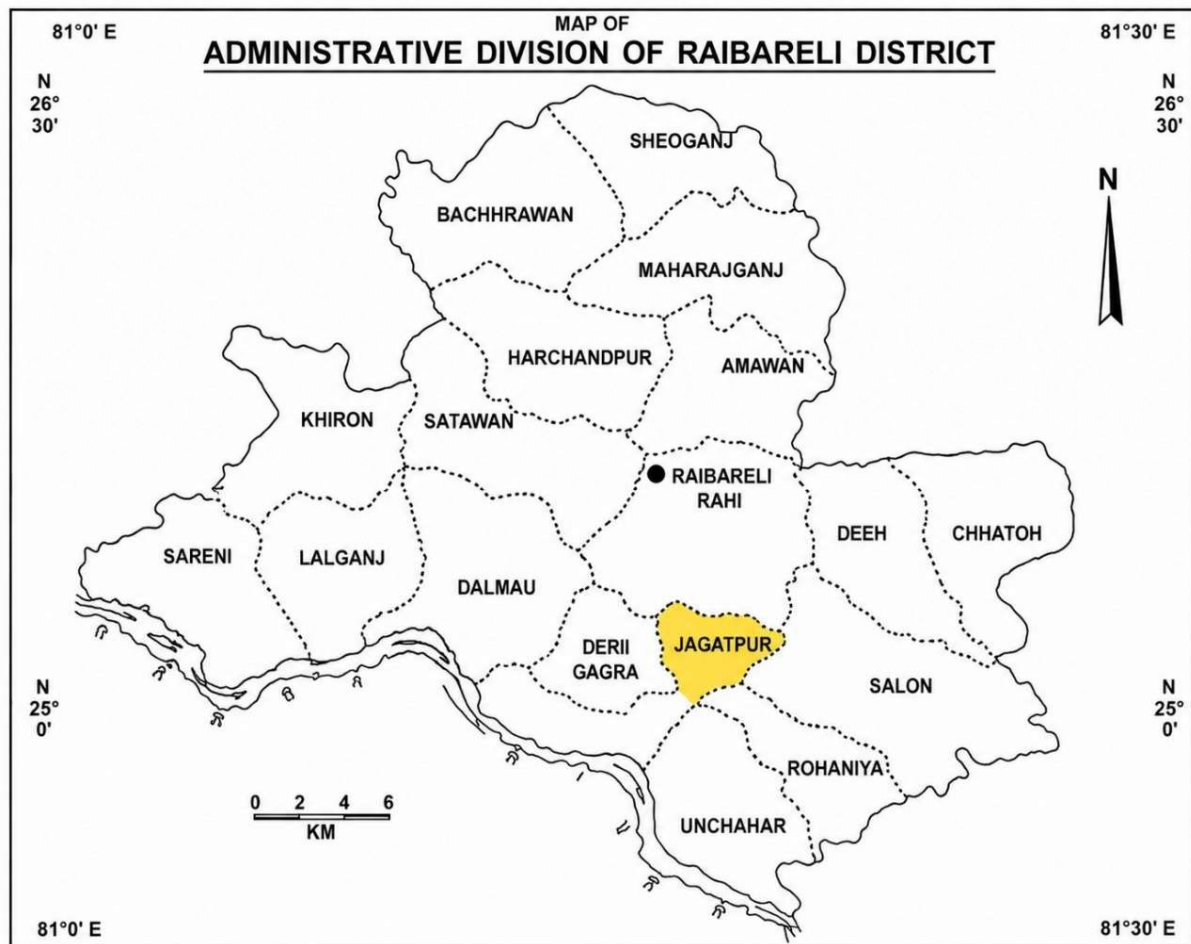


FIG. 1.2

Conceptual Background

The concept of sustainable rural development is an important concept in development geography. This concept emphasizes the systematic planning of the functional relationships between human and ecological elements in such a way that, through human economic development efforts, humans can not only meet their current needs but also ensure the potential for meeting the needs of future generations. In the current economic development process, the unplanned and excessive use of human potential has, in a short period of time, led to the destabilization of the entire ecological system, posing a threat to the existence of all living organisms, including humans. Sustainable development is the solution to many of the problems arising from this adverse global situation. Sustainable development emphasizes a development process that maintains ecological balance, ensures biological security, and promotes the prosperity of biodiversity. The concept of sustainable rural development gained greater significance at the end of the 20th century and at the Earth Summit held in 1992².

Sustainable development is ecologically sound and sustainable development. It considers development as sustainable. It emphasizes establishing a balance between the ecosystem, the biological and human communities, and their environment, ensuring not only their continued existence but also their development. Sustainable development is a model of development that is capable of meeting at least the basic needs of present and future generations of humans on Earth for a long period of time. Sustainable development encourages development without destruction. This concept is based on the belief that the balance between nature and society has become so imbalanced that the existence of the entire biological world, including humans, is endangered. This current and future crisis of the ecological system can only be mitigated and subsequently eliminated through sustainable development. Since our existing ecological system is a legacy for our descendants, it is our responsibility to preserve it³. The concept of sustainable development has long been present in geographical studies. In the present context, the concept of sustainable rural development is more important in the following two forms -

1. Concept of supply of basic needs: In this concept, meeting the minimum fundamental needs of human beings is called development. It may be noted that certain basic needs (food, clothes, house, education, medicine etc.) of the human society existing in many areas are the same, while in many societies there is a changing tendency of consumption and competition

to fulfill it⁴. This unplanned tendency of indiscriminate consumption of resources led to the loss of resources. The solution to this crisis is long term development.

2. Concept of Technical Development Level:- In today's scientific environment, more emphasis is being laid on process studies than in the format under rural geographical studies. This is the reason why the analysis of factors responsible for change in rural environment (scientific land use, assured irrigation system, mechanization, educational and health facilities, means of transport and communication, electrification, banking and agricultural dissemination services, non-agricultural economic activities etc.) has become important. In this process of sustainable development of rural areas, eco-prone development can be done through qualitative and quantitative change in the natural, social and economic activities of a particular area. In this context, the techniques to be adopted for the sustainable development of Jagatpur development block are being analyzed.

Table No. 1 Commercial Transformation of Crop Pattern Structure in Jagatpur Development Block
(Years 1999 to 2021)

Name	1999 Crop Area Percentage (Kharif Crops)	2021 Crop Area Percentage (Kharif Crops)
------	--	--



of Nyaya Panchayat	Pad dy	Fodd er	Jow ar	Baj ra	Moo ng	Arh ar	Ur ad	Ho rtic ult ure	Othe rs	Pad dy	Fodd er	Jow ar	Baj ra	Moo ng	Arh ar	Ur ad	Ho rti cul tu re	Othe rs
Purabgaon	52.2 2	13.36	2.10	8.46	1.12	3.98	1.1 9	11. 47	6.00	63.3 0	2.17	4.98	7.00	0.85	2.14	0.5 0	16. 16	3.00
Sajanhu dua	56.3 1	14.46	2.00	9.32	1.98	4.10	1.1 5	8.3 5	2.32	60.5 0	5.00	7.86	8.25	0.72	2.18	1.0 0	12. 34	2.15
Agatpur	68.0 0	10.00	3.97	9.18	2.46	3.00	1.1 2	2.0 0	0.63	76.1 4	6.00	2.71	3.16	1.15	1.10	0.2 5	8.0 0	1.49
Dhokaha	71.3 8	10.50	3.67	12.0 0	0.25	1.00	0.9 2	NI L	0.28	80.3 4	2.39	2.19	8.19	0.25	0.50	1.4 6	2.5 0	2.16
Rajputi	70.8 4	13.43	0.35	10.3 7	1.42	1.10	0.7 4	1.1 6	0.59	79.6 0	6.18	0.04	4.47	1.13	1.28	0.9 5	4.1 0	2.25
Bilandpur	67.7 4	10.18	3.00	10.1 2	3.21	2.16	1.1 3	1.3 6	1.10	80.3 9	3.47	1.31	0.15	2.00	0.85	0.2 7	9.1 6	1.49
Idera	68.0 0	13.10	3.60	8.00	2.24	1.75	0.6 2	1.9 8	0.70	79.1 7	4.13	4.86	7.50	1.16	1.12	0.1 4	3.1 4	1.98
Jawtar	54.1 5	9.30	1.97	14.6 4	1.92	4.00	2.1 0	10. 10	0.62	56.4 0	6.17	3.07	10.3 4	1.48	2.00	1.5 3	16. 19	2.40

Source: Block Development Office, Jagatpur

Table No. 2

Commercial Shift in Cropping Pattern Structure of Jagatpur Development Block

(Year 1999 to 2021)

Name of Nyaya Panchayat	Percentage Area of Various Crops (Rabi Crop) in 1999							Percentage Area of Various Crops (Rabi Crop) in 2021						
	Whe at	Gra m	Pea	Mustar d	Potat o	Fodder	Other	Wheat	Gr am	Pea	Mu star d	Potato	Fo dd er	Othe r
Kalakank	40.50	19.0	5.1	8.79	10.25	3.16	12.14	65.00	10.	3.15	6.3	10.20	2.1	2.66



ar (Poorabga on)		0	6						46		9		4	
Anthiwan (Surajkun da)	45.16	18.6 3	5.5 0	6.18	9.64	3.79	11.01	68.14	9.8 7	4.16	4.1 5	16.98	1.4 0	5.20
Rali (Jagatpur)	43.10	20.1 6	3.9 8	8.92	8.17	3.00	12.67	68.97	10. 87	2.16	7.0 0	8.75	1.3 1	1.84
Udaipur (Dhodhwa)	44.19	19.7 2	5.4 6	7.13	10.38	2.46	10.66	63.16	10. 87	3.12	5.1 6	12.36	2.0 3	2.72
Nawabga nj (Raghupu r)	48.46	18.7 5	5.1 7	8.00	12.14	1.98	5.50	70.50	11. 45	3.30	3.2 5	12.42	0.9 5	0.37

Source: Block Development Office, Jagatpur

Effective criterion of sustainable development in Jagatpur development block

Agriculture :- Agriculture is the main stone of development of study area. 77.82 percent of the total population of the area is engaged in agriculture and other primary activities (horticulture, crop production, animal husbandry etc.). Agriculture plays an important role in rural development, keeping in view many tactics can be adopted. In general, natural and cultural factors play the role of inhibitors in agricultural development. The problem of irregularity of monsoon, condition of soil erosion, uneven surface etc. is present here. Natural barriers of agricultural development can be removed through balanced irrigation system, construction of check dam, planting of bushy plants, artificial drainage system, Chris-cross plowing, supply of nutrients to the soil etc. There are problems like existing cultural barriers like land ownership, size of farms, landowners, sharing and contract farming method. There is a dire need to reorganize their form.

Irrigation: - Modern agriculture is based on development, irrigation capacity and its technological development, in this context there was an increase in the irrigation system of the study area, in 1971 58.96

percent of the net cultivated land was irrigated, which increased to 92.37 percent in 2011. It has been done, but due to lack of technical knowledge of farmers in the irrigation system, not only water is being misused, but the production has not increased unimpressively. Due to the intensive irrigation system of the canals, the agricultural land of the central area here is becoming a victim of ossification. This should not happen, for this it is necessary that 7.63 percent unirrigated cultivable land should be irrigated and technical assistants should provide technology to the farmers here to establish suitable irrigation system.

Commercial alternation of cropping pattern structure: The regional distribution of various crops is called a cropping pattern, which is subject to change and alternation. Changes in cropping patterns depend on the physical, economic, social, and institutional factors of the respective agricultural region. In the Jagatpur development block, Kharif, Rabi, and Zaid crops are grown in the rainy, winter, and summer seasons, respectively, based on seasonal changes. Kharif crops include paddy, fodder crops, millet, sorghum, pigeon pea, green gram, black gram, and urad, while Rabi crops include wheat, gram, peas, mustard, and potatoes. Zaid crops (black gram, dhaincha, fodder, and vegetables) are produced on only 16.40 percent of the total agricultural land, yet the greatest changes and alternations are observed during this cropping season. Here, food and other crop areas are being converted into orchards of mango, guava, and plum, which has also affected the land use pattern.

A study of Table - 01 clearly shows that in the Jagatpur development block, increased irrigation capacity over the past years (1999 to 2021) has led to an increase in paddy cultivation area under the Kharif crop in every Panchayat. Due to the decline in animal husbandry, the area under fodder cultivation has decreased. Due to various cultural factors (decreasing land ownership, smaller field sizes, open and free grazing of livestock), the crop area of crops like millet, mung, pigeon pea, and black gram has decreased. As farmers have embraced crops like mango, guava, plum, and sorghum as cash crops, the area under horticulture and sorghum has increased in almost every Panchayat.

A study of Table -02 clearly shows that in the Jagatpur development block, increased irrigation capacity has led to an increase in the area under wheat cultivation during the Rabi season in each Panchayat. The growing use of mechanization in agriculture, labour displacement, and land leveling have reduced the area under pulses and oilseeds. Farmers here have embraced potato cultivation as a cash crop and vegetable cultivation as other crops. Potato cultivation has increased in each Panchayat.

Employment Opportunities: Rural unemployment is prevalent in a country like India, which has a rural economy. This unemployment exists in both seasonal and hidden forms. To address rural unemployment in



the Jagatpur development block, there is a need to create numerous new employment opportunities. To achieve this, the following foundations can be created in the rural economy:

- (1) Developing agriculture and agriculture-related processes.
- (2) Promote construction activities in rural areas.
- (3) Develop rural industries and related rural services.

Optimized use of various agricultural inputs (improved seeds, pesticides, chemical fertilizers, and agricultural technology) can increase production. These various agricultural inputs, along with irrigation systems, can provide employment to over 100 people per hectare daily, whereas traditional agriculture-based areas require 60 to 65 workers per hectare daily. The nationwide TRYSEM scheme, which trains rural youth for self-employment through the Integrated Rural Development Agency, has been in operation in the Jagatpur development block since 1979. Schemes such as the Integrated Rural Development Programme (IRDP) have been in place since 1980, the Rural Landless Employment Programme (REL) since 1983, the National Rural Employment Programme (NREP) since 1997-98, and the MNREGA since 2005, have also been in place, but the problems of unemployment and labour displacement persist. Practical training should be provided to local farmers and existing workers in areas such as agriculture, animal husbandry, fisheries, horticulture, sericulture, artificial animal insemination, etc. Trained individuals should be linked to various rural service centres to create new employment opportunities.

Land Use Planning: When humans use land according to their needs, it is called land use. Land use refers to the process of land use, in which the practical use of land is linked to a specific purpose or plan. The process of land use planning is concerned with the optimal use of each land unit. Optimized land use is related to agriculture and its various dimensions. Thus, land use planning is related to optimal land use, increased agricultural production, multi-functional land use, and the coordination of agriculture, industry, and various services. In an agrarian economy, the only basis for sustainable development is planned land use. In fact, each piece of land should be used according to its carrying capacity, achieving optimal results with minimal degradation⁵. Sustainable rural development and land use planning are complementary to each other. The Jagatpur development block has subsistence land use potential and is moving towards a developing agricultural economy. Here, the goal of sustainable rural development can be achieved through land use planning. In this context, land use planning for sustainable rural development in the Jagatpur development block is presented in two major parts: planning for physical problems and social and economic reform.



(A) Planning for Physical Problems: Among the major physical problems existing in the Jagatpur development block, waterlogging, waterlogging, desertification, and soil erosion are particularly noteworthy. By addressing these existing problems, there is immense potential for establishing appropriate cropping patterns, expanding cultivated land, and increasing agricultural productivity. These problems can be addressed by implementing the following actions:

1. Addressing the Problem of Waterlogging: The southeastern and southwestern parts of the study area are affected by floods to a greater or lesser extent every year. Due to the flooding of the Ganga River, 8.60 percent of the total cultivated land is adversely affected. Consequently, only single-crop (Rabi crop) agriculture is possible here. The problem of waterlogging can be solved by constructing embankments and reservoirs and by storing water.

2. Solution to the Waterlogging Problem: The northwestern region of the Jagatpur development block suffers from waterlogging. The primary cause of waterlogging in these areas is the abundance of ponds and the lack of proper drainage. Constructing embankments around existing ponds can prevent water from spilling out. The water stored in these ponds can be used for water chestnut cultivation, irrigation, and fish farming. It is essential to restore previously

constructed drains in these areas and to construct new drains to ensure proper drainage and use of water, so that 7.63 percent of agricultural land affected by this problem can be transformed into multi-crop land.

3. Solution to the problem of soil erosion: While in the Jagatpur development block, food crops are traditionally cultivated, producing a single crop in a single area each crop year, the land along the Ganges River is suffering from the problem of soil erosion. The same crop production process in a single crop area year after year has led to an imbalance in the soil's nutrient balance, resulting in reduced production. Therefore, crop rotation and proper crop rotation are necessary. In the agricultural areas along the Ganges River, which are suffering from soil erosion, soil erosion can be prevented by planting shrub-like plants on the severely eroded land, using cross-crop ploughing, joint ridges, and constructing small check dams in the remaining areas.

4. Solution to the problem of barren land: The problem of barren land exists in all the Panchayats in the development block except Purbagaon Panchayat. Here 9.96 percent of the total area is suffering from the problem of barrenness. Cultivation on 36.47 percent of the total barren land is extremely difficult, labour-intensive and a loss-making proposition. To solve the fertilizer problem arising due to population growth and very low production, there is an urgent need to improve the barren land here. Inorganic and organic



improvement methods are necessary to be used for the improvement of barren land. In this method, the physical and biological conditions of the barren land can be improved by the balanced use of calcium chloride and gypsum etc.

(B) Social and Economic Reforms: The following social and economic reforms are proposed for the sustainable rural development of the Jagatpur Block:

1. Future Changes in Current Land Use Patterns: In 2019, 10.86 percent of the Jagatpur Block's land area was uncultivable, 15.35 percent was cultivable, and 70.79 percent was agricultural land. Population growth has increased pressure on land resources. To alleviate this pressure and promote sustainable rural development, it is essential to increase the area of agricultural land (421.21 hectares) by providing proper drainage for the 2.34 percent of waterlogged land. Thus, by making necessary improvements to the 9.96 percent of barren land, 1792.86 hectares of land can be converted into full-time agricultural land. The current agricultural land is being degraded due to increased residential land use and transportation development. Therefore, 5.95 percent of the arable fallow land (1071.00 hectares) here should also be converted into cultivated land. Along with this future change in land use pattern, the technological incorporation of new agricultural inputs by farmers would be the best possible option for increasing the average production per hectare.

2. Potential Changes in Crop Patterns: Due to the influence of geographical factors, there is considerable variation in the production of various crops and their average production at the regional level in the Jagatpur development block. In an area with such geographical conditions, priority should be given to the production of cash crops along with the production of major food crops so that the farmers here can reap maximum benefits. This region, with its mixed farming system, could be transformed into a specialized farming system, as there is immense potential for this potential change.

3. Suggestions for a Balanced Crop Rotation: A balanced crop rotation refers to a crop production system in which farmers produce crops in each crop season, one or more years, that are not often repeated and that minimize soil productivity loss. A crop rotation is a sequence of crop production in which selected crops are grown one after another in a fixed cycle, within a fixed period of time, in the same area. By producing crops in a balanced and timely manner, the soil's natural productivity is minimized. This is the basic concept of a balanced crop rotation. To increase agricultural productivity and maintain the soil's natural fertility in the Jagatpur development block, farmers here need to understand a balanced crop rotation. Farmers should adopt a balanced crop rotation according to the ecological conditions in different parts of the region. When determining the crop rotation, it should be kept in mind that the selected crop should maintain a balance



between its maturity period and the exploitation and recycling of soil's fertilizer elements. Some of the crops produced should also be of commercial importance, so that farmers can earn cash. In this context, the following balanced crop rotation is proposed for the Jagatpur development block:

Table No. 3
Suggested Crop Rotation System
One-Year Crop Rotation

S.No.	Kharif Crop	Rabi Crop	Zaid Crop
1.	Aghani Paddy (Rice)	Wheat, Gram, Pea, Mustard	Maize, Moong, Urad
2.	Pearl Millet (Bajra) - Sorghum (Jowar)	Wheat, Pea, Mustard	Urad, Maize, Sunn Hemp
3.	Maize	Wheat, Gram, Pea, Early Mustard	Vegetables, Cowpea (Lobia), Dhaincha
4.	Fodder	Pea, Gram, Barley, Mustard	Urad, Moong, Muskmelon
5.	Vegetables	Potato or Other Crops	Vegetables
6.	Pigeon Pea (Arhar) & Other Crops	Pigeon Pea (Arhar)	Maize, Dhaincha, Sunn Hemp, Fodder

Two-Year Crop Rotation

S.No.	Kharif Crop	Rabi Crop	Zaid Crop
1. (1)	Sugarcane	Sugarcane	Sunn Hemp, Dhaincha
(2)	Paddy (Rice)	Wheat, Gram, Pea, Oilseeds	Sugarcane
2. (1)	Sugarcane	Sugarcane	Fodder
(2)	Pearl Millet (Bajra)	Wheat, Pea, Potato	Fodder, Moong, Urad
3. (1)	Aghani Pigeon Pea (Arhar)	Wheat, Gram, Pea, Mustard	Moong, Vegetables, Sunn Hemp

(2)	Maize, Pigeon Pea (Arhar)	Gram, Mustard, Potato	Sugarcane, Vegetables, Dhaincha
4. (1)	Maize & Vegetables	Wheat, Gram, Pea, Oilseeds	Urad, Cucumber, Moong
(2)	Companion / Intercrops	Potato, Mustard, Pea	Cowpea (Lobia), Sunn Hemp, Dhaincha
5. (1)	Maize, Fodder	Sugarcane, Potato, Wheat	Moong, Fodder, Vegetables
(2)	Sugarcane, Paddy (Rice)	Wheat, Sugarcane, Oilseeds	Sugarcane, Vegetables
6. (1)	Pearl Millet (Bajra), Sorghum (Jowar)	Pea, Gram, Barley, Wheat	Fodder, Moong
(2)	Pigeon Pea (Arhar) & Others	Wheat, Pea, Pigeon Pea (Arhar)	Urad, Muskmelon, Vegetables

3. Increasing the area of multiple cropping: To meet the food needs of the current population growth in the Jagatpur development block, there is a need to convert more of the agricultural land into multi-cropping (growing crops in more than one season in a year). Currently, 70.79 percent of the total area of 18,020 hectares, i.e., 12,756 hectares, is cultivated. Only 53 percent of the total cultivated land, i.e., 6,761 hectares, is used for multi-cropping. 9.96 percent of the land here suffers from desertification, 8.60 percent from waterlogging, and 7.63 percent from waterlogging. Consequently, this cultivated land is not multi-cropped.

Thus, by addressing physical problems and incorporating innovative agricultural technologies, the multi-cropping area in the Jagatpur development block can be increased by 26.19 percent. Thus, the multi-cropping area here, which is currently 53 percent, will increase to 79.19 percent.

5. Developing Agriculture-Related Activities: The rural economy of the Jagatpur development block is primarily based on food crops and horticulture. Furthermore, the people of this area are grappling with seasonal unemployment, a lack of new employment opportunities, and the inability to elevate their economic and social status. To address these problems, it is absolutely essential to develop agriculture-related activities. Therefore, agricultural activities such as dairy farming, animal husbandry, sheep and goat rearing, pig farming, poultry farming, and fish farming should be developed in the Jagatpur development



block. It would be more appropriate to conduct this work under the supervision of technical experts from the Raja Dinesh Singh Agricultural Science Institute. Establishing small food processing units at the Panchayat level to empower the rural population will also be important for long-term rural development.

6. Developing Social Values: The entire potential for human development is not only based on the social environment but also receives support from it, gradually developing and bearing fruit. Social institutions, their rules, regulations, and systems have a significant impact on all human social, religious, economic, and political activities. The rural economy and all economic activities are also significantly influenced by long-standing customs, traditions, customs, and religious superstitions prevalent in society. Social institutions and their systems are linked to human interests and guide them. They play a crucial role in the development of the rural economy. To develop rural social values in the Jagatpur development block, a plan can be implemented that is in keeping with the local social ecology, ensuring drainage of water from waterlogged areas and disposal of solid and wet waste at suitable locations outside the village. This process can keep rural areas clean and tidy, while using compost manure made from waste will help increase crop production. Performing these important tasks through collective labour and a spirit of cooperation will be effective. Eliminating mental ills and vices will prove to be a valuable step in improving the social environment here.

7. Properly meeting basic needs and improving the quality of life: Providing adequately for the material needs of the population and improving their quality of life is the moral responsibility of the administration, social system, and citizens of any society or economy in the world. Achieving this goal has long been the objective of our policy makers. The supply of basic needs includes food, clothing, shelter, education, and health⁶. Properly meeting basic needs makes it possible to improve the quality of life. A qualitative standard of living refers to a standard of living that provides the basic necessities (food, clothing, shelter, education, health, etc.) while simultaneously providing a healthy and fulfilling natural, biological, and socio-cultural environment⁷. Global attention focused on the proper supply of basic needs in the 1980s. Awareness also arose about improving the quality of life. As a result, many countries, including India, achieved economic development, but the goal of impartial social justice remained far from being achieved. This is why, as an alternative to economic development diplomacy, the diplomacy of providing basic minimum needs was born. Since India's independence, numerous efforts have been made to provide basic necessities, but 37 percent of the population remains forced to live below the poverty line. Previous governments also attempted to uplift this segment of society for their own benefit, but the current government has taken meaningful initiatives that have yielded fruitful results. To ensure adequate supply of basic needs of common citizens and restore a quality standard of living, our illustrious Prime Minister Shri Narendra Modi has implemented several public welfare schemes (Pradhan Mantri Jan Dhan Yojana (August 28, 2014),



Pradhan Mantri Mudra Loan Yojana (April 8, 2015), Pradhan Mantri Fasal Bima Yojana (January 13, 2016), Ujjwala Yojana (May 1, 2016), Ayushman Bharat Yojana (April 1, 2018), Pradhan Mantri Kisan Samman Nidhi Yojana (February 1, 2019), One Nation One Ration Card Scheme (August 1, 2019), New National Health Scheme (August 9, 2021), etc., whose impact is already visible. Keeping in mind the appropriate conceptual frameworks in the Jagatpur development block, the following suggestions have been proposed to ensure adequate supply of basic needs and improve the quality standard of living, so that the goal of sustainable rural development can be achieved.

- Providing primary education for children under the age of 14 near their homes, incorporating practical aspects such as cleanliness, health, creativity, and innovation into the curriculum, and providing teachers accordingly.
- Equally providing public health facilities, making the family planning program effective for all sections of society.
- Providing access to clean drinking water for all citizens at a convenient rate, and connecting all villages to high-quality roads, national highways, other important roads, and rural service centres.
- The objective is to improve the economic condition of landless labourers and guarantee food security and provide labour-based employment opportunities to every citizen living below the poverty line.
- 98.35 percent of villages in the Jagatpur development block have been fully electrified, but low voltage and poor transmission systems remain a serious problem. Therefore, this problem must be addressed, and the remaining villages (1.65%) must also be fully electrified. People should be made aware of the use of alternative energy sources.
- All important government institutions operating in the Jagatpur development block (education, health, drinking water, electricity, public distribution, cooperatives, finance, security, etc.) should have a balanced staffing level, and a system should be put in place to prove their practical usefulness to the public.

Planning for Environmental Quality: A development model that not only provides nourishment to current and future generations of humans on Earth but also establishes harmony between the functions of humans and nature and improves human life from a public welfare perspective is indicative of environmental quality. Environmental quality emphasizes a new functional equation between humans and the environment, ensuring judicious use of natural resources. The goals of environmental quality are to prevent harmful use of resources, prevent misuse, promote reuse and recycling, and conserve and invest resources for future use⁸.

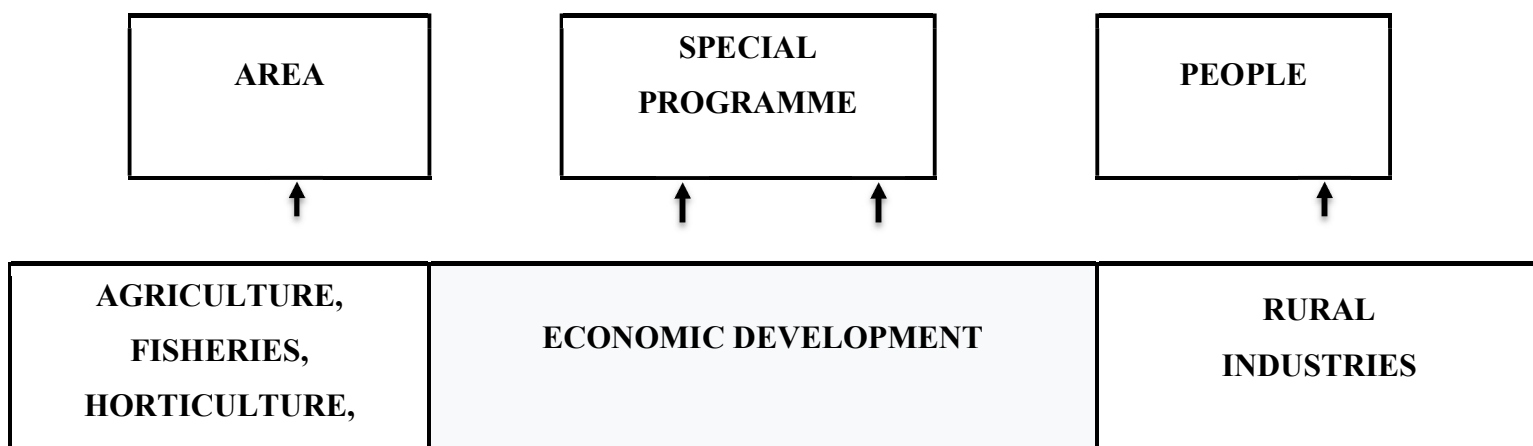


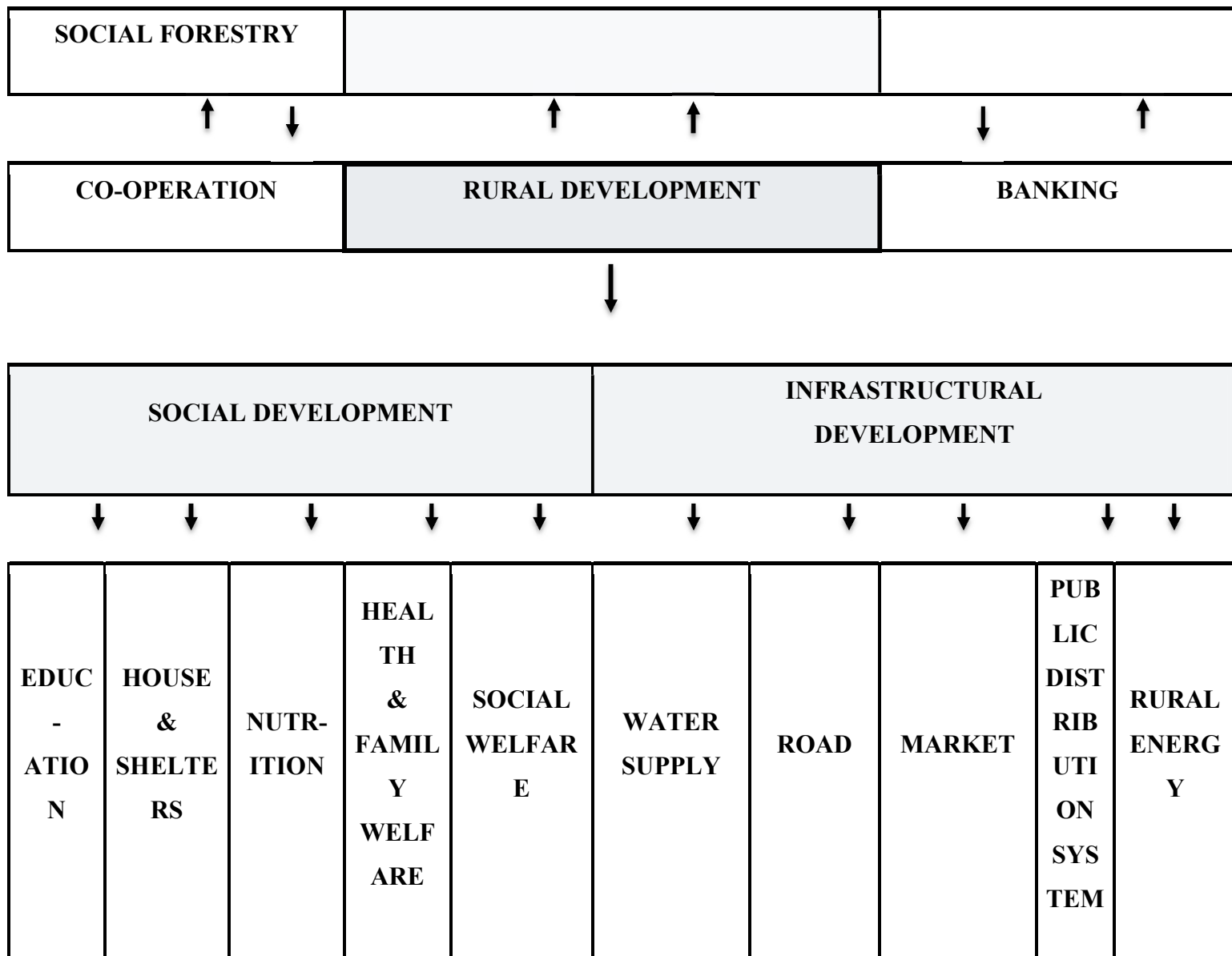
To achieve this environmental quality goal in the Jagatpur development block, resource consumption must be planned. To achieve this goal, we must ensure the conservation of resources and utilize technologies that meet our needs with minimal resources and ensure the continuous generation of new resources.

Although government and non-government efforts to achieve sustainable rural development and improve environmental quality in the Jagatpur development block have shown positive impact, despite these efforts, the region remains far from achieving its goals due to a lack of coordination in development programs, the influence of middlemen, a lack of public awareness, and the neglect of local public participation in various schemes. Long-term rural development can be achieved by appropriately utilizing available resources, integrating all development efforts, and implementing various programs in light of the entire population of the study area, their needs, and problems. This is the action plan, through which environmental quality can be maintained along with the development process.

In summary, for sustainable rural development in the Jagatpur development block, solutions to physical problems and land use planning must be ensured. Social and economic reforms, the adoption of appropriate crop rotations, the development of agricultural activities, and the inculcation of social values will not only meet the basic needs of the residents but also improve their quality of life. Ultimately, I believe that rural development is based on agriculture, and sustainable agricultural development is based on the planned use of land. All human social, economic, cultural, political, and infrastructural development structures are based on the planned use of land. Since land is a key component of our entire planet's ecosystem, and agriculture and related economic activities are linked to land, land-use planning is the foundation of sustainable agricultural and rural development in every situation. The use of remote sensing technology will be an important step in this direction.

Ideal Model of Rural Development





References

1. Dr. Anand Singh and Santosh Kumar Singh: Uttar Bharat Bhugol Patrika (North India Geography Journal), Volume 1 and 2, June-December 2001, Page - 69
2. Professor Jagdish Singh: Sovikas Sandesh, Issue 15, Number - 1, January - 2007, Page - 1
3. Dr. Brijbhushan Singh: Krishi Bhugol (Agricultural Geography), Gyanoday Prakashan Gorakhpur, 1988, Page - 165



4. Shri R.C. Tiwari and B.N. Singh: Krishi Bhugol (Agricultural Geography), Pravalika Publication Allahabad, 2019, Page - 77
5. A. Gautam: Approaches to Wasteland Development: J.P.A., 35 1989, Page 497 and 498
6. Dr. Kashinath Singh and Dr. Jagdish Singh: Aarthik Bhugol Ke Mool Tatva (Fundamentals of Economic Geography), Vasundhara Prakashan Gorakhpur, 1989, Page - 1
7. Ibid.
8. Priyanka Singh: A Geographical Study of Modern Techniques in Agriculture and Integrated Rural Development in Raniganj Block (Pratapgarh District), Unpublished Research Thesis, Dr. Rammanohar Lohia Avadh University Faizabad U.P., 2015, Page – 215