An Overview of Baghakole Village

The village Baghakole was founded in the early thirteenth century when Bakhtiyar Khilji was the ruler of Bihar. It is located in the Bikram block of Patna district at a distance of about 55 km from Patna city. This village had a poor road connectivity earlier but now has a fairly good road connectivity with the construction of a pucca Bihta-Patna-Mahabalipur road. The total population of Baghakole is around 3000, comprising around 500 households. This village is rich in educational infrastructure with one high school, one middle school, two primary schools and one Urdu school. About 25 girls of this village are receiving higher education in a college at Bikram. The literacy level (64%) of this village is higher than the state literacy rate.

In Baghakole, a majority of households belong to the Hindu community with only seven per cent Muslim households. But, there is complete communal harmony in this village, so much so that a temple and a mosque are located side-by-side in this village. Across social castes, other backward castes constitute around 50 per cent of households with 30 per cent households of scheduled castes and 20 per cent of forward castes. The majority of forward caste households belong to *Bhumihars,* whereas *Kahars* dominate in the OBC category and *Chamars* and *Dusadhs* are in majority in the scheduled caste category. The dowry system and village feast system (*shradh*) are still prevalent in the village, though these adversely affect the economic situation of most of the households. An interesting feature about out-migration from Baghakole is that it is high for salaried jobs and education, showing a higher level of general awareness and education in Baghakole.

The average landholding size of 1.18 acres in Baghakole is higher than in most of the villages in Bihar. Soil of the village is sandy loam. In the southern part of the village, abundant sand is available and it provides substantial income and employment to the village labourers. Most of the land is irrigated for cultivation and private tube-wells are the main source of irrigation presently.

The agriculture in Baghakole up to 1970s was highly diversified with the cultivation of several varieties of rice, millets, maize, sugarcane, pigeonpea and other pulses. But subsequently, rice became the main crop in *kharif* and wheat became the major crop in *rabi*. Recently, lemon grass, mentha and some off-season vegetables including green pea have been introduced. Another significant development is the change in package of practices for crop

cultivation. The farmers of this village have started producing and using vermi-compost for fertilization of their crops. All this reveals better awareness of the people of this village and adoption of a move towards diversification.

In Baghakole, livestock-rearing is the second important economic activity after agriculture and it is not limited to cattle and buffaloes only; goatery and poultry farming are also practised. But despite a large number of animals in this village, the livestock healthcare facilities are limited. One artificial insemination unit was established in this village only in the year 2000, prior to which villagers had to go to Bikram or opt for natural insemination. The Dairy Cooperative, organized in 1985 in the village, is in sables and needs better management to be useful to the farmers of this village.

The agriculture is moving from manual to mechanised operations in Baghakole. Tractors, diesel engines and threshers are seen in good numbers. Bore-well is another common farm infrastructure owned by about one-fifth of the households. All the houses are pucca or at least semi-pucca in the village. All this indicates that economic status of people in Baghakole is quite good.

Non-farm employment has emerged as an important source of household income in Baghakole. It has surpassed even the agricultural sector. Due to higher level of awareness and education, income from salaried jobs is also quite significant. Thus, occupational pattern in Baghakole reflects a considerable diversification in sources of income.

The healthcare facilities are practically non-existent in the Baghakole village. To avail a medical facility, the villagers have to go to either Bikram or Bihta, where also these services have become functional only from 2005 with the intervention of state government. Polio vaccination is being done in the village but facilities for other vaccinations are lacking. The emergence of diseases like gastritis, stomach cancer, high blood pressure, asthama, etc. due to changing life-styles, diversifying food baskets, increasing use of agricultural chemicals, etc. have made the life still difficult in this village.

The residents of Baghakole village do not have easy access to any organized agricultural market or procurement centre. There is no input dealer in this village and people have to go to Bikram, Bihta or even Patna to get a better quality and wider choice of products.

The mobile phone revolution in the country has provided communication power to the residents of otherwise poorly-connected Baghakole village also. The electric supply continues to be erratic, affecting both living and working conditions in the village.

In Baghakole, several welfare schemes/programmes of both central and state governments are in operation and effect of some of these programmes has become visible also but a wider impact has yet to emerge.

Thus, the village Baghakole is still not much developed although it has better educational facilities as compared to several villages of Bihar. The economic status of the most residents of this village is low, but is showing improvement with diversification in occupational pattern. The village has some strong points also like better awareness, higher productivity of wheat and rice than the state average, diversification in cultivation towards medicinal plants and summer vegetables, etc. These strong points need institutional intervention for a faster development of the village. It has opportunities in milk marketing for which support of an effective and functional dairy cooperative is needed. Setting up of a food processing unit and a procurement centre in/around the village will go a long way in generating income and employment facilities in this village.

1. Introduction

A mega project on **"Tracking Change in Rural Poverty in Household and Village Economies in South Asia"** is being undertaken by National Centre for Agricultural Economics and Policy Research (NCAP), New Delhi and International Crops Research Institute for Semi-Arid Tropics (ICRISAT), Hyderabad. The project has been sponsored by Bill and Melinda Gates Foundation and aims at understanding the dynamic process for reducing poverty in the poverty-laden agro-ecologies of South Asia by tracking the household and village economies continuously.

The Eastern India being one of the most poverty–laden regions in terms of both prevalence rates and total numbers has been identified as one of the regions for study under this project. Reducing poverty in Eastern India has been a big challenge and the successful implementation of this project is expected to contribute to our understanding of the complex poverty dynamism in the region. In Eastern India, the NCAP will focus on three states, namely Bihar, Jharkhand and Orissa.

The overall objective of the project is to help evolve appropriate and effective strategies for accelerated reduction of poverty in South Asia. Specific objectives of the project are:

- To enhance the availability of reliable household, individual and field-specific, high frequency, time series data in selected villages and at meso-level (e.g., district level) to address the dynamics of economic, social and institutional development, and
- To nurture policy analysis and strengthen capacity building for poverty reduction in South Asia, and Eastern Region of India is one of the regions.

Collection of longitudinal data on household, individual and field levels in selected villages is one of the major activities. Twelve villages have been selected in Eastern India for continuously tracking the changes in rural economies under the project. The Baghakole village of Patna district in Bihar is one of the selected villages. Before selection of sample households for continuous monitoring, the village census has been conducted in each selected village to understand the general and socio-economic profile of the village. This village profile is based on the village census carried out and qualitative information gathered by the project team.

2. The District Patna

2.1. History

The ancient name of Patna was 'Patliputra'. The mention of Patliputra is found in many historical books. The Greek historian, Megasthenes (350 BC–290 BC) who visited India, has described the glory of city of Patliputra (calling it as Palibothra). The Chinese traveller, Fa Hien, has also mentioned about Patliputra in his writings. The history of Patna dates back to 490 BC when Ajatshatru, the king of Magadh, shifted his capital from the hilly city Rajgir to a more strategically located place on the banks of the Ganges to combat the Lichavis of Vaishali. From that time, Patna has witnessed several historical changes including the disintegration of the Gupta Empire. Bakhtiar Khilji captured Bihar in the 12th century and destroyed many ancient seats of learning. With time Patna lost its prestigious position as seat of learning. It also lost its fame as the political and cultural centre of India.

The Mugal period was a phase of provincial administration from Delhi. The most remarkable period of those times was the span under the king Sher Shah Suri who revived Patna in the middle of the 16th century. The tenth Guru of Sikhs, Guru Gobind Singh (22 December, 1666 – 7 October, 1708) was born in Patna as Gobind Rai to Guru Tegbahadur, the ninth Guru of Sikhs, and his wife Mata Gujari. During the 17th century, Patna became a centre of international trade. After the decisive Battle of Buxar (1765), Patna fell in the hands of the East India Company of Britishers but it continued as a big trading centre during the British period also.

2.2. Location

The district of Patna in Bihar is located between 25° 13′ and 25° 45′ North and 84° 43′ and 86° 44′ East longitudes. It is spread over a geographical area of 3202 square kilometres.

The district is bound by the river Ganges on the north and the river Sone on the west. The districts of Nalanda and Lakhisarai lie on its east and the Jahanabad district lies on its south.

2.3. Demographic Features

According to the Census of India 2011, population of Patna district is 5,772,804 comprising 52.9 per cent males and 47.1 per cent females. The population density of the district at 1803 persons per square kilometre is highest among districts in Bihar. The sex ratio is 892 in the district. About 84 per cent of the population is rural.

2.4. Special Characteristics

The district Patna is a socio-economically developed district of Bihar because its average crop productivity is higher than that of the majority of districts of this state. The district Patna has an edge over other districts of the state with respect to educational level, per capita income, health care and hygienic status, infrastructural facilities, etc. The district has 6 subdivisions, 23 blocks and 1284 villages.

2.5. Climate and Rainfall

The climate of Patna district is characterized by quite hot summers to moderately cold winters. The day temperature ranges from 21 ^{O}C in January to 43 ^{O}C in June/July and night temperature ranges from 7 ^{O}C in December to 28 ^{O}C in June. The summers season begins from April and peaks in June/July. The rainy season starts from late July/August and continues sometimes up to early-October. The annual average rainfall is 1171.1 mm.

2.6. Language

The main language of Patna district is Hindi in *Magadhi* dialect. *Bhojpuri*, *Angika* and *Maithili* are also spoken. The number of residents conversant with English is small in this district but is increasing continuously.

2.7. Biodiversity

The district Patna had a rich biodiversity till the early-1950s, but the rapid growth of population led to clearing of forests and extinction of several wild animals. Among the trees found presently in this district are: sisam, khair, palmyra, khajur, mango, jackfruit, peepal and tamarind. The district also has some grasslands. Among the wild animals commonly seen are jackals. Foxes and wild cats are also seen occasionally but wolves and hyenas have become rare animals. With the felling of trees and encroachment of forest area, the availability of fire wood, fence poles, etc. is fast decreasing.

3. The Village Baghakole

3.1. History

The village Baghakole was established in the early thirteenth century when Bakhtiyar Khilji was the ruler of Bihar. There was a dense forest in the area where the village Baghakole is presently located and it was the home of a variety of animals including tigers. The legend goes that two brothers named Shalik Singh and Saligram Singh of Koli-Kumari village of the Bhojpur district while returning from Patna after depositing the land revenue with the ruler's office, had to stay in this forest due to falling of night. During night, a furious tiger attacked them but they managed to kill the tiger. The people of nearby villages were very happy to learn about the killing of vociferous tiger and they extended a civic reception to these brothers. The ruler of the area was also happy to learn about the killing of this tiger, who was regarded a terror in the area. He awarded

Figure 1: Map showing blocks of Patna district

these brothers with 1000 acres of land and asked them to live there. Thus, the name Baghakole of this village is related to the presence of tiger (*Bagh*) in the area (*Kole*).

The Baghakole village has specific characteristics of the Patna district, i.e. winter season from November to February, summer season from March to June and rainy season from July to October, the average minimum and maximum temperature ranges from 4°C to 40°C. The average annual rainfall in Baghakole village (Bikram block) is about 1130 mm. However, most of it (70%) is received during July-September. Due to concentration of rainfall during this period, rice is the main crop of the village.

3.2. Location

The village Baghakole (25^{O} 28' N, 84^{O} 50' E) falls in the Bikram block of Patna district in Bihar. It is about 55 km south-west of Patna and can be reached via Bihta on Patna-Patu-Aurangabad road. The village is one km east of Patna-Patut-Aurangabad road and 3 km west of Bikram block headquarters.

3.3. Road Connectivity

The village Baghakole had a poor road connectivity till the early-1960s, but with the construction of a pucca Bihta-Patna-Mahabalipur road in 1967-68, the connectivity of this village increased to a large extent. Bullock cart was the only mode of transport prior to 1970 but with the construction of the pucca road, a private bus started playing on it in 1971 from Baghakole to Bihta, which facilitated the movement of the people of this village to Bihta and from there to other places.

3.4. Significant Events in History of Baghakole

A chronological list of significant events, presented in Box 1, indicates the general development pathways of the Baghakole village.

A perusal of Box 1 reveals that the village has faced several natural calamities during the past one century, starting with a plague outbreak in 1920, earthquake in 1934, cholera outbreak in 1955 and floods in 1971 & 1975 and droughts in 1967 & 2010.

On the brighter side, educational facilities were regularly created — a primary school in 1936, a middle school in 1962, and a high school in 1968. The farm mechanization is also visible in the village — introduction of a power tiller in

Box 1: Significant Events in History of Baghakole Village	
Year	**Event**
1920	Plague outbreak
1934	Access to canal water irrigation
1934	Earthquake
1936	Primary School established
1953	Village electrification
1953	First tube-well installed
1955	Cholera outbreak
1955	Panchayat constituted
1960	Access to mettled road
1962	Middle School established
1966	PDS Programme begins
1967	Severe drought
1967	Use of chemical fertilizers started
1968	High School established
1970	First power tiller introduced
1970	Insecticide used in crop
1971	Severe flood of Sone river
1975	Severe flood of Sone river
1978	Thresher introduced
1984	First tractor introduced
1985	Dairy Cooperative organized
1988	Earthquake
1995	First rice huller brought
2000	A.I. Centre established
2002	*Anganwadi* (ICDS) established
2010	Severe drought

1970, a thresher in 1978, a tractor in 1984 and a rice huller in 1995. Canal irrigation facilities were introduced in this village in as early as 1934 and the first tube-well was installed in 1953. The village has facilities of government institutions and programmes such as constitution of village panchayat in 1955, PDS programme in 1966, dairy cooperative in 1985, A.I. centre in 2000 and *Anganwadi* programme in 2002.

3.5. Demographic Structure

The total population of village Baghakole is 3045, comprising 1579 males and 1466 females. About three-fourth population is of labour households and

one-fourth together comprises small, medium and large households. The number of households in this village is 503, which also comprises three-fourths of labour households, followed by small (≈10%), large (≈8%) and medium (≈7%) households (Table 1).

The average family size is worked out to be of 6.06 persons with maximum (8.43 persons) on large households, followed by labour (5.93), medium (5.61) and small (5.33) households. The overall sex ratio is 928 in the village, it is maximum on labour (953) and minimum on small (822) households.

The average age of persons in the village Baghakole is higher on large households (29.32 years) and it declines with the decline in land base of the households (Table 1). The comparatively low average age on smaller farm categories, particularly on labour households is mainly due to larger population of younger persons (<16 years), i.e. 46 per cent on labour households and 30 per cent on larger households. However, poor nutrition might have also contributed to the low average age on labour households.

Table 1: General characteristics of households in the Baghakole village

Particulars	Households				
	Labour	Small	Medium	Large	All
Population					
Male	1132	152	109	186	1579
Female	1080	125	93	168	1466
All	2212	277	202	354	3045
Number of households	373	52	36	42	503
Age (years)	23.6	26.8	28.2	29.3	24.9
Education (years)	2.8	5.3	6.8	8.3	3.9
Family size (No.)	5.9	5.3	5.6	8.4	6.1
Male-headed households (%)	90.4	90.6	97.2	91.1	90.9
Sex ratio (per 1000 male)	953	822	853	903	928

3.6. Status of Education

The level of education is quite high in the village. There is 64.0 per cent literacy in the village, which is higher than the state average literacy level. Literacy level of large households is much higher (≈92%) with high male literacy (≈98%) and female literacy (≈86%) levels. The literacy level declines with the decline in the land base of households. The difference in female literacy between large and labour households is very high (43%) than in the corresponding male literacy rate (30%) (Table 2).

Children going to school

The village Baghakole is rich in educational infrastructure. It has one high school, one middle school, two primary schools and one Urdu school. The first primary school was established in 1936 which was upgraded to a middle school in 1962. One private middle school was also started in the village in 1962, but it was closed in 2006. Then, a private high school was established in 1968 with the donations from local and adjacent villagers. The state government took over this school in the year 1972. Presently, a private middle school is functional in the village.

Before the establishment of high school in the village, girls used to discontinue their education after the middle level. Presently, about 25 girls go for higher education to a college at Bikram, located about 3 km away from the village.

Table 2: Literacy rates across different categories of households in Baghakole village
(in per cent)

Particulars	Households				
	Labour	Small	Medium	Large	All
All	55.8	75.5	83.5	91.8	64.0
Males	67.9	83.3	90.6	97.7	74.6
Females	42.8	65.8	75.6	85.5	52.3

3.7. Social Structure

The social structure in the Baghakole village like most parts of the country, is male-dominated. All major decisions are taken by males and women have little say in such decisions. In Baghakole, only about 9 per cent households have a female as household-head. In labour households, the share of female-headed households is slightly more at 10 per cent of the total households in this village, it is due to either widowhood or out-migration of the senior male member.

3.8. Community and Caste Structure

Community-wise, the households in the Baghakole village fall under two religions, viz. Hindu and Muslim. A majority of the households belong to the Hindu community (≈93%) and Muslim households are only about 7 per cent. In terms of households-size, cent per cent large and medium households and more than 98 per cent households of small category belong to the Hindu community. On the other hand, most of the Muslim households belong to the labour household category with a few households belonging to the small category (Table 3). There is no Christian household in this village.

Table 3: Distribution of households by community in Baghakole village

(in per cent)

Community	Households				
	Labour	Small	Medium	Large	All
Hindu	90.3	98.1	100.0	100.0	92.6
Muslim	9.7	1.9	0.0	0.0	7.4

In terms of social castes, about half of the households belong to other backward castes (OBCs) (47.57%), about one-third (31.21%) to schedule castes (SCs) and one-fifth (21.27%) to forward castes. About 90 per cent of large households are of forward castes, and only 2.41 per cent are labour households. No schedule caste households belongs to the medium and large categories and all the SC households are either labour or small farmers in the village (Table 4). More than half of OBC households (57.91%) belong to the labour category and only 9.52 per cent belong to large farm households. The majority of forward caste households belong to *Bhumihar*, whereas *Kahars* dominate in the OBC category and *Chamar* and *Dusadh* are in majority in scheduled caste category.

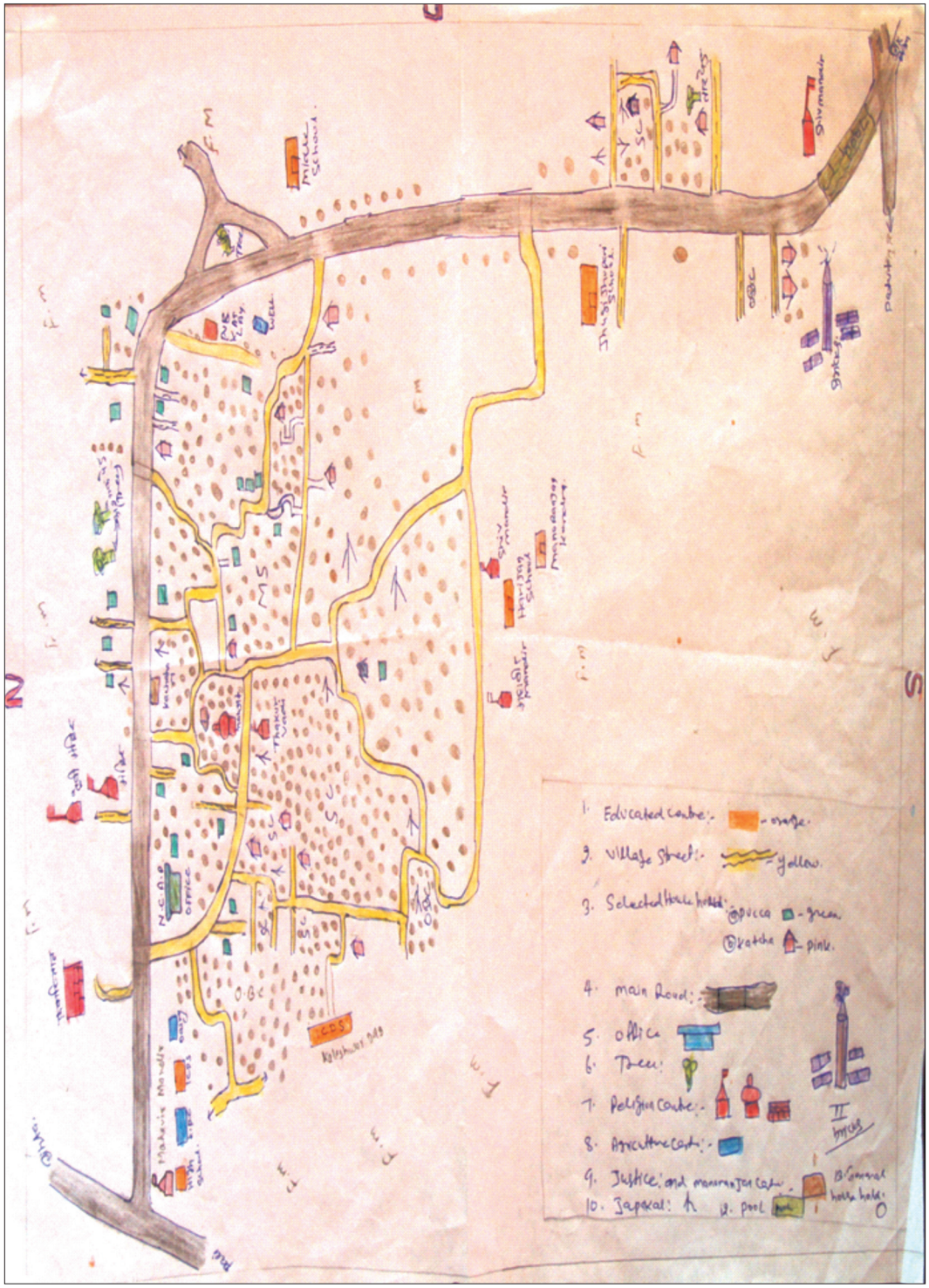

Figure 2: Social map of Baghakole

Table 4: Distribution of households by social group in Baghakole village

(per cent)

Social group	Households				
	Labour	Small	Medium	Large	All
Scheduled Castes (SCs)	39.7	17.3	0.0	0.0	31.2
Forward Castes (FCs)	2.4	55.8	86.1	90.5	21.3
Other Backward Castes (OBCs)	57.9	26.9	13.9	9.5	47.5

3.9. Culture

The people of Baghakole village are though not highly educated in terms of schooling years but are highly cultured. There is a complete harmony in the village, so much so that Mandir (temple) and Masjid (mosque) are located side-by-side in the village.

The food habits and costumes of all the households of this village are similar, irrespective of the community they belong to. The staple food is rice and wheat, but the poor households of the village, irrespective of their caste or community, largely remain under-fed and do not get the required calories from food-intake

A sign of communal harmony — Mandir-Masjid stand side by side in Baghakole

due to weak economic base and lack of wage employment. Mahatma Gandhi National Rural Employment Guarantee Scheme (popularly known as NAREGA) has been implemented in the village to provide employment to the poor households but it has not provided 100 days employment to even one labourer in the village.

The dowry system and village feast system are still a norm in the village. The residents have to incur a huge expenditure on the marriage of their daughters and on the observance of '*Shradh'* (rituals after death of an elderly family member). All the households of the village and of nearby villages are offered food at the time of observance of *Shradh*. Such customs adversely affect the people of this village, particularly the small and marginal households, who have to sometime even sell or mortgage their land for observing the traditional rituals.

3.10. Migration

Bihar is known for large-scale migration in the country and out-migration from the Baghakole village is also considerable. The people, particularly the adult population, opt to migrate from a place when employment opportunities are not locally available, some people, particularly younger ones have to go out for higher education or for a salaried job. Out-migration from the Baghakole village is more than 16 per cent of the total population, but this percentage would be much higher if migration with respect to adult population is worked out (Table 5).

Table 5: Incidence of migration in Baghakole village

(per cent)

Particulars	Households				
	Labour	Small	Medium	Large	All
Out-migration	15.7	14.8	12.4	23.5	16.3
Purpose of living outside the village					
Education	9.8	19.5	24.0	28.1	14.3
Salaried job	26.8	34.2	44.0	25.6	28.1
Daily wage employment	10.4	2.4	0.0	3.7	8.1
Own business	2.9	0.0	0.0	2.4	2.4
Searching job	0.0	0.0	0.0	4.9	0.8
Others	50.1	43.9	32.0	35.4	46.3

Incidence of out-migration is highest for a salaried job (28%), followed by for education (14%). An interesting feature observed in out-migration from Baghakole is that its percentage for a salaried job is very high across all household categories; it is highest across medium households (44%), followed by small (34%), labour (27%) and large (28%) households. This shows the better awareness of residents of this village about the importance of higher education. For education also, people from all household categories have gone out of village; their percentage, as expected, is highest among the large households (28%) and it decreases with decrease in farm size, reaching around 10 per cent among labour households.

Contrary to most of the villages of Bihar, out-migration from Baghakole is not very high for daily wage employment, it is only 8 per cent on overall basis, being maximum among labour households (10%), as expected. Due to weak economic base, out-migration for doing business is very low, around 2 per cent only (Table 5).

4. Agriculture

4.1. Landholding and Land-use Pattern

In Baghakole village, agriculture is the major activity for the majority of households. The average size of landholding is 1.18 acres. It is maximum across large households (8.09 acres), followed by medium households (4.14 acres) (Table 6).

Table 6 : Landholding pattern across different households in Baghakole village

Particulars	Households				
	Labour	Small	Medium	Large	All
Size of landholding (acre)	0.1	1.3	4.4	8.1	1.2
Operated land (%)	0.2	1.3	3.0	7.5	2.1
Irrigated area (%)	65.3	67.3	51.2	70.4	64.6
Permanent fallows (%)	5.3	13.0	30.2	7.4	14.0
Per capita cultivated land (acre)	0.3	0.2	0.5	0.9	0.2

The share in cultivable land is very high among large households (55.7%), followed by medium (19.4%), small (12.3%) and labour (12.6%) households. Thus, land ownership is skewed in the village (Figure 3).

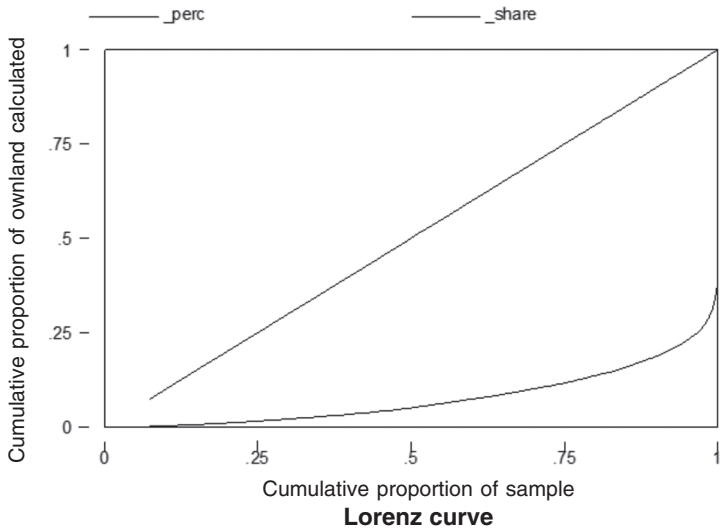

Figure 3: Lorenz curve of own land distribution in Baghakole village

In Baghakole, the operated areas on labour and small farm households are larger than their average landholding size mainly due to leasing-in and leasing-out of land from/to fellow farmers. The situation is just reverse in the case of medium and large farm households (Table 7).

Table 7: Incidence of tenancy in Baghakole village

Particulars	Households				
	Labour	Small	Medium	Large	All
	Percentage of households leasing land				
Leased-in	15.0	13.5	0.0	0.0	12.5
Leased-out	1.1	1.9	2.8	2.4	1.4
	Share in operated land				
Leased-in	86.8	17.4	0.0	0.0	13.3
Leased-out	26.2	1.5	1.4	0.3	4.0

4.2. Soil and Irrigation

Soil of the village is sandy loam. In the southern part of village, abundant sand is available below 2-3 feet of surface. Mining of sand from their fields provides substantial income to farmers and employment to labourers.

Land situation after sand mining in Baghakole

About 70 per cent of cultivated land is canal irrigated since 1934; however, during the past 5 years, the canal water available for irrigation is not adequate. The first tube-well was installed by a sugar factory in Bihta in 1953 which had a command area of about 80 acres. This tube-well has now been abandoned. In 1985, a government tube-well was installed but it is not operative since 1990 due to non-supply of electricity. The government had installed a submersible tube-well in 2008 but it is still to be commissioned. There are about 200 private tube-wells in the village which are being used for irrigation. Presently, private tube-wells are the main source of irrigation in the Baghakole village.

4.3. Crops and Cropping Pattern

Prior to onset of green revolution, i.e. before 1970s, agriculture in Baghakole was highly diversified. Several varieties of rice, millets, maize, pigeon pea and other pulses were grown in the village. But after the introduction of high-yielding varieties of rice and wheat, farmers have left the cultivation of local varieties of rice, millets and pulses and have switched over to rice and wheat crops. Sugarcane was one of the principal crops of this village but its cultivation was abandoned in 1980, mainly due to close of Bihta Sugar Factory.

Presently, rice is the main crop of *kharif* season covering about 85 per cent of net area sown. During the *rabi* season, wheat is the major crop covering around 45 per cent of net area sown. Both these crops are cash crops and are also covered under minimum support price (MSP). Due to non-availability of right price for pulses, farmers have left their cultivation. The meanance of 'neel gai' (a variety of deer) is also a cause behind abandoning cultivation of pulse crops. Lentil and potato are also grown during the *rabi* season and these jointly cover about 15 per cent of area. Lemon grass in *kharif* and mentha in *rabi* have been introduced recently. In the summer season, vegetables and green pea are grown but these crops together cover only 5-7 per cent of net sown area in the village. Productivity of rice and wheat is higher in this village than the state average.

There has been a change in the package of practices for crop cultivation in the Baghakole village during the past thirty years. Farmers had started using chemical fertilizers in 1960s @ 150 kg of NPK per acre (rice+wheat), particularly in the form of DAP, urea and potash. Recently, farmers have adopted vermi compost for production of field crops. There are more than a dozen farmers who produce vermi compost in the village, they use it on their fields and sell it to fellow farmers also.

Agricultural labourers at work in onion farm

The changing cropping pattern in the Baghakole village has been depicted in Table 8.

Table 8: Changing cropping pattern in Baghakole village

Crop season	1950-55	1980-85	2010
Kharif	Local paddy Millets Green pea Urd Arhar Horse bean Maize + Cucurbits	Improved rice Arhar Maize + Cucurbits	Aromatic plants Rice (Modern varieties)
Rabi	Barley Sugarcane Gram Linseed -	Gram Sugarcane Wheat Lentil Mustard	Wheat Aromatic plants Lentil Potato Mustard
Summer		Summery paddy	Vegetables Green pea

During the past forty years, the production of fruits has declined because of long gestation period of these plants, high investment, decreasing initiative of people and reduction in orchards. On the other hand, production of vegetables is increasing but due to the meanance of *neel gai,* who damages the vegetable crops, the increase in the vegetable production is very slow.

Standing mixed crops of wheat and mustard

4.4. Preference for Crop Varieties

Based on seed characteristics like higher yield, irrigation-need, fertilizer-need, crop duration and taste of produce, farmers in the Baghakole village select the variety of seed for cultivation. Since wheat and rice are the two major crops grown in this village, preference for their different seed varieties is shown in Table 9.

- In wheat, the farmers accord first preference to PBW 373 so far as yield is concerned. The variety demands less irrigation and less fertilizer. The variety 343 is least risky for the villagers as it is not infested easily with pests & diseases, provides higher yields, and is a short-duration crop. The only

Table 9: Preference of Baghakole farmers for different seed varieties

Seed variety	High yield	Less irrigation	Less fertilizer	Short duration	Good taste	Preference
			Wheat			
PBW373	⬭⬭⬭ ⬭⬭⬭ ⬭	⬭⬭⬭ ⬭⬭⬭ ⬭	⬭⬭⬭ ⬭⬭⬭ ⬭	⬭⬭⬭ ⬭⬭⬭ ⬭	⬭⬭	First
343	⬭⬭⬭ ⬭⬭⬭	⬭⬭⬭ ⬭⬭⬭	⬭⬭⬭ ⬭⬭⬭	⬭⬭⬭ ⬭⬭⬭	⬭	Second
502	⬭⬭⬭ ⬭⬭	⬭⬭⬭ ⬭⬭	⬭⬭⬭ ⬭⬭	⬭⬭⬭ ⬭⬭	⬭⬭⬭⬭	Third
HD2733	⬭⬭⬭	⬭⬭⬭ ⬭	⬭⬭⬭ ⬭	⬭⬭⬭⬭	⬭⬭⬭⬭ ⬭⬭⬭⬭	Fourth
154	⬭⬭⬭ ⬭	⬭⬭⬭⬭	⬭⬭⬭⬭	⬭⬭⬭⬭ ⬭	⬭⬭⬭⬭ ⬭⬭	Fifth
UP262	⬭⬭	⬭⬭	⬭⬭	⬭⬭	⬭⬭⬭⬭ ⬭⬭⬭⬭ ⬭	Sixth
2425	⬭	⬭	⬭	⬭	⬭⬭⬭⬭ ⬭	Seventh
			Rice			
MTU7029	△△△ △△△	△	△	△△△ △△△	△△△ △△	First
BPT5204	△△△ △△	△△	△△	△△	△△△ △△△	Second
MTU1001	△△△ △	△△△	△△△	△△△	△△△ △	Third
BSHR135	△△△	△△△ △	△△△ △	△	△△	Fourth
PIONEER 171	△△	△△△ △△	△△△ △△	△△△ △	△△△	Sixth
BIO30495	△	△△△ △△△	△△△ △△△	△△△ △△	△	Fifth

Notes : Different seed varieties have been shown because due to non-availability of selected seed variety, farmers have to compromise sometimes on seed variety.
Symbols are only indicators of difference and they do not depict the difference in real terms across different characteristics.

disadvantage of this variety is its taste, which is not good in comparison to other varieties. UP262 stands first when taste is considered, but it is ranked lower in other attributes. The variety 2425 is more prone to crop diseases, but is good in taste. Overall, the variety PBW373 is the most preferred wheat variety in Baghakole, because of its overall better ranking in all the attributes.

- In rice, the highly preferred variety is MTU7029, which provides higher yields, demands less irrigation, production duration is less, and stands high in taste. On the other hand, the variety Pioneer 171 is least preferred because of its lower yield in comparison to other varieties.

Vermi compost preparation in village Baghakole

4.5. Livestock

Livestock production is the second important economic activity in Baghakole village. There are 313 cattle (308 cows and 5 bullocks), 230 buffaloes, 259 goats and 70 poultry birds in the village. Labour households constituting 74 per cent of total households, own 67 per cent buffaloes and 50 per cent of cattle of the village (Table 10). The higher incidence of buffaloes on labour households is mainly due demand of more human labour in buffalo-rearing. Large households rear cattle more than buffalo, but they own 26 per cent of the cattle of the village and majority of them are of cross-breed.

Table 10: Livestock-rearing pattern across different households in Baghakole village

Livestoc	Households				
	Labour	Small	Medium	Large	All
Cattle	157	30	42	84	313
Buffalo	154	33	22	21	230
Goat	245	14	0	0	259
Poultry	65	5	0	0	70
Others	20	0	0	1	21

Cross-bred cows outnumber local breed in Bhagakole

In Baghakole village, about one-third of households own both cattle and buffalo or one of these milch animals (Table 11). Incidence of livestock-rearing is higher on larger and medium households but incidence of buffalo-rearing is higher on large households (69%), followed by medium households (58%).

The incidence of cattle rearing is higher on small and medium households (39%) than large and small households (31%). Incidence of cattle and buffalo rearing is almost identical on labour and small farm households.

Table 11: Incidence of livestock-rearing in Baghakole village

(per cent)

Livestock	Households				
	Labour	Small	Medium	Large	All
Cattle	30.3	38.5	38.9	31.0	31.8
Buffalo	30.6	30.8	58.4	69.1	35.8
Goat	32.2	13.5	0.0	0.0	25.3
Poultry	7.0	3.9	0.0	0.0	5.6
Others	0.5	0.0	0.0	2.4	0.6

Goat-rearing is mainly in the domain of weaker section of the society in the village. About one-third of labour households and 13.46 per cent of small households own goats in the village. Poultry is also domesticated by the weaker section of the society in the village. Large and medium households do not practise goatery and poultry in the village.

An old farmer grazing goats

In the Baghakole village, large and medium households domesticate cross-bred cows, whereas labour and small households rear local breed of cows. Analysis in terms of value of animals also supports this observation because 73

per cent of investment on livestock incurred by large households is on cattle only. Labour households and small farmers cannot afford to have cross-bred cattle because of their high price, ranging from Rs 25,000 to Rs 60,000.

Despite a large number of animals in Baghakole village, their health care facilities are limited. Some people go to the Bikram block headquarters for treatment of their animals. But, the majority of farmers depend on quacks in the village for treatment of their animals. Artificial insemination unit was established in the Baghakole village in 2000. Before 2000, farmers availed Artificial Insemination facility for their milch animals at Bikram, but the majority of them used to opt for natural insemination facility available in the nearby villages.

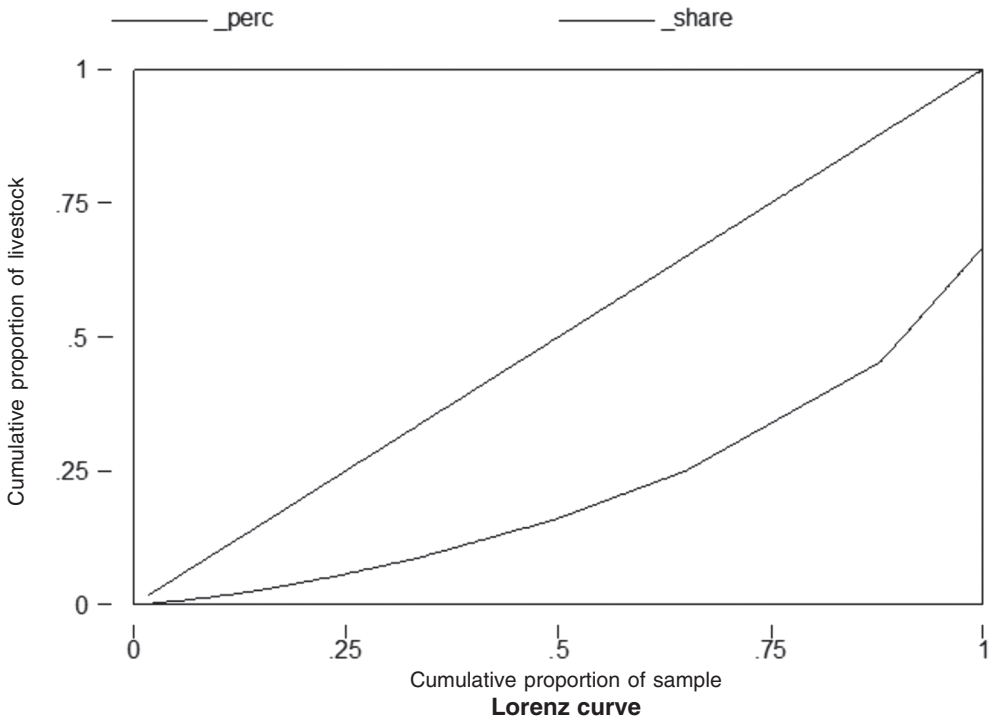

Figure 4: Lorenz curve for livestock-rearing in Baghakole

A Dairy Cooperative was organized in the village in the year 1985. It functioned well during the first 10 years of establishment and the per day milk collection touched 800 litres. But, this Dairy Cooperative has experienced deterioration during the past 8 years and per day milk collection has declined to 400 litres. It has been mainly due to uneconomic price fixed by COMFED in Bihar. The farmers have reduced the number of milch animals because they do not get a remunerative price for their milk.

4.6. Farm Machinery and Implements

The agriculture of Baghakole village is moving from traditional to modern mechanized farming. Farmers have shifted from manual ploughing to tractor ploughing. Mode of transportation has also changed from bullock/horse carts to tractor-trolley. The first tractor was purchased in 1984 and the first power tiller in 1970 in the village. Labour households also hire tractor for ploughing and do not use bullocks for this purpose. The first thresher was purchased in 1978 and presently there are 5 threshers in the village. Threshers are used mainly for wheat/pulses threshing but paddy is still threshed by tractor and human labourers. Diesel engine is most common agricultural machinery in the village. The first diesel engine was purchased in 1974. There are 175 diesel engines and 6 electric motors in the village which are used mainly for irrigation, but some of the diesel engines and all electric motors are used for threshing. About one dozen farmers have more than one diesel engine, which they use for irrigation, threshing, bhusa making and cane crushing. About 22 per cent of farm households own diesel engine in the village. About 93 per cent of large farm households own diesel engine. More than three-fourths of medium farm households and half of the small farm households own diesel engine in the village (Table 12). One of the large farmers has a land leveller also. Labour households are not able to afford to have a diesel engine though the majority of them (87%) are engaged in cultivation on leased-in land.

Bore-well is another common farm infrastructure which is owned by about one-fifth of the households in Baghakole village. The incidence of bore-well ownership declines with the decline in land base of households, i.e. it is highest on large households (80.95%) and lowest on labour households (3.49%).

In the Baghakole village, only tractor is now used for tillage purpose. About 3 per cent of households own a tractor, whereas more than one-fifth of large

Table 12: Percentage of households having farm machinery in Baghakole village

(per cent)

Particulars	Households				
	Labour	Small	Medium	Large	All
Tractors	0.5	1.9	5.6	23.8	3.0
Harvesters & threshers	0.0	0.0	2.8	9.5	1.0
Irrigation motors	3.5	55.8	77.8	92.9	21.7
Sprinkler and drip irrigation	0.0	0.0	2.8	0.0	0.2
Bore-wells	5.9	42.3	66.7	80.9	20.3

Irrigation using a diesel pump is common in Baghakole village

farm households own a tractor in the village. A few small farm households also own tractors, but they have hired out their tractors for non-farm purposes. Sand mining is one of the important non-farm activities in the area which has a regular demand for tractors for sand transportation. About 10 per cent of large households and 3 per cent of medium households own a thresher in the village.

5. Economic Status

In the Baghakole village, agriculture and livestock-rearing constitute the major economic activities. Agriculture is the main occupation for 58 per cent of large households and 67 per cent of medium households. Livestock is also owned by the majority of the households in the village. Almost all the houses are pucca or semi-pucca in the village. Thus, economic status of people in Baghakole is quite good.

5.1. Sources of Income and Occupational Diversification

Crop production and livestock-rearing have been the main sources of income in the Baghakole village. The increasing land fragmentations, declining agricultural income, declining interest in agriculture and increasing educational level have induced people to opt for non-farm employment. The diversified occupations may be categorized into 5 groups, viz. (i) Cultivator, (ii) Agricultural worker, (iii) Non-farm worker, (iv) Salaried job, including government job, and (v) Other jobs like auto-plying, tractor/auto repairing,

A pucca house depicts sound economic status in Baghakole

black smithy, tailoring, carpentry, etc. The MNREG Scheme of Government of India is operational in this village also but as per the residents, it has not provided 100-day employment to even one eligible household in this village.

The working population is around 31 per cent in this village and interestingly, its share is almost same across all the four categories of households (Table 13).

A blacksmith making traditional farm tools

Across different occupations, non-farm sector provides maximum employment (54.2%) to the people of this village, followed by crop cultivation (31.0%), agricultural labour (12.7%) and salaried job (5.3%). Around 9 per cent households are occupied in other miscellaneous jobs. The adoption of non-farm employment is maximum as expected, by labour households (66.4%), followed by small (30.2%), large (22.4%) and medium (12.7%) households. Among cultivators, a large proportion is of medium (66.7%) and large (57.9%) households and negligible of labour households (4.4%).

Women empowerment in village

Table 13: Occupational diversification in Baghakole village

Livestock	Households				
	Labour	Small	Medium	Large	All
Working population (No.)	691	90	63	113	957
Share of different occupations in total working population (%)					
Cultivator	4.4	41.9	66.7	57.9	31.0
Agricultural worker	16.6	8.1	0.0	0.0	12.7
Non-farm worker	66.4	30.2	12.7	22.4	54.2
Salaried job	2.6	10.5	12.7	14.0	5.3
Other jobs	10.1	9.3	7.9	5.6	9.4

A salaried job, including government job, is also an important source of income across all categories of households. Its incidence is maximum (14.0%) among large households and it decreases with households-size. About 3 per cent labour households are also engaged in salaried jobs. It reflects that people in Baghakole village accord considerable importance to education which helps them to get salaried jobs.

6. Healthcare and Sanitation

6.1. Drinking Water

The problem of poor health is directly linked to the availability and quality of drinking water. Open well was the main source of drinking water in this village up to 1970. Presently, hand pumps have become the main source of drinking water. The installation of hand pumps has increased the access to drinking water in this village but the quality of water is a matter of concern. There is no municipal supply of water in this village.

6.2. Healthcare

The healthcare facilities in the Baghakole village are practically non-existent. The access to medical facilities is also not easy. The villagers have to go to either Bikram (3 km away) or Bihta (12 km away) to avail medical facilities. A 3-bed hospital at each of these places was established in 1980s but these hospitals did not function properly up to 2005. It was only with the initiative of the state government that the medical services in the state could be streamlined. Thus, from 2005 onwards, the villagers of Baghakole village have access to hospitals at Bikram as well as Bihta. According to a rough estimate, 60 per cent of villagers avail healthcare facilities at Bikram, 30 per cent at Bihta and 10 per cent in the village itself through quacks.

Polio vaccination is being done in the village regularly but there is no arrangement for vaccination against other diseases. Prosperous farmers manage vaccination for prevention of different diseases for their children at Bikram or Bihta.

The increasing intervention of chemicals in agriculture, changing life-styles and diversifying food habits have resulted in emergence of diseases like gastritis, stomach cancer, cardiological problems and respiratory/asthama problems, which were not recorded earlier.

6.3. Sanitation

The sanitation conditions in the Baghakole village are poor. There is no public sanitation in operation in the village. Gram panchayat does not undertake any sanitation activity in the village.

A traditional medicine shop

The main streets of the village are pucca but lanes and by-lanes have only bricked roads. About one-fifth households have constructed septic latrines in their houses, around half of the households have non-septic latrines and about one-fourth households do not have toilet facilities within their residential premises.

The majority of households still use fuel wood, dung cake and crop residue for cooking purposes which adversely affect the health of women and adds to environmental pollution. Only about 10 per cent households use LPG for cooking purposes.

7. Markets, Transport and Communication

7.1. Markets

The Baghakole village does not have easy access to any organized agricultural market. The local markets— one at Patut and the other at Bikram— are located at a distance of 2 km and 3 km, respectively from the village; moreover these markets are largely vegetable markets and therefore do not serve as a all-purpose market. Bihta has a big foodgrain market but its utlity becomes limited due to it being 12 km away. Moreover, this market was a regulated market before July, 2006, but after the repeal of Agricultural Produce Market Act (APMA) by the state government, it now functions as a private market. Under such a scenario, most villagers of Baghakole, specially the small farmers sell their produce in the village to the itinerant traders at un-remunerative prices. It was observed that the farmers sold paddy @ Rs 1000/- per quiintal, which is less than the announced procurement price of paddy. The medium and large farmers of the village manage to transport their paddy and wheat to the procurement centre of Food Corporation of India (FCI), but they also do not get the proper price for their produce.

There is no input dealer in the Baghakole village. For purchasing fertilizers, seeds, pesticides and other agro-chemicals, farmers have to go to Bikram (3 km away). But market facilities being limited at Bikram, most of the farmers go to Bihta (12 km) for purchasing these inputs. Large farmers prefer to purchase seeds, pesticides, etc. from Patna market to get a better quality and a wider choice of products.

The lack of marketing facilities within the Baghakole village affects the purchasing of daily goods also. The residents have to go to either Bikram or Bihta for purchasing these commodities, which is a time-consuming and laborious job.

7.2. Transport

Transport facilities in the village Baghakole are meagre. The village is not located on or near a rail head and the villagers have to travel 12 km to Bihta which is the nearest railway station. The national highway NH 98 is at a distance

of 5 km from this village. The interestate bus stop is located at Patna which is 45 km away from the village.

There are three horse carts which are used by the villagers for travelling or transportation to nearby places, including Bikram. There are three cars also in this village and these are owned by the prosperous farmers, who have income from non-farming sources also.

Bicycle is the most common mode of transport in the village Baghakole. It is used for going to different nearby places and also for transporting agricultural produce to shorter distances. However, bicycle is being replaced *albeit* slowly, by motorcycles/scooters and presently there are about 50 motorcycles/scooters in the village.

7.3. Communication

Communication network provides linkages between people and institutions. It provides a mode of person to person communication and thus strenghtens the social life of a household. It helps in the dissemination of agricultural related information among the farmers and helps them in better marketing by providing market-related information.

Like all other infrastructural facilities, the communicaiton facility was very poor in the Baghakole. The village does not have a post office and for transmission of letters/money orders, villagers have to depend on the private facilities. But the access to telephone, both landline and mobile, has largely improved the communicaiton facility in this village. The first landline telephone connection was introduced in 1996 and presently there are 12 landline telephone connections in this village. The Baghakole village has also been affected with mobile phone revolution and practically every house has a mobile telephone in this village.

7.4. Electric Supply

The electric supply was started in 1953 in this village. It helped in introduction of power tillers, rice hullers and tube-wells in the village. The electric supply, however, continues to be irregular and for a short duraiton only in a day.

8. Welfare and Development Programmes

Several welfare programmes of the central and state governments are in operation in the Baghakole village. These incude :

1. Agricultural Technology and Management Agency
2. Anganwadi Scheme
3. Balika Smridhi Yojna
4. Beej Gram Yojna
5. Cooperative Dairy
6. Diesel Subsidy Scheme
7. Handicapped Pension Scheme
8. Indira Awas Yojna
9. Integrated Scheme of Palm and Oilseed Management
10. Jaivik Khad Protsahan Yojna
11. Kabir Antyosthi Yojna
12. Kanya Vivah Yojna
13. Mahatma Gandhi National Rural Employment Guarantee Scheme
14. Micro Mode Scheme
15. Mid-Day Meal Scheme
16. Mukhya Mantri Cycle Yojna
17. Mukhya Mantri Tivr Beej Vistar Yojna
18. National Food Security Mission
19. Matrytva Labh Yojna
20. Laxmibai Widow Pension Yojna
21. Primary Agriculture Credit Scheme
22. Public Distribution System (PDS)
23. Rashtriya Bagwani Mission
24. Rashtriya Krishi Vikas Yojna
25. VRGS

The effect of some of these schemes has become visible like implementation of Mukhya Mantri Cycle Yojna has facilitated continuation of education, more so by girls, after the primary level in the native village, introduction of mid-day meals has increased enrolment in schools, etc. However, a wider impact has yet to emerge.

A glance of other infrasturcutral facilities in the Baghakole village can be had from Table 14.

Table 14: Development indicators in Baghakole village : 2010

Particulars		Number
Primary Schools	:	2
Middle School	:	1
High School	:	1
Urdu School	:	1
College-going Girls	:	≈ 25
Bullocks	:	5
Bullocks carts	:	No more
Tractors	:	18
Tube-wells	:	≈ 200
Bore-wells	:	≈ 100
Threshers	:	5
Land Leveller	:	1
Diesel Engines	:	≈ 175
Power Tillers	:	2
Electric Motors	:	6
Input Dealers	:	Nil
Vermi Compost Producers	:	≈ 12
Procurement Centre	:	Nil
Sprinkler & Drip Irrigation System	:	Nil
Veterinary Hospital	:	Nil
Veterinary Doctor	:	Nil
Artificial Insemination (AI) Centre	:	1
Dairy Cooperative	:	1 (Non-functional)
Medical Hospital	:	Nil
Medical Doctor	:	Nil
Primary Health Centre	:	1
Horse Cart	:	3
Cars	:	3
Motorcycles/Scooters	:	≈ 50
Bicycles	:	≈ 500
Telephone Land Lines	:	12
Mobile telephones	:	≈ 500
Source of Drinking Water	:	Hand Pump
Polio Vaccination	:	Yes
Vaccination for Other Diseases	:	Nil
LPG connections	:	≈ 50

9. Households Preference for Different Public Institutions

According to the people of Baghakole village, the most important institution is 'School' because it is the educaiton which will help in the development of the village. The next rank is given to the 'Medical Facilties' in general and a 'Hospital' in particular. But proper medical facilities are not available and there is no allopathic hospital in this village and people have to go to Bikram or Patna for availing a medicial faciltiy which is a costly preposition and many villagers are not able to bear this cost. The ayurvedic clinic in the village is of not of much use for the villagers.

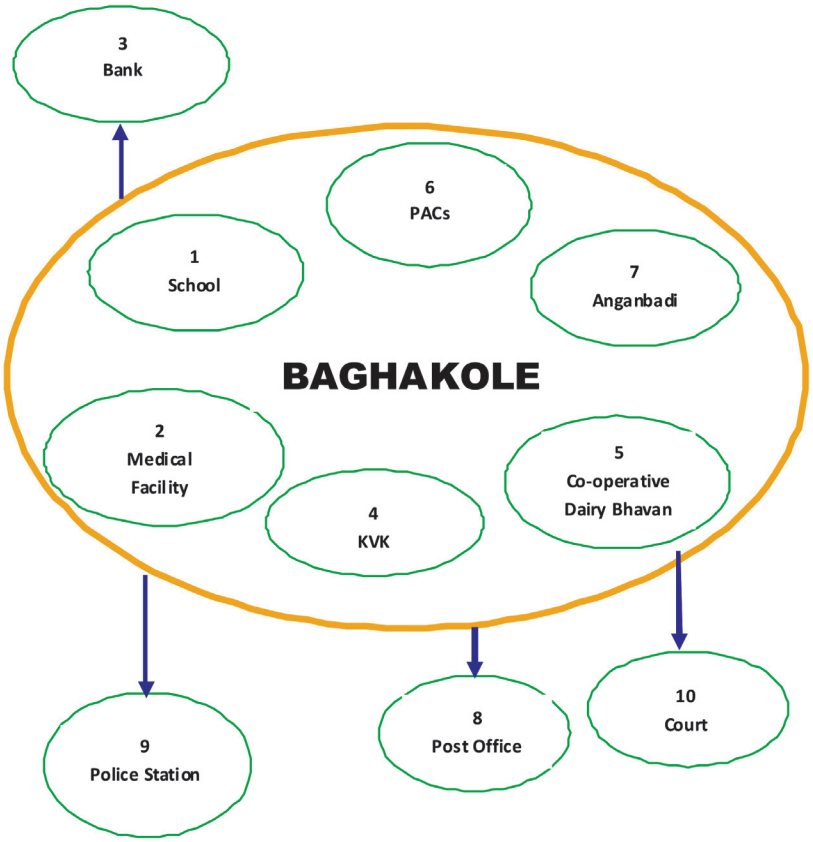

Figure 5 : Households preference for different public institutions

Note **:** The number shows the preferential ranking of villagers for the institution, and the length of arrow shows the distance from the village, longer the size of arrow, farther it is from the village.

The two other important institutions of people's choice in Baghakole are 'Bank' and 'Kisan Vikas Kendra'. Both these institutions have a singificant place in agriculture-based economy. These also help in increasing produciton and consequently income by providing appropriate inputs.

Livestock being an important activity in Baghakole, the next important instituion is 'Dairy Cooperative' for the people in this village. Its proper functioning can enhance their income level and provide help in livestock healthcare. 'Police Station' and 'Court' are regarded least important as the farming community in this village seems to have a paceful life with little incidence of fightings, quarrels, etc.

Table 15 : Trend change in Baghakole village : 1970-2010

Indicators	1970	1990	2010	Reasons
Soil fertility				Not much change as people are not fully dependent on chemical fertilizers but use organic manure also
Number of crops				Lack of water, demonstration effect, *neel gai* destroys crops
Fertilizer use				Use of improved seeds needs more fertilizers
Horticulture				Problems of *neel gai* are prominent
Area of cultivation (Per capita)				Increasing population
Irrigation				More investment in private boring, government initiative

Table 15 : Trend change in Baghakole village : 1970-2010 — *Cond.*

Indicators	1970	1990	2010	Reasons
Migration				Demonstration effect
Livestock-rearing				Increased government initiative
Diseases				Better awareness about healthcare
Forest cover				Lack of rain, cutting of forests
Wild life				Decreasing forest and encroachment of land

Note: The symbols used in this table are only indicators of change and do not depict the extent of change in real terms over time.

10. Opportunities and Constraints

10.1. Opportunities

The strengths of this village are better irrigation facilities, higher productivity of wheat and rice, strong milk supplying capacity and higher educational facilities. These should be strengthened further.

- The irrigation facilities in the Baghakole village can be utilized for crop diversification and cultivation of summer vegetables and medicinal plants.
- The productivity of wheat and rice, being higher in the village than state average, should be strengthened further by facilitating quality inputs and procurement from the village.
- The milk supplying capacity of the village should be supported by providing livestock healthcare facilities in the village and making the dairy cooperative more effective and functional.
- The strong educational infrastructure in the village may be developed further in terms of opening of a college for higher education and a polytechnic or technical training institute for capacity building in the village, particularly of the youths. This will strengthen the technological capabilities of the younger group in this village and will facilitate income opportunities locally as well as check migration.
- Setting-up of small-scale food processing units in or around the village will generate employment and income for the local residents and save the post-harvest losses.
- With the availability of a number of institutions like Krishi Vigyan Kendra, etc. in the village, a right initiative can change the economic status of the village.

10.2. Constraints

- Lack of basic medical facilities is among the major problems of the Baghakole village.
- Lack of animal health care facilities, including a big artificial insemination centre is constraining the development of livestock in the village.

- The non-existence of an effective and functional dairy cooperative is adversely affecting the milk supplying as well livestock-rearing systems of the village.
- Lack of availability of quality seed and other inputs is constraining the growth in productivity of wheat and rice crops.
- Inspite of better education to girls, lack of participation of women in decision-making programmes of the household continues to be a social evil.
- School-level educational structure being strong in the village, there is a need of a college-level institution in/around the village so that more boys and girls could get higher education.
- There is also a need of an institution like technical training institute or polytechnic in the village for the capacity building of the youth of village.

Unregistered contribution of women and children to agriculture

Baghakole

(Bihar)

— A Profile

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Baghakole (Bihar) — A Profile

Under ICAR-ICRISAT Collaborative Project

Tracking Change in Rural Poverty in Household and Village Economies in South Asia
(Sponsored by Bill and Melinda Gates Foundation)

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Contents

Foreword

The eastern region of India continues to have high concentration of poverty in terms of prevalence rates and total numbers. Reducing poverty in this region has been a major challenge and therefore, Bill and Melinda Gates Foundation deserves high appreciation for initiating a study on understanding the ways of reducing poverty in this region. NCAP is happy to be a partner in this significant study which is part of a mega project on "Tracking Change in Rural Poverty in Household and Village Economies in South Asia" being undertaken by International Crops Research Institute for Semi-Arid Tropics (ICRISAT), Hyderabad, in collaboration with International Rice Research Institute (IRRI), Manila, Philippines. The project aims at understanding the dynamic process for reducing poverty in the poverty-laden agro-ecologies of South Asia by tracking the household and village economies continuously.

In eastern India, NCAP will focus on the three states, namely Bihar, Jharkhand and Orissa of the region with the overall objective of evolving appropriate and effective strategies for accelerated poverty reduction in the study area. For the implementation of project, 12 villages have been selected from these three states and as a first step a profile of each village will be prepared based on the prevailing socio-economic scenario of that village. The present profile is of village Baghakole in the Patna district of Bihar. The successful implementation of this project would significantly contribute to our understanding of the complex poverty dynamism.

I do acknowledge the funding support of Bill and Melinda Gates Foundation to this project. I compliment the project team for bringing out this publication and I am sure it would be a meaningful start for the implementation of this useful project. The information provided in this village profile will also be helpful to state as well as central departments of rural development.

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