IMPACT OF INFRASTRUCTURE ON AGRICULTURAL PRODUCTS IN NALANDA DISTRICT: A GEOGRAPHICAL ANALYSIS.

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ABSTRACT: *Infrastructure is an important capital stock of the economy, which enhances the productivities either in agriculture or in industries.This part of capital stock of economy is known as supporting structure .There are two type of infrastructure:1. Social – infrastructure: - It includes communication and transmission of information, Education, Training and research, Health and family welfare, Housing and Other civil amenities. 2. Economic infrastructure it includesTransport, Power resources, Irrigation and Money and banking.*

KEYWORDS: Infrastructure, Capital Stock, Enhances Economy, Civil Amenities, etc.

1. INTRODUCTION

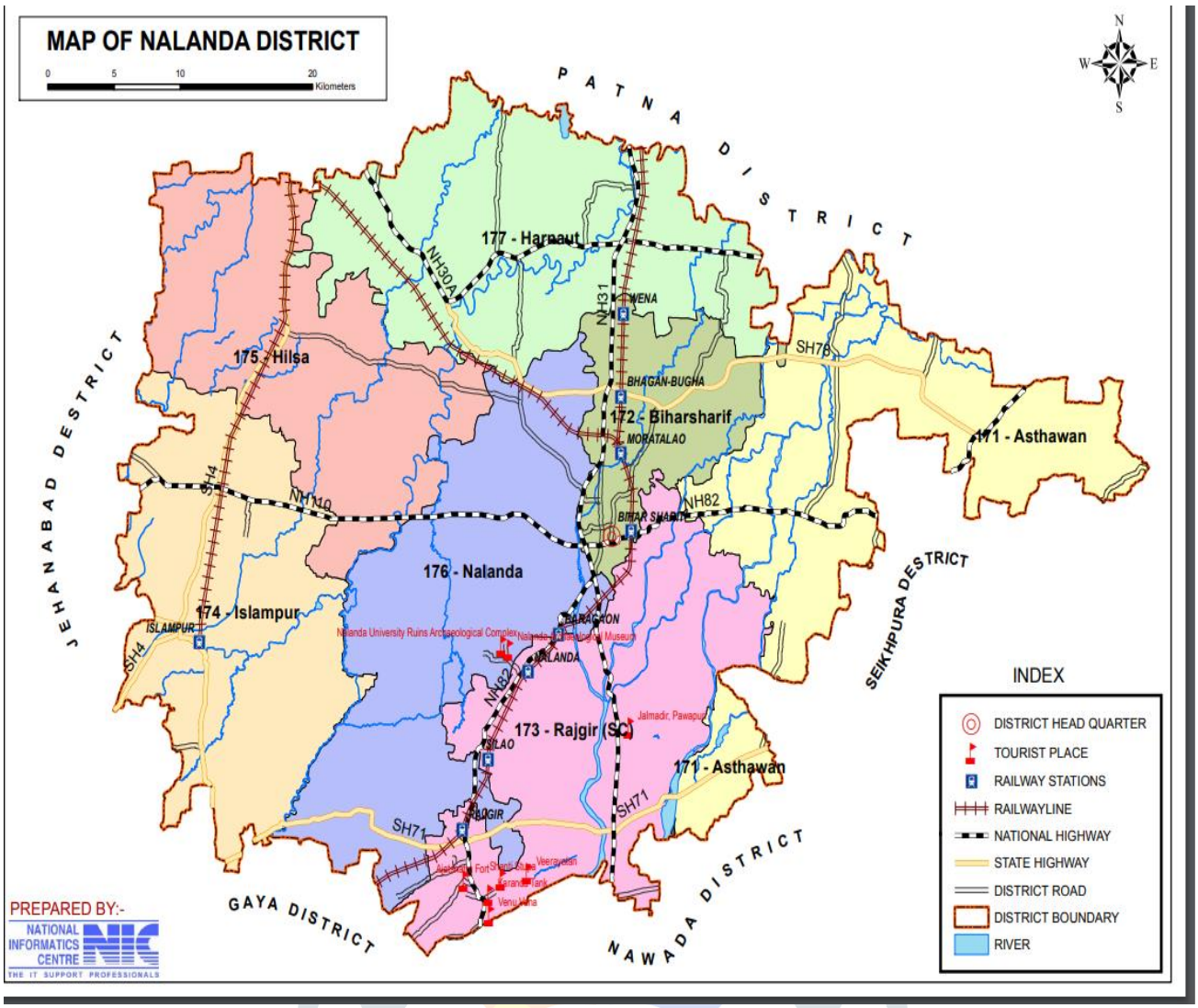
Agriculture is the backbone of Indian economy. Present age is the age of science and technology and Bihar is the most densely populated state of India. Nalanda,dist is part and parcel of this state where 2872523 persons live about 80% people directly or indirectly depend on Agriculture. In this condition infrastructure like equipment of tilling, the land like plough, Tractor machine, Power tiller, Harvester, means of irrigation capital, seeds, fertiliser, labour and means of Transportation etc. This factors act dominant role for the improvement of production in the field of agriculture in any place. The productive services like health and education are also means, of production and add to the value of goods. those enhanced the production in the field. So it is said that infrastructure improves the productivity in agriculture and assists in the improvement quality of life.

2. OBJECTIVE OF THE STUDY

The purpose of the study is to analysis the impact of infrastructure on agricultural production and arise the problem of infrastructure support through the govt. And farmers though they can use infrastructure in their field and can grow their products with the time. The gap between population and agriculture is growing day to day the population is growing rapidly than agricultural products. It will change the quality of life in the district and whole states area will develop properly.

3. DATA AND METHODOLOGY

The study is based on Secondary data through empirical method and comparative method. Secondary data has been taken from various census hand book published by government. Data of infrastructure production of crops have also been analysed.



4. STUDY AREA

Nalanda is the fertile land of south Bihar region. It is also known as the ancient seat of learning. Which was founded in 5th century A.D . It was the capital of ancient Magadh and it was the learning place as will as inhabitant place of lord Buddha and lord Mahavira. So it is referred frequently in Jain and Budhist scriptures. The present district of Nalanda is spread over an area of 2367 sq km having a population of 28,72,420 (2011). it is bounded by Patna district in the north, Gaya and Nawada district in the south, Lakhisarai district in the east and Jehanabad district in the west. It is divided in to three sub-division, 20 blocks and 249 village panchayats.

5. ANALYSIS AND INTERPRETATION

Present age is the age of science and technology. In this condition infrastructure plays an important role to develop agriculture products. Here researcher tried to show the impact of infrastructure as irrigation data of census 2011, financial help in manufacturing by the government in financial year 2010-11 to 2014-15. Distribution of Agriculture equipments through the govt in Financial year 2010-11 To 2014-15 as subsidy. The description of these Datas are given below—

TABLE-1

DISTRIBUTION OF IRRIGATED LAND (PERCENT TO THE NETSOWN AREA) WITH MEANS OF IRRIGATION IN NALANDA DIST. 2011

NALANDA	AREA	CANAL	TANK	STATE TUBE-WELL	TUBE-WELL (ELECTRIC)	TUBE-WELL (DIESSEL)	WELL
TOTAL	239391	63	126	155	5693.88	25996	1044

6. SOURCE-AGRICULTURE OFFICE BIHAR SHARIF NALANDA

The table:1, clearly shows the irrigation facility of concerning district total irrigated area of the district Is 2,39391 hect total canal - 63, tank - 126 govt - tube-well - 155, tube-well electric private - 5693.88, tube-well diesel 25996 , well – 1044 . present time all tube wells of diesels are converted in tube-well of electric because whole Nalanda district Is complete electrified. There is no existence of well as irrigation Because there is no water in well during summer and winter season due to water level is so depth .

TABLE -2

THE NUMBER OF BENIFFITED PERSONS UNDER ENHANSMENT PROGRAMME OF ORGENIC AGRICLUTURE IN THE FINNACIAL YEAR 2010-11 TO 2014-15

DIST:- NALANDA

SL.NO	NAME OF PARTICULAR	YEARS	YEARS	YEARS	YEARS	YEARS
	PROJECT	2010-11	2011-12	2012-13	2013-14	2014-15
1	2	3	4	5	6	7
1	VARMI KAMBOST UNIT	1049	908	847	1208	1200
2	VARMI BED	349	400	658	837	0
2	BIO GAIS	0	0	28	11	26

SOURCE -AGRICULTURE OFFICE BIHATSAHRIF NALANDA 2014-15

The table:2, shows that the govt has enhanced the farmer of the district through the distribution of bermy compost in different years to develop the agriculture products unit -1st shows the bermy compost 1049 in 2010-11, 908 in year 2011-12, 847 in year 2012-13,1208 in year 2013-14,1200 in year 2014-15.

Unit second shows the distribution of bermy bed 349 in 2010-11, 400 in 2011-12, 658 in 2012-13, 837 in 2013-14,2014-15-N.A.

Unit - 3 shows distribution of Bio-Gas Nill In 2010-11, Nill In 2011-12, 28 in 2012-13, 11 In 2013-14, 26 In 2014-15.

Table - 3rd shows number of benefited farmers by distribution of different agricultural equipments with subsequent in the financial years 2010-11 to 2015-16. In Nalanda district.

TABLE-3

THE NUMBER OF BENIFFITED PERSONS UNDER DIFRANTE TYPES OF EQUIPEMENTS ON SUBSIDY IN THE FINNNACIAL YEARS 2010-11 TO 2015-16

SL. NO.	NAME OF EQUIPEMETS	YEARS 2010-11	YEARS 2011-12	YEARS 2012-13	YEARS 2013-14	YEARS 2014-15	YEARS 2015-16
1	2	3	4	5	6	7	8
1	POWER TRILER	1983	2600	1824	1270	658	453
2	TRACTOR	131	174	349	340	594	0
3	NAME OF TOTAL DISTRIBUTED EQUIPEMENTS ON SUBSIDY	2875	4286	4600	3452	3684	0

SOURCE OF AGRICULTURE OFFICE BIHATSAHRIF NALANDA 2015-16

Distribution of different agricultural equipments distributed by the help of banking on subsidy, are mentioned below:

1. Power Tiller - 1983 in 2010-11, 2660 in 2011-12, 1824 in 2012-13, 1270 in 2013-14, 658 in 2014-15 and 453 In 2015-16.

2. Tractor – 131 in 2010-11, 174 in 2011-12, 349 in 2012-13, 340 in 2013-14, 594 in 2014-15 and nill In 2015-16.

3. Distribution of total equipments on subsidy -2875 in 2010-11, 4286 In 2011-12, 4600 in 2012-13, 3452 in 2013-14, 3684 in 2014-15 and nill in 2015-16.

There is great impact of above said infrastructure in the development of agricultural products to sustain the socio- economic condition of the district that is shown by table no-4

TABLE-4

PRODUCTION AND PRODUCTIVITY OF IMPORTANT COMMODITIES DISTRICT-NALANDA

SL.NO	NAME OF	2010			2011			2012			2013			2014			2015	
	COMMODITY	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P
1	PADDY	13000	3406000	26.2	128000	3456000	27	123000	3520000	27.5	126000	3843000	30.5	130000	4238000	32.6	136000	4433600
2	WHEAT	93000	2077620	22.34	92000	2024000	22	87000	1948800	22.4	92000	2410400	26.2	93500	2552550	27.3	86500	2361450
3	PULSES	44050	744514	16.9	42050	668595	15.9	44600	722520	16.2	44200	724880	16.4	45400	472160	10.4	43500	452400

A-AREA IN '000' ha P-Production'000' Y-Yield (Productivity) in Kgs./ha.

SOURCE OF AGRICULTURE OFFICE BIHATSAHRIF NALANDA 2014-15

The table shows the impact of infrastructure on the development of agricultural Commodities are mentioned bellow:-

1. **Paddy – 1,30000 area, 34,06000 production 26.2 yield in kg/hact in 2010, 128000 hac area, 34,56000 production and 27 kg/hact. yield in 2011, Area in hac 1,28000, production 35,20,000 and yield 27.5 kg/hact in 2012. Area 1,26000 production 38,43000 and yield 30.5kg/hact in 2013. Area 1,30.000, production 42,38,000 and yield 32.6kg/hact in 2014. Area 1, 36000 hact Production 44, 33,600 and yield 32.6kg/hact in 2015. All years productivity is increased due to infrastructure development and use on the basis of condition of green revolution.**
2. **Wheat : - Area in hac 93000, production 20,77620 kg/hact, yield 22.34 in 2010. area - 92,000 hact, production 20,24000 kg/hact, and yield 22kg/hac in 2011. Area – 87,000 hac, production 19,48,800 and yield - 22.4 kg/hact in 2013. Area 93500 hact, production 25,52550 and yield 27.3 kg/hact in 2014. Area 86500, Production 23,61450 and yield 27.3 Kg/hact, in 2015.**
3. **Pulse : - Area 44060, Production 744614 yield 16.9 kg/hact, in 2010. Area 42050 production 668595 and yield 15.9 kg/hact in 2011. Area 44,600 production 7,22520, and yield 16.2 kg/hact in 2012. Area 44200, production 7,24880 and yield 16.4 kg/hact in 2013. Area 45,400, production 472160 yield 10.4 kg/hact in 2014. Area 43500, Production 452400 and yield 10.4 kg/hact in 2015.**

Impact of infrastructure on Agricultural Products

1. **Due to impact of Infrastructure as social and economic development has been shown in selected crops as paddy, wheat pulse.**
2. **Bhadai and aghani ragi Tulbulia Maize ,Sugar cane and Arhar. Kurthi, Till etc continuously decrease Either these crops have gone or grow in miserably condition due to low productivity.**
3. **Due to infrastructure development few crops as Potato,Onion, Garma Moong Flower,and Betal etc. Are growing rapidly every years as a commercial crops**
4. **Under mixed economy as fishing, poltry farm and dairy farm are developing lips and bounds day to day by Educated farmers.**
5. **Selected agricultural products are developing under scientific method and technique which result is fruitful.**
6. **Traditional method of farming is to be gone like, plough and labour based cultivation.**

7. CONCLUSION

It is fact that the impact of infrastructure has brought pleasure among the farmers in the field of agriculture. Its use is seen in selected crops in the development of productivity.Though the govt and agriculture scientist should take proper attention among different types of agricultural crops. They should develop the seeds and infrastructure on the basis of climate change. There is great gap between population and agricultural production. To seeing this great gap they should take proper action though socio-economic adjustment can develop with nature.

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