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SOCIO-ECONOMIC AND RESOURCE PROFILE ANALYSIS OF CHANDRASEKHARPUR VILLAGE

(An Outcome of VDSA Project)

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(Indian Council of Agricultural Research)
Bhubaneswar-751 023, Odisha

2013

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CONTENTS

List of Tables

List of Figures

Chandrasekharpur Village: An Overview

Chandrasekharpur village, located on geographical coordinates of 20°42'48" N and 85°42'50" E, is 27 km away from district headquarter Dhenkanal and 13 km from sub-divisional block of Gondia. It is at the foot hill of Kapilas, surrounded by forest and hills. Natural vegetation with *Sal, Mahua, Palas* and *Sagwan* trees are widely seen around the locality.

Livelihood mainly depends on agriculture and allied activities. As most of the lands have no irrigation facility and water availability, the agriculture is highly rain fed and very difficult to mechanize. Even if the inputs are made available, the resource poor farmers had no money to buy those as a result of which they had no option but to rely on subsistence nature of farming. Paddy is the only crop cultivated in the *Kharif* season and black gram and green gram in *Rabi* season. Due to the non-availability of gainful employment until recently, most of the people started migrating to nearby towns to work in constructions on daily basis.

The population under earning age constitutes 66 per cent of the total population. So the age composition of the village is very healthy as very small size is dependents. In spite of large earning age group, a sizable population (55 per cent) has no or little land restricting the economic activity of population. The village is rich in red soil. Alluvial soil is found in the low land, which is used for paddy cultivation. Most of the soil structure is not conducive for crop cultivation but ideal for plantation. So these areas are surrounded by cashews, mangoes and teak trees.

Highly under developed state of the village is quite visible and also reflected by the poor social indicators such as low literacy, poor sex ratio, poor source of irrigation, low production and productivity, low farm mechanization etc. The role of the women is also very limited and otherwise engaged in day to day domestic activities. This traditional outlook of the society restricts them to come out from household boundaries.

There is no organized market, nor society for crops, milk and livestock. The non-accessibility of market is a big issue for the local people for agriculture product and sale and purchase of livestock. This results in unfavorable market price and discourages production output. The status of socio-economic infrastructure is very meager. People need the awareness about health and hygiene. Hence, the development of village is very slow but is in progress.

1. Introduction

A mega Project on **Tracking Change in Rural Poverty in Households and Village Economies in South Asia** is being undertaken by National Centre for Agricultural Economies and Policy Research (NCAP), New Delhi and International Crops Research Institute for Semi-Arid Tropics (ICRISAT), Hyderabad. For Eastern India, Directorate of Water Management Bhubaneswar is the implementing agency of the project in Odisha villages. The Project aims at understanding the dynamic process for reducing poverty in the poverty-laden agro-ecologies of Eastern India by tracking the households and village economies continuously. The Eastern region of India is one of the most poverty-laden regions in terms of both prevalence rates and total numbers. 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.

The overall objective of the Project is to help evolve appropriate and effective strategies for accelerated reduction of poverty in Eastern India. 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 to address dynamics of economic, social, and institutional development at meso-level (e.g. district level), and
- To nurture policy analysis and strengthen capacity building for poverty reduction in the Eastern Region of India.

Collection of longitudinal data on households, individuals and field levels in selected villages is one of the major activities. Twelve villages have been selected for continuously tracking the changes in rural economies under the Project. The village Chandrasekharpur of Dhenkanal district of Odisha is one of the selected village. Before selection of sample households for continuous monitoring, the village census has been conducted in each selected village to understand the general and the 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 Dhenkanal

Dhenkanal is one of the centrally positioned districts of Odisha. The district is spread over an area of 4595 square km that stretches across the geographical coordinates of 20° 29' to 21° 11' North latitude and 85° 58' to 86° 2' East longitude. As per 20011 census the District has a population of 11,92,948.

The District of Dhenkanal is bound on the east by the Jajpur district. Keonjhar district lies to the north. The district of Angul borders Dhenkanal on the west. On the south lies the district of Cuttack. The district is 99 km away from capital Bhubaneswar on National Highway No. 42. Regular bus services connect Dhenkanal with Bhubaneswar, Cuttack, Puri, Rourkela, Sambalpur, Raipur, etc.

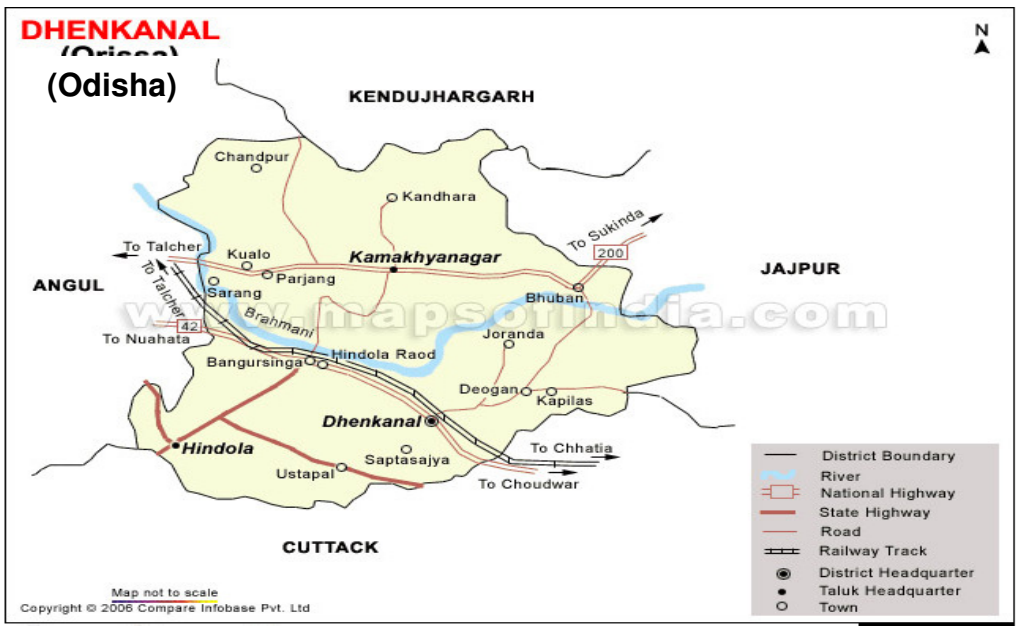


Fig. 1: District Map of Dhenkanal in Odisha.

The river Brahmani flows in the west of the district as a boundary to Anugul district and then flows within the district bisecting it into two parts. The Valley of Brahmani River comprises major northern part of Dhenkanal and southern part of Kamakhyanagar sub-division. The district is predominated by the agricultural sector. Some large scale industries like Nilachal Refractories, Utkal Asbestos Ltd, Odisha Polyfibres Ltd, Shakti Sugar are established in this district.

2.1 History of Dhenkanal

It is believed that the district derives its name from Dhenka, the *Savara* chief who reigned in the region. The district was influenced by the religious movement of *Mahima Dharma*. The district is marked by the presence of several pilgrim sites. The economy of the district is influenced by the large scale industries like the Odisha Polyfibres Limited, Nilachal Refractories, Shakti Sugar and Utkal Asbestos Limited. The forest and its products are also important components that influence the economy of the district. Rich in flora and fauna, the forests are home to a number of endangered variety of plants and animals. The forest is home to the elephants and tigers.

Fig. 2: Field Investigator Interacting with Farmers

2.2 Natural Sub-Divisions

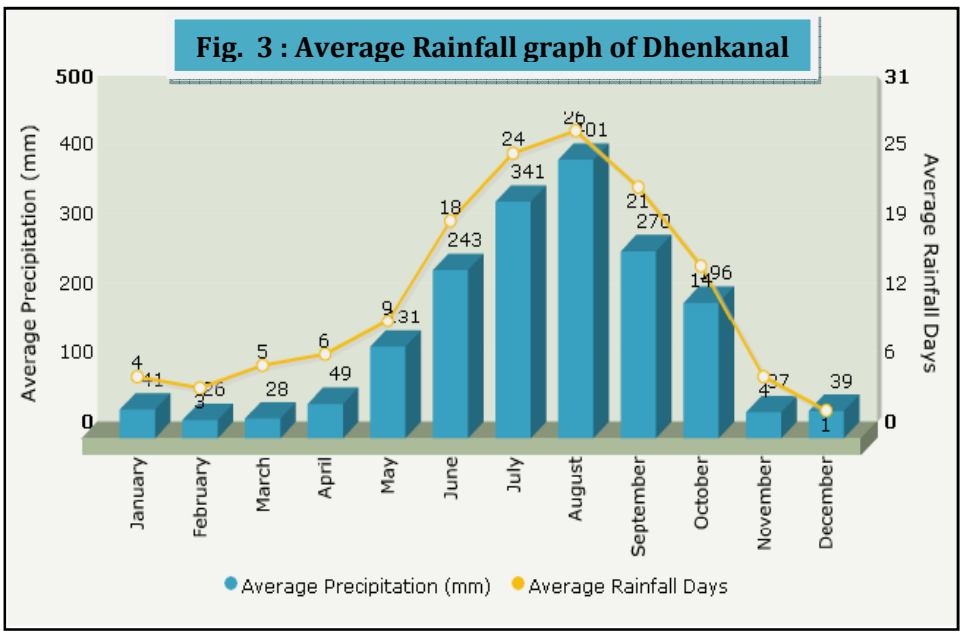
Dhenkanal District is divided in to three natural sub-divisions. The southern part is covered by hilly region, the fertile river valley with tributaries, and the northern hilly region. Most part of this district is covered with dense forest and a long range of hills. Therefore, the district is called as the "Home of elephants and tigers for the country". It has mainly five varieties of soil:

- Alluvial soil (available in river valley)
- Red loam soil (available in highland)
- Sandy loam soil (found in yatches)
- Gravelly soil (found in hill slopes)
- Cleaving loan soil (found throughout the district)

The topography of Dhenkanal district is marked by the hilly regions and the valley formed by the river that flows in the district. The total population of the district is 10,65,983 according to the census conducted in the year 2001. Majority of the people of the district are engaged in the occupation of agriculture.

2.3 Climate and Vegetation

The climate of this district is generally hot with high humidity during April and May and cold during December and January. The monsoon generally breaks during the month of June. The main forest products are timber, bamboo, firewood, and *Kendu* leaves. Normal rainfall 1421.1 mm and actual rain fall in last year (2012) was 1300 mm. The pattern of rain fall supports only two cropping season's *Kharif* and *Rabi*. Paddy is the major *kharif* crop and Wheat, Maize, Ragi, Mung, Biri ,Kulthi ,*Till*, Groundnut, Mustard, Jute, Potato, Sugarcane are among the *Rabi* crops.



3. The Chandrasekharpur Village

3.1 History of the Village

The village established on the landed property of God Kapilas (*Debotter* Land). The residents have no permanent land possession document. And they are living generations after generations with a feeling that, they are protected by the divine bless of Lord Chandrasekhar, hence the village named as Chandrasekharpur.

3.2 Location of the Village

Chandrasekharpur is a village coming under the *Gram Panchayat* Neulapoi in the block Gondia of Dhenkanal district in Odisha. The village stretches across geographical coordinates 20°42'48" N and 85°42'50" E. It is situated at a distance of 4.5 km on the foot hill of Kapilas, where Lord Siva (Chandrasekhar) is worshiped, and 8 km from Joranda, a holy place of religion Alekh Mahima. Besides it Dattatreya Ashram, which is a holy temple of Lord Shirdi Sai Baba is 9 km away from the village. The village is at a distance of 27 km from district headquarter Dhenkanal town, 13 km from block headquarter Gondia and 3 km from *Gram Panchayat* headquarter Neulapoi. One end of the village is confined by a stream known as Kapilas stream, which springs from Kapilas hill.

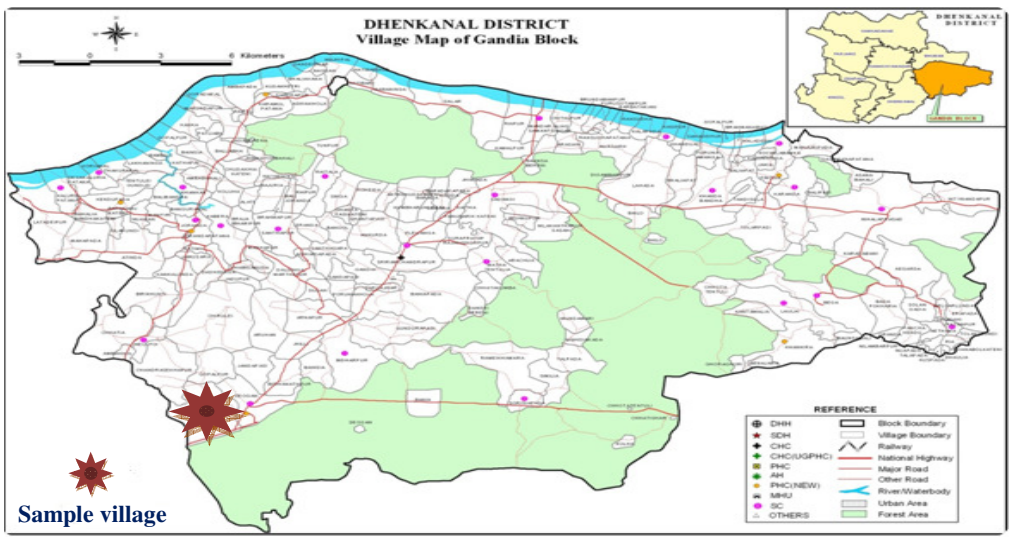


Fig. 4: Chandrasekhapur Village under Gondia Block map

3.3 Physical Features

This village is at the foot hill of Kapilas, surrounded by forest and hills. Natural vegetation like *Sal, Mahua, Birja, Patas, Sagwan* etc. trees are widely seen around the locality. Village is on bed of red soil with stone particles locally known as *Moharam* soil. Since the stream is very narrow, people depend on it seasonally for agriculture and bathing. *Moharam* and stone is available nearby area, that provide partial employment to people for stone cutting and stone for personal use i.e. home, building, boundary etc.

3.4 Development Milestones of Chandrasekharpur Village

Development process in the village initiated long back. Some of the important milestones and achievements have been documented and year-wise important milestones are presented in Table 1.

Table 1: Important Milestones of Chandrasekharpur Village

Year	Events
1800	Village was established
1956	First primary school opened
1960	Dysentery breaks out in the village
1962-66	Severe drought occurred
1967	First community house set up
1970	Public Distribution System opened
1971	Severe cyclone
1972	First government well dug
1980	First hand pump came into existence
1983	Electricity supply started
1999	Severe cyclone occurred
2000	Setting up of SC community centre
2003	First mobile service
2004	First SHG formed
2006	NREGS started in the village
2010	Renovation of pond done
2010	VDSA Office set up

4. Population and Village Society

4.1 Demographic Structure

The village is having 1377 population from 302 households. One-third of households are having no land (landless), followed by small (25%), medium (20%), with another 20 per cent large farm households (Table 2). It is noticeable that the average years of education is highest (i.e., 6.83 years) among the large farm households followed by medium (5.45), small (4.26), and landless (3.52) households. Hence, average years of education rise up with class of farmers. The average years of education of the villagers are 4.56. The education of most of the population confined to primary level though the overall literacy rate is 73.12 per cent. The average size of family ranges from 4.00 for landless to 5.38 for large farm households. Most of the households are small and headed by male member of the family.

4.2 Age-wise Population Distribution

As per the population distribution of Chandrasekharpur by age, the population within the earning age group i.e.17-60 is 907 which constitute 66% of the total population, out of which male and female are respectively 482 and 425. So the age composition of the village is very healthy as small size of population is in the bracket of dependents. They are either children or old persons. When we further look in to the distribution of earning age group across the categories 470 are landless and small farmers and the rest 437 are medium and large farmers. In spite of large earning age group a sizable population have no or little land, hence restrict the economic activity of population. The landless population is highest in number i.e.400 followed by small farmers 347 large farmer 349 medium 255.

Table 2: General Characteristics of Households

Particulars	Landless	Small	Medium	Large	All
Number	100	75	63	64	302
Age (years)	29.70	30.30	31.02	32.13	30.73
Education (years)	3.52	4.26	5.45	6.83	4.93
Family size (nos.)	4.00	4.63	4.52	5.38	4.56
% headed by male	92.00	93.59	95.31	93.75	93.46
Literacy rate (%)	63.69	66.46	79.18	85.67	73.12

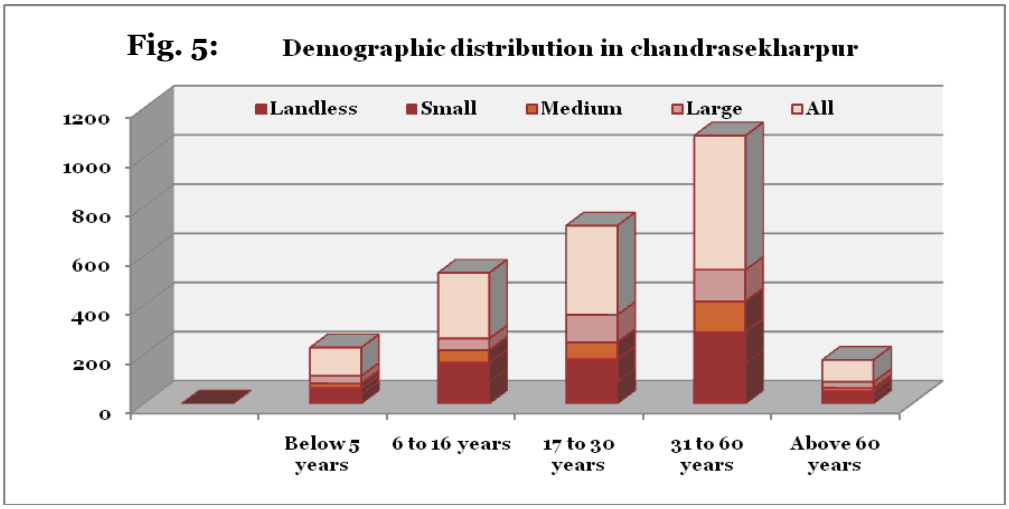


Fig. 5: Demographic Distribution in Chandrasekharpur.

4.3 Gender Composition

The total population of the village is 1376 out of which 745 are male (i.e. 54%) and 631 are female (46%). The overall sex ratio is 847 female for 1000 male, which is poorer than the district level ratio of 961 female as per 2001 population census. But, it is matter a of satisfaction that the ratio is gradually improving across the age groups from older to younger generation, .i.e., above 60years (679), 31-60years (886), 17-30years (876), 6-16 years (773) and below 5 years (900).

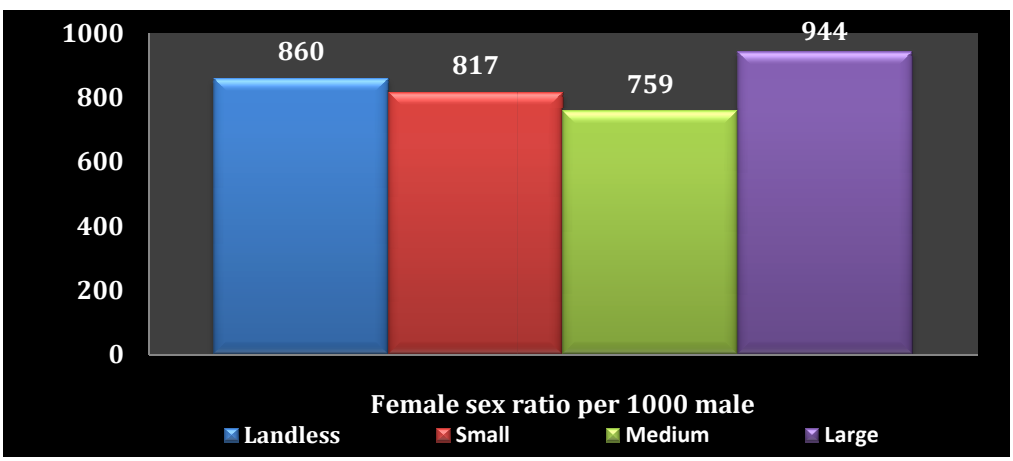


Fig. 6: Female Sex Ratio per 1000 male in Chandrasekharpur.

Table 3: Total Population by Sex in Chandrasekharpur (no.)

Particulars	Landless	Small	Medium	Large	All
Male	215	191	162	177	745
Female	185	156	123	167	631
Total	400	347	285	344	1376
Sex ratio*	860	817	759	944	847

* Number of females per thousand males.

4.4 Social Class and Caste Structure

Village social group composition suggests that 68.04 per cent of the households belong to Forward Castes (FCs). Of the remaining, 13.75 per cent each belong to Schedule Castes (SCs) and Other Backward Castes (OBCs) with the remaining (~5%) belong to Schedule Tribes (STs). Most of the large farmer households are FCs and landless households are of SCs.

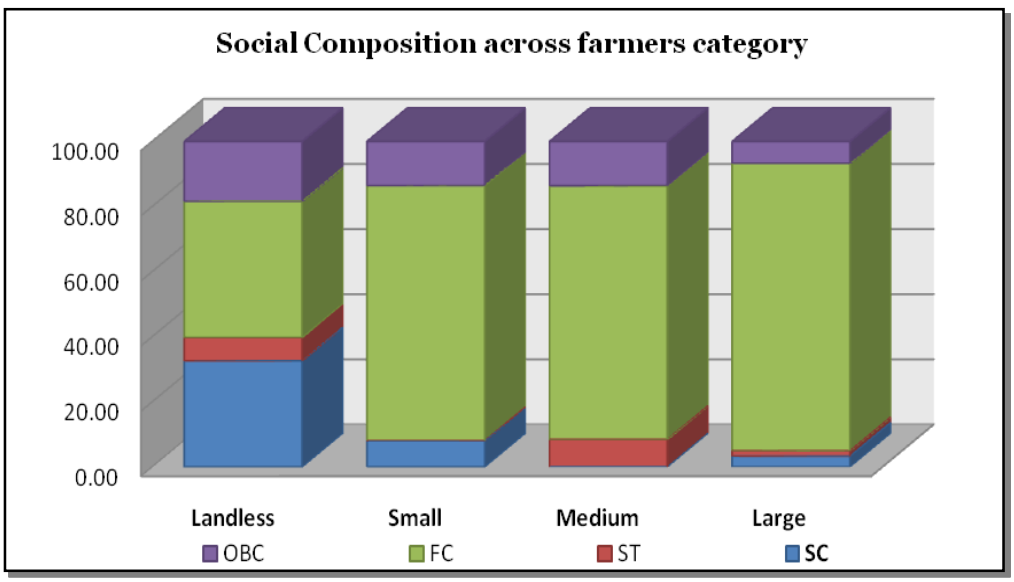


Fig. 7: Social Composition across Farmers' Categories.

Though, the villagers living together with all sort of harmony, the caste barriers still exist in the village. *Khandayatas* and *Paikas (*General caste) are the most dominated in the village. Besides that *Panas, Hadis* (SC) and *Behera* (OBC) live in the village. Most of the families are male dominated. Women are not part of important family decisions. The social statuses of girls are clearly visible by

observing their educational status. People are very conservative in the matter of girls' education. They hardly allow girls to go for higher education outside the village. Even for the boys the general education is up to high school level. Only 2 male candidates have graduation degrees in the entire village.

4.5 Culture

The villagers celebrate most of the Hindu festivals, out of which *Dola Purnima*, Dushera, *Asta Prahari*, Brahmani *Devi Pooja*. Ganesh *Pooja*, Saraswati *Pooja* are being celebrated mainly by people. On the occasion of Dushera, the *Paikas* (warrior clan) visit the Kapilas temple with carrying all the war weapons such as *Khanda, Dhala, Bachha* and *Chhuri* to offer ritual prayer to Lord Chandrasekhar. The village youth always take the lead role in order to collect the required finance and arrangement of the festival. The major decisions related to any matter are taken commonly in *Kotha Ghar* which is in the centre of the village. They also enjoy the local *Joranda Yatra* festival.

Fig. 8: Village Deity Worshipped under Banyan Tree.

4.5.1 Kapilas Temple and the Village

The village is named after Lord Chandrasekharpur and existing on *Debotter* Land, of God Kapilas. The Kapilas temple is situated in about 2239 feet from the sea level. Narasinghdeva-I constructed the temple for Sri Chandrasekhar in 1246 AD indicated in the Kapilas temple inscription. In the left side *Payamruta Kunda* and in the right side *Marichi Kunda* exists. The temple has a wooden Jagamohana. Sri Ganesh, Kartikeya, Gangadevi etc are found in the temple. *Patita Pavana* Jagannath also remains in the temple as *Parsva Deva*. Lord Biswanath temple is also situated in Kapilas. According to some scholars this temple is older than the Chandrasekhar temple, hence it is known as Budha *lingo*. History says, it was the ashram of Kapila muni. Lord Chandrasekharar worshipped by the *chintapatis* in 36 *Niyogas*. *Maha Sivaratri* is the greatest festival at Kapilas.

Fig. 9 : Kapilas Temple: Source of Deep Faith.

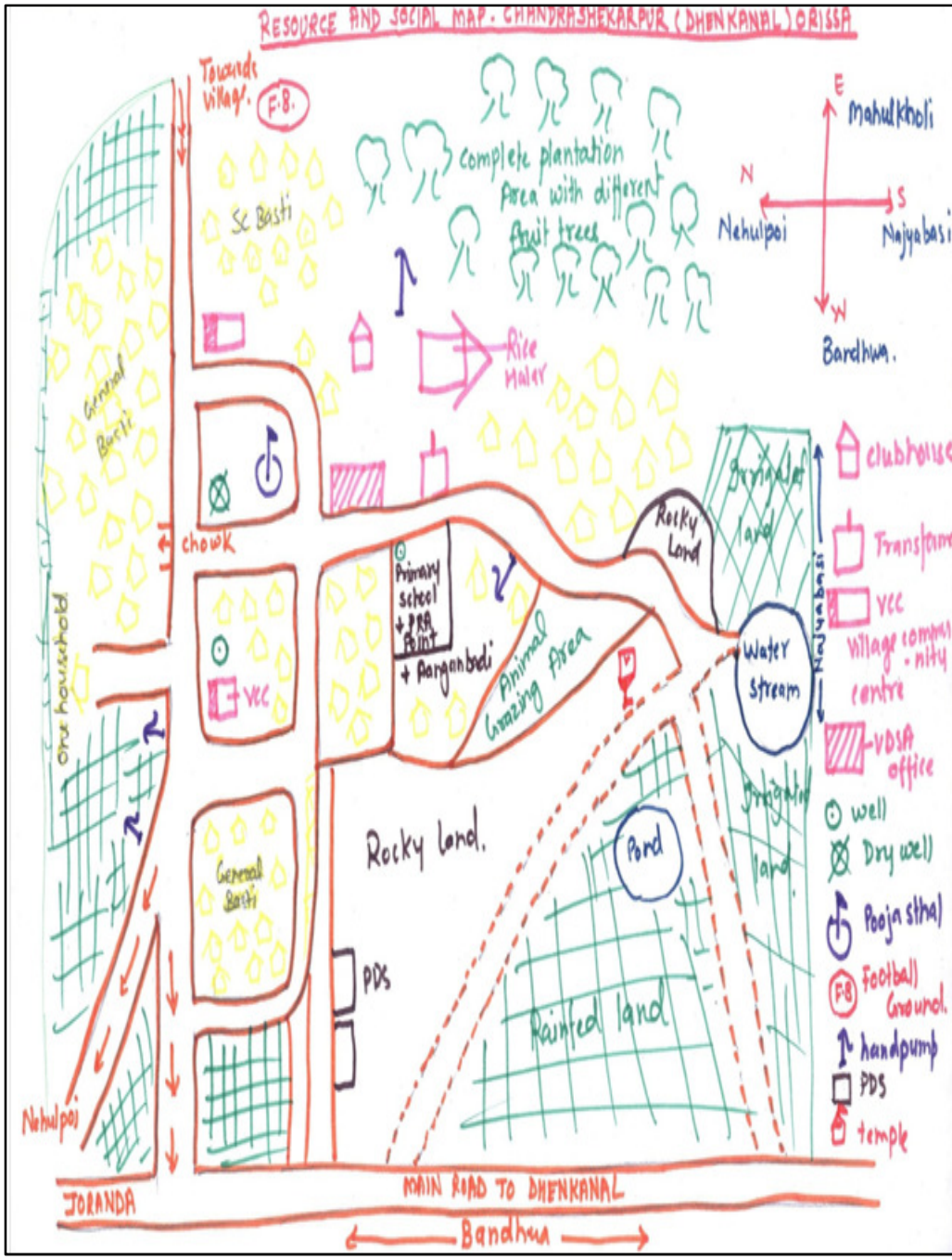


Fig. 10: Social and Resource Map of Chandrasekharpur

5. Agriculture/Assets/Options

5.1 Size of Landholding

The size of the landholding ranges from 0.10 acre for landless to 5.36 acres for large farmers. No land in the village is irrigable. So the agriculture is fully depended on rainfall. The average operated land area in case of landless is 0.21 acre which is more than the size of landholding. So they cultivate available land more intensively contrary to the large farmers, as the average operated land area is less than average size of landholding in medium and large farmers. Since the village is on the foot of hill, maximum area is covered by stones, forest and *Mohram* (red soil). So these are permanent fallow. Almost 28.43 per cent area of the village comes under permanent fallow land.

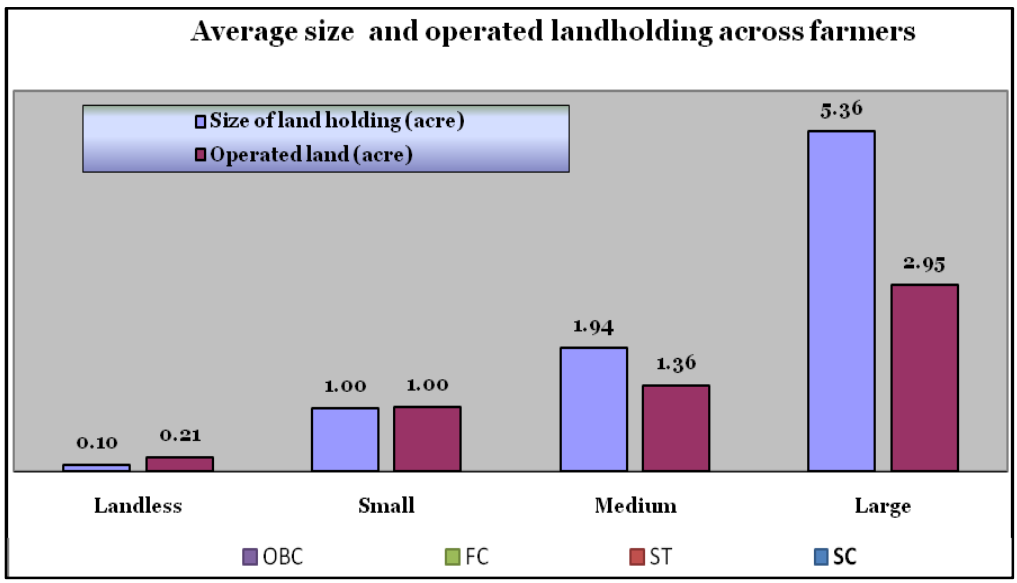


Fig. 11: Average Operational Landholding across Farmers.

Table 4: Inequality Measure of Own Land in Chandrasekharpur

Particulars	Households	Per capita
Coefficient of variation	1.475515	1.354045
Ginni coefficient	0.597459	0.592146
Theil entropy measure	0.698958	0.665038

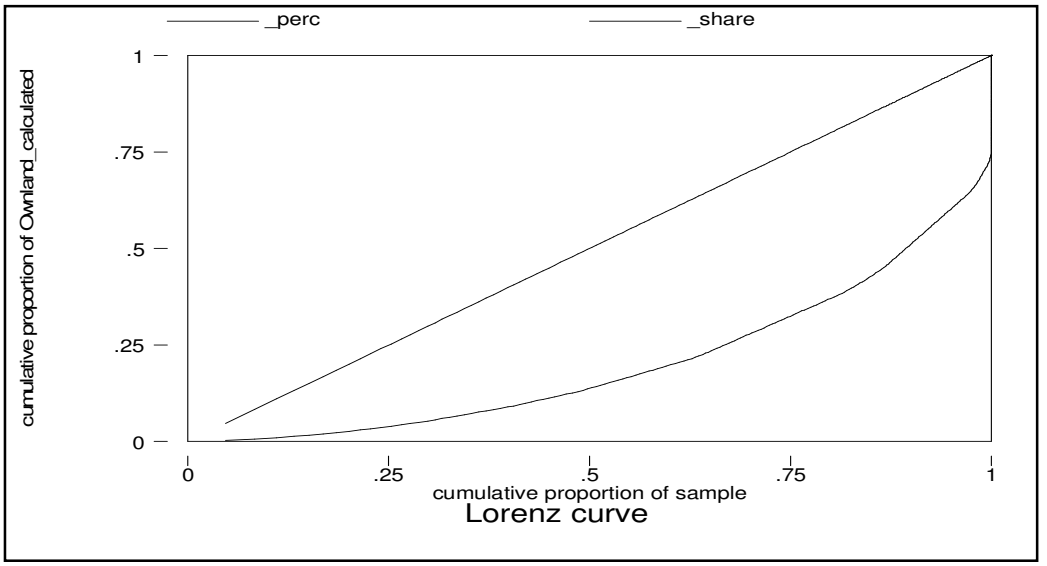


Fig. 12: Lorenz Curve of Own Land in Chandrasekharpur.

5.2 Soil and Irrigation

The village is rich in red soil. Alluvial soil is found in the lowland which is used by the villagers for Paddy cultivation in *kharif*. Most of the soil structure is not conducive for crop cultivation but ideal for plantation. So these areas are surrounded by cashews, mangoes, teak trees (*Sagas*) and Eucalyptus. Only Kapilas stream irrigates some portion of agricultural land. No other irrigation source is available here. People use diesel pump sets to water their fields from well, small pond at the time of need, number of which are very few. People use to store stream water for cultivation of *Rabi* crops.

5.3 Crops and Cropping Pattern

There are two seasons for cultivation of crops in the village namely *kharif* (July to October) and *Rabi* season (November to February). Only Paddy cultivation is done in season. The success of the crop heavily depends upon rain water. Most of the time due to scarcity or heavy rain, farmers pays heavy loss. The main crops of the *Rabi* season are black gram, green gram, potato. More than 80 per cent of the cultivated lands are covered by the black gram and green gram. For domestic consumption the villagers cultivates runner beans, cluster beans and leafy vegetables in the backyards of their houses.

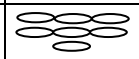
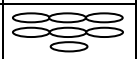
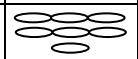
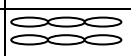
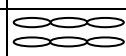
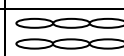
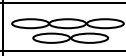
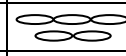
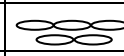
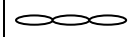
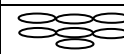
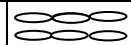
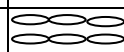
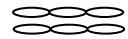
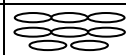
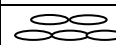
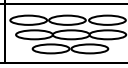
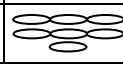
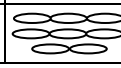
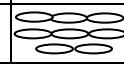
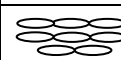
Table 5: Changing Crop Pattern in Chandrashekarpur

Crop Year	**1970**		**2010**
Crop season	Kharif		***Rabi***
Crops grown	Paddy	Paddy	Green gram Black gram Vegetables (Potato)

5.4 Preference of Paddy Seed Variety

Based on the seed characteristics like yield, irrigation-need, fertilizer-need, crop duration and taste of produce, the farmers in the village select the seed variety for cultivation. In Chandrashekarpur, Paddy is the main crop cultivated by the farmers. The preferred seed varieties are: 1009 (first preference) and Lalat (second preference), Paduni (third preference) and 1018 (fourth preference) for Paddy cultivation, as shown in Table 6.

Table 6: Farmers' Preference of Paddy Seed Variety in the Village

Paddy variety	**More Yield**	**Less Irrigation**	**Less Fertilizer**	**Less Duration**	**Good Taste**	**Rank**
Lalat						Second
Swarna						Sixth
1025						Fifth
1018						Fourth
Paduni						Third
Khandagiri						Eighth
Kalachampa						Seventh
1009						First

Note: Symbols are only indicators of change and do not depict the extent of that change in real terms with time.

5.5 Agriculture Dynamics and Farmer Economy

Participatory method of farmer interacttion was used to record farmer perception on agricultural practices, tools and technology and dynamic changes over the period of time in the village. The farmers generously responded on the agriculture-based perception like soil fertility, fertiliser use, crops grown, cropped area, ground water level, irrigation, migration, horticulture, livestock, diseases, forest and wildlife, etc. in seventies, nineties and 2010 in the village. With increasing population, decreasing resource base, the farm practices in the field also have taken shape as the existing needs. More production taken with extensive use of critical inputs led to greater pressure on natural resources. The decreasing soil fertility, more chemical intervention, lowering water table, intensive cultivation, growing interest for cash commercial crops, deforestation, less/erratic rainfall, more and more natural calamities like draught, flood are some of the common phenomenon in today's environment. Some farmers' perception on existing dynamics were recorded based on their experiences and recalled memories has been documented and presented in lucid pictorial cum tabular form in Table 7.

Fig. 13: Traditional farm Set up of the Village with least mechanisation

Table 7 : Agricultural Biodiversity and Crop Ecological Dynamics during 1970-2010 in the Village

Indicators	1970	1990	2010	Reasons
Soil Fertility				Chemical intervention
Number of crops				Availablity of water
Fertilizer use				Decreasing soil fertility
Area of Cultivation (per capita)				Increasing population
Horticulture				More vegetables production
Irrigation				More investment in private boring, Government initiative
Migration				Lack of employment and education opportunities
Ground Water Level				Less rain
Livestock				Increased government initiative
Diseases				More chemicals use and rising mosquito population
Forest				Lack of rain, cutting of forests
Wild life				Decreasing forest and encroachment

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

5.6 Livestock

Cattle rearing is the most favorable allied option among all the categories of farmers followed by goatary. Average size of livestock per household in the village is 1.65 and there are 495 cattle in the village. The number of cattle and buffalos are gradually rising from landless on the bottom to large farmers on the top as small and medium farmers fall in between. The possession of livestock seems to be a sign of prosperity. The value of livestock per household has been worked out to be Rs 7593, ranging from Rs. 2687 for landless to Rs. 8481 for large farmers.

Table 8: Population by Livestock Species in Chandrasekharpur (nos)

Age group	Landless	Small	Medium	Large	All
Cattle	52	97	162	184	495
Buffalo	0	10	23	17	50
Goat	44	54	26	0	124
Poultry	0	0	0	300	300

Buffalos are in good number in the village in comparison to other villages of this area. One farmer is having 300 poultry in his farm. Bullocks, cows and goats are property of villagers. Bullocks are costly, ranging from Rs. 8000 to Rs.30,000 per pair. However, the number of cows is more, giving milk from 0.5 to a maximum of 2 litres per day. Paddy straw and the agro byproducts are the major sources of the feed material for the livestock.

Fig. 14: A Pile of Paddy Straw for Livestock Fodder.

Table 9: Inequality Measure of Livestock in Chandrasekharpur

Particulars	Households	Per capita
Coefficient of variation	5.572432	4.444388
Ginni cofficient	0.768379	0.753619
Theil entropy measures	1.789560	1.539148

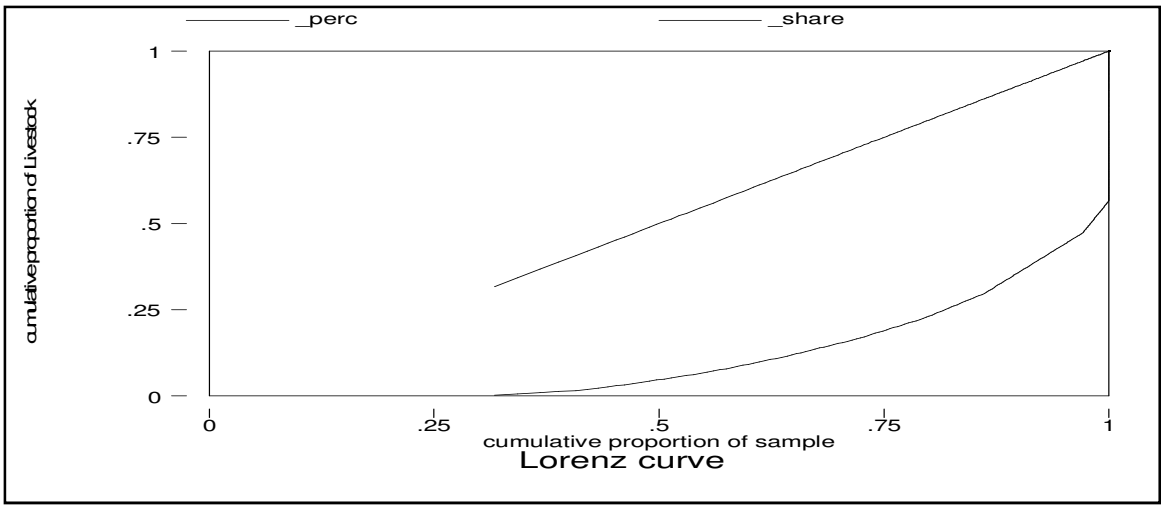


Fig. 15: Lorenz Curve of Livestock in Chandrasekharpur.

5.7 Farm Machinery and Implements

Mechanization in agricultural operation is slowly improving in the village. The ploughing is done by tractors. The tractors are owned by the large and medium farmers and other people use them by paying rent. But rest of the farm activities are done using traditional implements such as plough, yoke, blade harrow, cart, sprayer, power tiller, palter and pump sets etc. People don't know the use of harvester, threshers and drip/sprinkler irrigation.

Fig. 16: Power Tiller v/s Traditional Plough: Two Sides of the Coin

Table 10: Households having Machines in the Village (%)

Particulars	Landless	Small	Medium	Large	All
Tractor	0.00	1.54	0.00	2.50	0.66
Irrigation motor	0.00	1.54	7.22	15.00	4.64
Borewell	0.00	1.54	1.03	2.50	0.99

Investment on agricultural farm per household is Rs.8570 in the village; it is much higher on large farm household (Rs. 27319) and least on landless household (Rs. 337). High investment with large farmers visible due to tractor, irrigation motor and bore wells are with them.

6. Economic Situation in Chandrasekharpur

6.1 Source of Income

The occupation of households in the village encompasses service holders, agricultural farmers, agriculture labours, stone cutting labourers, and small business men. Service holders are generally in defense line of services, i.e., ITA, Border Security Force, Assam Rifles etc having 10th qualification. Agriculture farmers who have their own land cultivate their farm by themselves. Agriculture laboures work in others' agriculture fields from July to August and November to December. During other times they remain unemployed. Stone cutting laboures are those groups who go to stone mines and work 8 hours every day for 7 to 8 months in a year. They are getting Rs. 150 to 250 per day out of which they spend minimum 50 per cent of daily wage (Rs. 75/- to Rs. 150/-) on alcoholic beverages and tobacco. Besides these, some daily wage laboures go to nearby villages for finding work. Small business men here are village shopkeepers of grocery items, stationery and alcoholic beverages.

Fig. 17: Counting Coins: A Miserable Livelihood Option Income.

6.2 Occupational Pattern

Working population in the village is about 41 per cent. And the types of workers are cultivators, agricultural workers, non-farm workers, govt. job holders, etc. (Table 11). Among working class, maximum 40 per cent are cultivators followed by 33 per cent non-farm workers. 13 per cent each are in govt. jobs and agricultural workers. If we are adding cultivators and agro-workers, then we can say village agriculture absorbs about 53 per cent of the working population, so agriculture is still a major source of village livelihood.

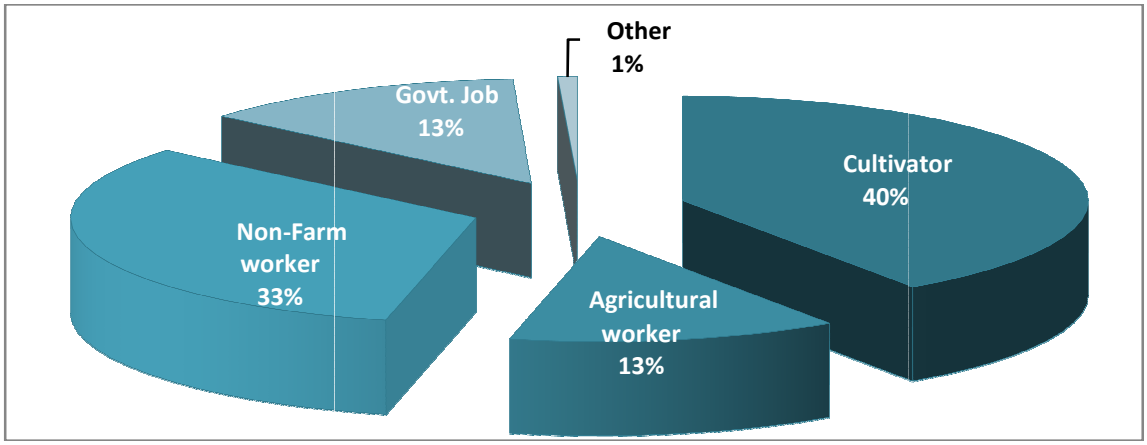


Fig. 18: Diversification of Working Population.

Table 11: Occupation diversification in Chandrasekharpur (%)

Particulars	Landless	Small	Medium	Large	All
% working population	45.00	37.46	44.91	37.79	41.28
Share of particulars in total working population					
Cultivator	11.66	48.46	59.06	50.39	40.44
Agricultural worker	26.38	6.92	7.09	8.53	13.11
Non-Farm worker	60.12	33.08	17.32	12.40	32.60
Government Job	1.23	10.77	15.75	27.91	13.11
Other	0.61	0.77	0.79	0.78	0.73

Most of the people from landless category sustain by working in others' fields as they have inadequate land to cultivate .27.91 per cent of large, 15.75 per cent of medium farmer households are employed in different government works. Hence it provides an additional source of income with agriculture and strengthens the economic status of these groups.

Fig.19: Daily Needs Family Shop in the Village.

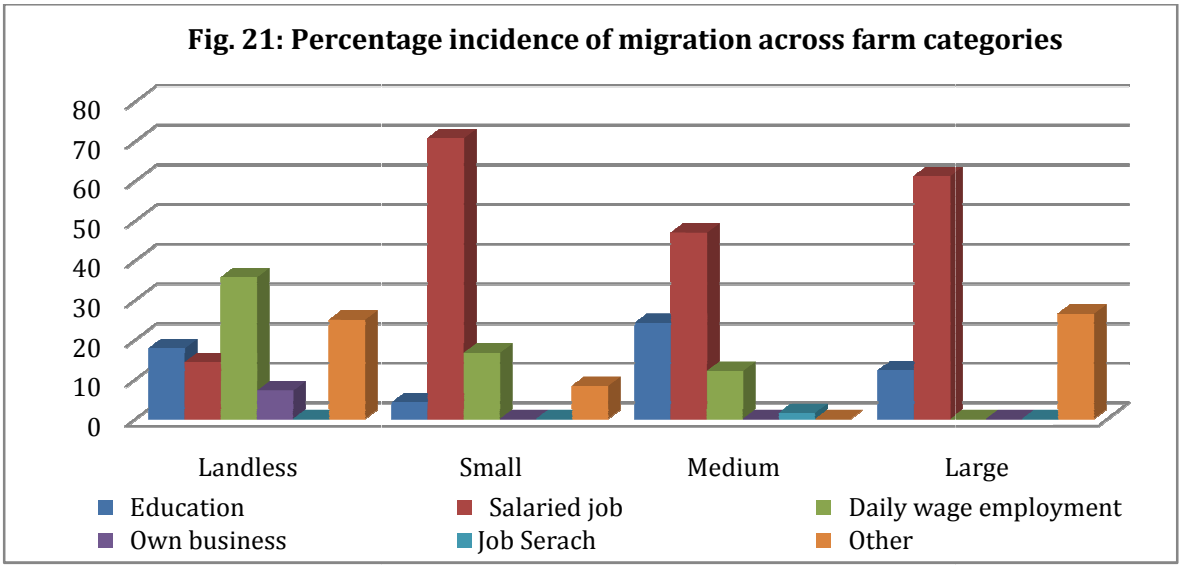
According to the PRA perception, the households in Chandrashekarpur could be classifieds into different income classes as follows : (i) 20 per cent of total households are in 'rich' or 'well-off' category, (ii) 22per cent of households are in 'average' or 'medium' category, and (iii) 58 per cent of households are in 'poor' category. Thus, the majority of households in Chandrashekarpur village are 'poor' and only a small percentage is of 'rich' households.

Fig. 20: PRA Exercises in Chandrasekharpur.

6.3 Incidence of Migration

A sum of 12.57 per cent of villagers migrated outside the village for searching livelihood options. Among those, maximum migration recorded from resource full farmers. Almost half (49.10 %) of the people migrated in order to get a salaried job which is one of the prominent cause of migration fallowed by 16.77 per cent in search of good education. But the picture is completely different for landless households. The reason of migration is daily wage employment (35.71%) and 25% to do other part time miscellaneous works.

Fig. 21: Percentage incidence of migration across farm categories



7. Social/Public Institutions in the village

There are a number of social institutions supporting the villagers as shown in the circle. The number in the circle represents preferential ranking of the institution by the villagers, and length of the arrow depicts the relative distance from village. Venn diagram of these institutions is shown in Figure 21.

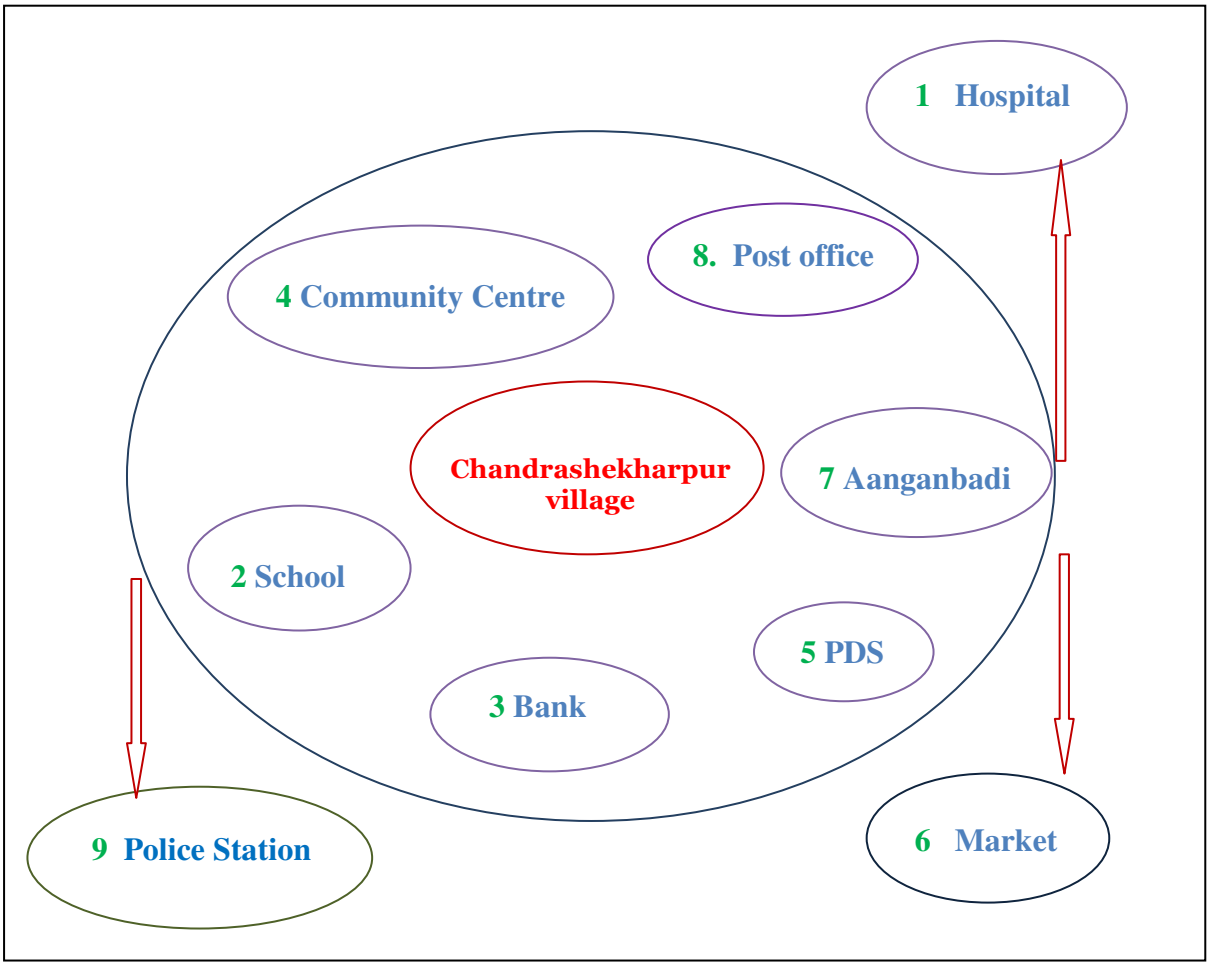


Fig. 22: Public Institutions: Households' Preference and their Location.

7.1 Public Institution and Utility based Ranking

Medical facility is not available in ther village and villagers give it the first rank in their preference of services. The second most important institution for the villagers is school as they give priority to the education. For higher education, the villagers send their kids to Bhubaneswar. The village has a branch of scheduled commercial bank. It is ranked third in the preference list and almost all the villagers have their accounts with this branch. The bank offers many types of services including short and long-term loans to cater the fund needs in the village. Community centre, public distribution system and anganbadi Kendra are other important needs of the households.To provide postal services in the village and its neighboruring areas, a post office is operative, which ranked eighth according to its usability by the villagers. Besides this, village having supportive of markets and the police station, which is outside of the village.

8. Health Care and Sanitation

8.1 Health Care Facility

Villagers are facing much difficulty to get minimum medical benefit. During the critical illness periods they have to move outside of the village by arranging private vehicle to get first aid. People mainly depend on Beltikiri Public Health Centre, 8 km away from the village and further referral to district headquarter hospital of Dhenkanal. An ASHA worker is active for taking pre- and post-natal care of women and child. The *Anganwadi* center is functioning in the village. People get free medicine when they suffer from fever and malaria.

8.2 Drinking Water

There is no natural source of drinking water available to the villagers. People mainly depend on wells and tube-wells for drinking water. There are total of 22 wells out of which 4 are from government. Out of 6 government tube-wells, one is not functioning.

Fig. 23: Women lifting Drinking Water from Dug-well.

8.3 Sanitation

The sanitation habits of the villagers are very static. Most of the people still use the fallow lands and hilly areas for sanitary purpose. The concept of hygiene is almost absent in the village. Though the few public latrines are available, they remain in the deserted condition because of the non-usability.

9. Market, Transport and Communication

9.1 Market

Joranda, a small market (Hata) 8 km from village which functions two times in a week, is for grocery, vegetable and necessary goods. The supply market is in Dhenkanal town, which is 27 km from village. The daily needs of domestic consumption is met by the village petty shops. The farmers of this village have been facing lots of bottlenecks due to non-accessibility of proper market for their surplus production. In spite of the presence of government crop *mandi* at Deogaon, the farmers are compelled to sell their seasonal surplus crops to outside village traders, who come to village only to tender them in much depreciated price. The people of the village do not prefer to visit the government *mandi* because of delay in cash payment and other official formalities. A weekly livestock market is at Gopinathpur, 40 km away from village.

9.2 Transport

The method of transport is bus; auto rickshaw facility is available for the villagers. *Under Pradhan Mantri Gram Sadak Yojana* (PMGSY), the village is linked by all season road to Deogan, 5 km away from Chandrasekharpur. The nearest bus stoppage is in Deogan. People follow some short cut roads to cover the distance by walking. The nearest railway station is in Dhenkanal around 30 km away from the village. They use auto rickshaw and bus to go to health centre, district headquarter and market.

9.3 Communication

Pucca road is from village to district headquarter via Deogaon and local market Joranda via Neulapoi, 3 km from Murom road from the village and 5 km pucca road to the end. Generally people use walk way via Durga Prasad to go to Dhenkanal town and to Beltikiri PHC for health except rainy season. The communication infrastructure is gradually changing due to establishment of mobile towers in the radius of 10 km. Now the villagers have nearly 80 sets of mobiles in order communicate in need. The use of radio set is very limited as most of the people have TV sets. People have personal dish antenna to avail necessary channels. People prefer to watch the regional channel in order to get information and entertainment. The use of newspaper is very restrictive. One has to travel Deogan in order to read an Oriya newspaper.

Fig. 24: TV: Modern Source of Information.

9.4 Electricity

Though the village has received electric supply under RGVY; but 100 households are still in a queue to get the facility. Only 48 households have connected by electricity. The quality of electricity supply is inferior. People face frequent power cuts and the voltage is also very low. Television is the advance electronic equipment in most of the houses. Only a few people have recently purchased coolers to get rid from summer temperature.

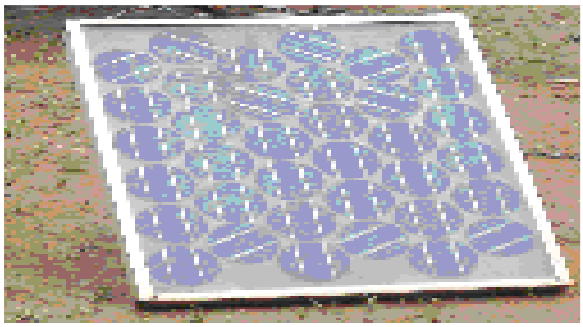


Fig25: Solar Plate: Alternative Energy Option.

10. Problems and Opportunities in the Village

The village has growing horticulture sector; the setting up of markets for the perishables will definitely increase the profit of the farmers. The village has potentially hard working population which with suitable infrastructure can make the village better in economic terms.
The existing problems of the village are as follows:

- ✓ Lack of participation of women in decision making
- ✓ Stigma that girls are not allowed to go out of the village for education
- ✓ No property ownership to females
- ✓ Lack of awareness about the hygiene and sanitation practices
- ✓ Lack of healthcare infrastructure and personnel
- ✓ Lack of transport facilities
- ✓ Lack of good roads
- ✓ Lack of reliable markets for vegetables
- ✓ Inadequate knowledge and skills in improved production
- ✓ Lack of irrigation facilities
- ✓ Lack of proper livestock management practices
- ✓ Lack of good transport facility as poor conveyance and poor roads
- ✓ Lack of storage facility
- ✓ Inadequate drinking water facility
- ✓ Inadequate food processing facility in the village.
- ✓ Lack of toilet facility
- ✓ Lack of market in the village
- ✓ Erratic electricity supply
- ✓ SHGs work is not satisfactory as irregular depositors and arising conflicts.
- ✓ Difference in wage rate for females and males despite of working for same hours
- ✓ No government market (*mandi*) is nearby so traders or mediators take benefit in selling of crops. It causes distress among the farmers.

11. Infrastructural Facilities in village

Details of available facilities in the village summarized in Table 12.

Table 12: Developmental Infrastructure in Chandrasekharpur

Particulars		Number
Primary School	:	One
Primary Health Centre	:	No
Hospital	:	No
Veterinary hospital	:	No
Ashas (medical helpers)	:	One
Anganwadi Centres	:	One
Private Chemist Shop	:	No
Tractors	:	One
Power tiller	:	One
Bus Service	:	5 km away
Bank	:	No
Drinking Water Supply	:	No
Dug well	:	Yes
Farm Pond	:	Four
Electric Supply	:	Yes, erratic
TV Sets	:	Yes
Dish TV antenna	:	Yes
Public Handpumps	:	Yes
Post Office	:	No
Telephone Land Line	:	No
Mobile Phone	:	Yes
Agricultural Input Shop	:	No
Farmers Club	:	No
Library	:	No

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Authors