

**CHANGING AGRICULTURAL PRACTICES AND
THEIR IMPACT ON RURAL INSTITUTIONS IN
ORISSA**

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fulfillment of the requirements for the award of the degree of**

MASTER OF PHILOSOPHY

IN

ANTHROPOLOGY

BY

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2003

DECLARATION

I hereby declare that the work incorporated in this dissertation entitled "**Changing Agricultural Practices and Their Impact On Rural Institutions In Orissa**" is original and carried out by me under the guidance of Prof. K.K. Misra, and it has not been submitted for any degree in part or in full for any degree of any other University.

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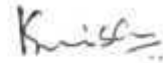
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This is to certify that Mr. **Niharranjan Mishra**, Department of Anthropology has carried out the research embodied in the present dissertation entitled "**Changing Agricultural Practices and Their Impact On Rural Institutions In Orissa**" at the University of Hyderabad for his M. Phil Degree. The dissertation represents his independent work and does not constitute part of any material submitted for a degree here or else where.

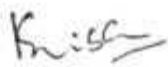
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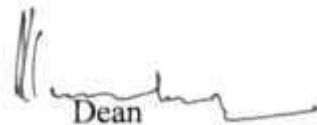
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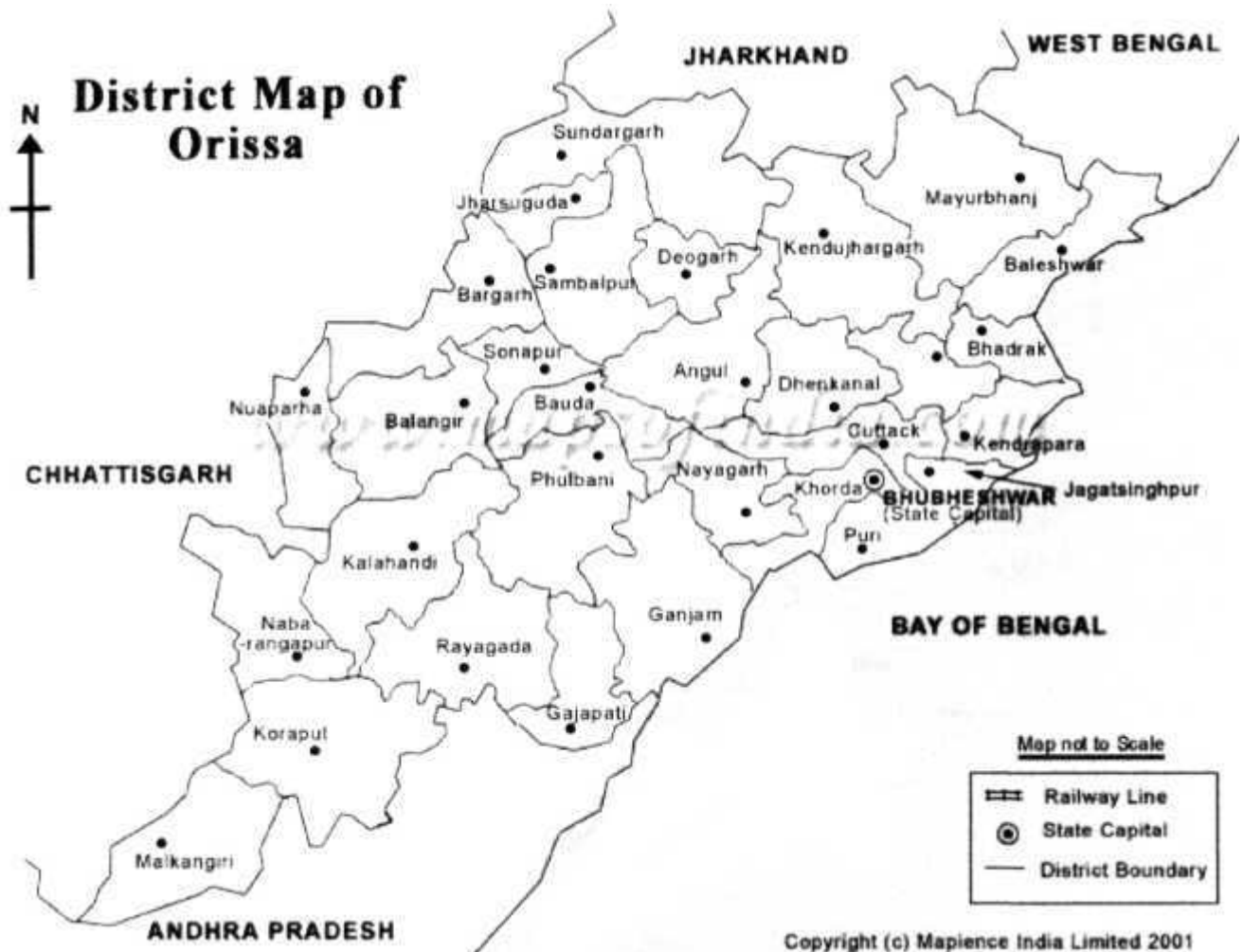
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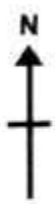
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District Map of Orissa



JHARKHAND

WEST BENGAL

CHHATTISGARH

BAY OF BENGAL

ANDHRA PRADESH

BHUBHESHWAR
(State Capital)

- Sundargarh
- Jhatsuguda
- Mayurbhanj
- Bargah
- Sambalpur
- Deogarh
- Kendujhargarh
- Baleswar
- Sonapur
- Angul
- Dhenkanal
- Bhadrak
- Nuaparha
- Balangir
- Bauda
- Gufack
- Kendrapara
- Phulbani
- Nayagarh
- Khorda
- Jagatsinghpur
- Kalahandi
- Nabarangapur
- Rayagada
- Ganjam
- Koraput
- Gajapati
- Meikangiri

BHADRAK District Map (Orissa)



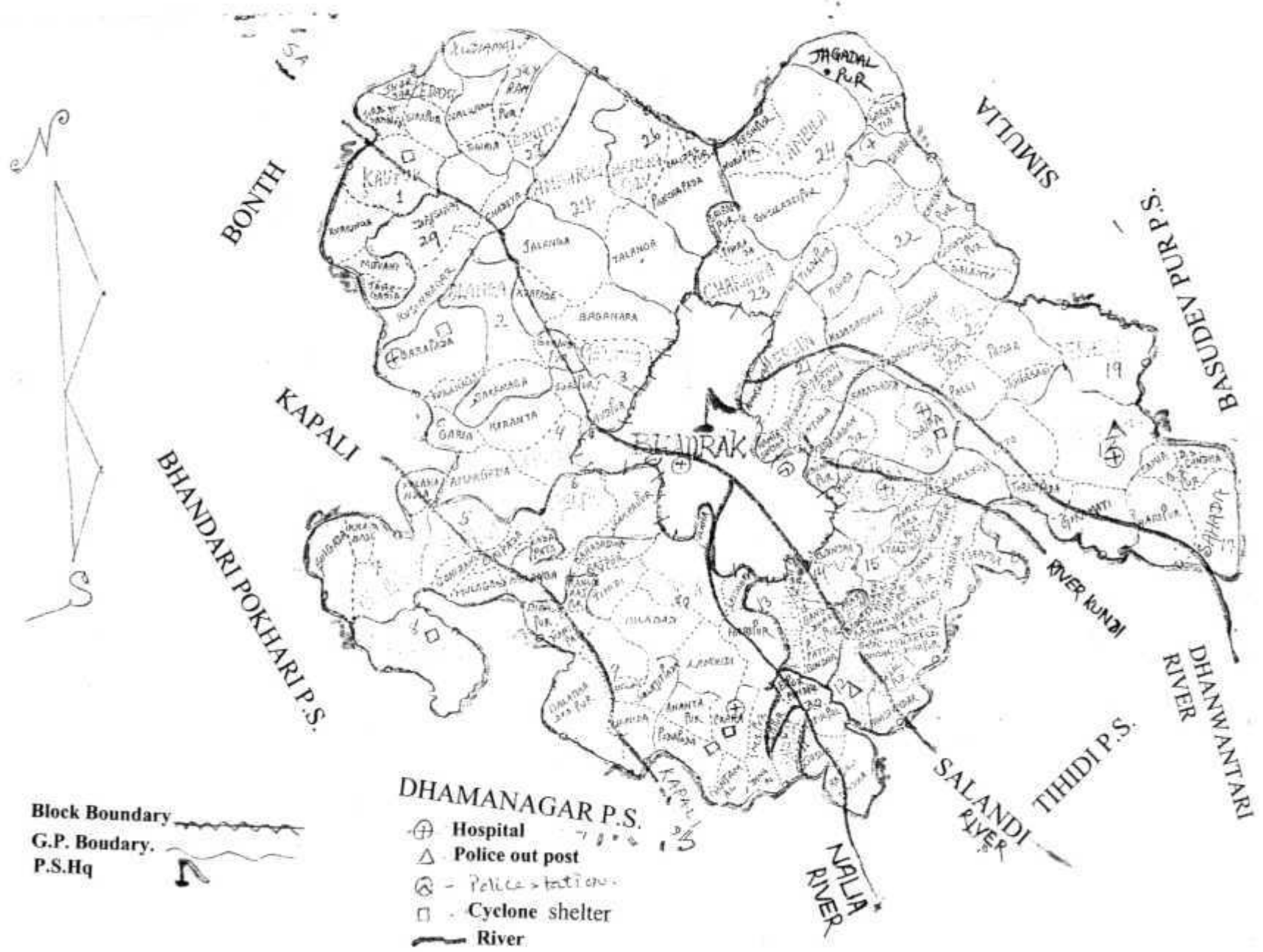
- District Boundary
- River
- National Highway
- State Highway
- Road
- Railway Track
- District Headquarter
- Taluk Headquarter
- Town



BHADRAK DISTRICT : BLOCK MAP



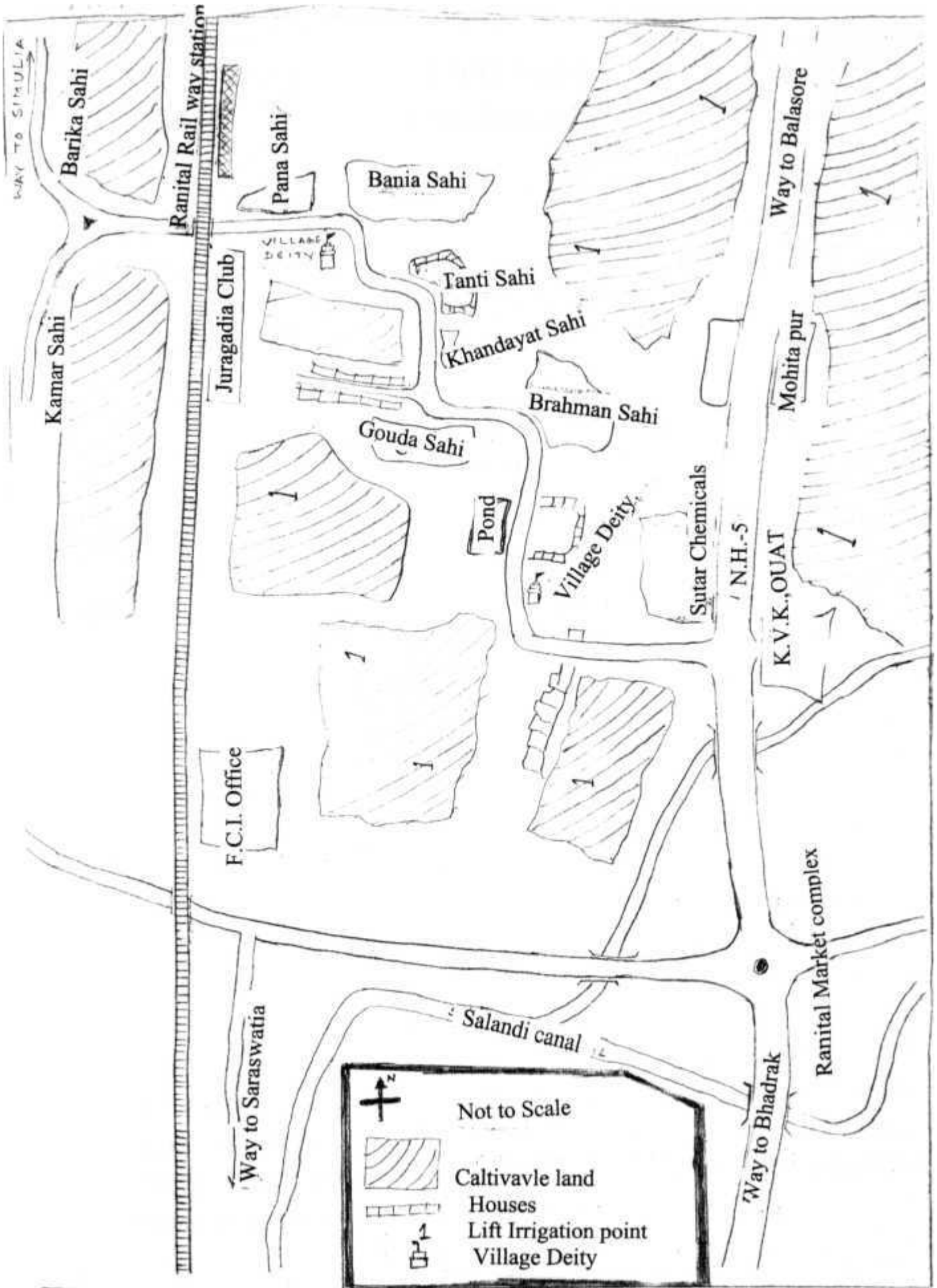
MAP OF BHADRAK P.S.



Block Boundary
 G.P. Boundary.
 P.S.Hq

- ⊕ Hospital
- △ Police out post
- ⊙ - Police station
- - Cyclone shelter
- River

MAP OF JAGDAL PUR VILLAGE



CHAPTER I

INTRODUCTION

Change and continuity, becoming and being, dynamic and static are the unavoidable facts of life. Change is considered as the major component of the intellectual tradition of Anthropology and Sociology. It plays an important role in every sphere of life. Engel views that nothing remains what, where, and as it was, **but** everything moves, changes, comes into being, and passes away. Heraclitus, an ancient Greek philosopher, has remarked that one cannot bath in the same river twice. Because, he views that, in between the first and second bath, both the water in the river and the man-taking bath get changed. According to him, "nothing remains the same; all comes and goes, resolves itself and passes into other forms".

As change is the unchangeable law of nature, every society, be it primitive, agrarian or industrial, is in continuous transformation. Scientific outlook, technological expansion, economic development and political sagacity have been the root causes of change in the human society, from primitive to modern, or from agrarian to industrial.

Agriculture, which is the main economic activity of any state, is as ancient as human civilization. Civilization started with the emergence of agriculture. Agriculture is defined as an art of cultivating land. It refers to the sector of human activity between environment and human culture, which has grown in and from it (Lenka, 2000). After Independence, most of the States in India in their developmental plans have given high priority to programmes of increasing agricultural production in order to bring about a tremendous change in the field of agriculture. As a result of which, India witnessed the Green Revolution in the late sixties, which entered with new technology in the form of High Yielding Varieties (HYVs) of seeds, developed irrigation system, chemical fertilizers and mechanization. The Green Revolution enabled the country to convert the nightmarish "begging bowl" status to that of "self sufficiency" (Poroda, 1997:17). As a result of this, Indian agriculture changed from traditionally predominant subsistence farming system to market oriented production system.

Despite mechanization, urbanization and industrialization, a majority of the people in Orissa still lives in villages that depend mainly on cultivation. Agriculture occupies a vital place in the socio-economic life of the people in India. Nearly 64% of its population live in rural areas and depend mostly on agriculture for their livelihood (Survey of Indian Agriculture 2002). Indian agriculture is known for its multifunctional role of providing employment, livelihood, food and nutritional securities. It contributes nearly about 26% of the Gross Domestic Product (*ibid*). Orissa, which is considered to be a State of villages, is mostly a farmers' land. Even in the contemporary Orissa, about 85% of the total population depend on farming (Economic Survey 2001-2002). They depend on agriculture for their livelihood and employment. Compared to the secondary and tertiary sectors, agriculture contributes a sizeable portion of income towards the computation of the state domestic product (about 28.54%, *ibid*). Paddy is the major crop in the state with coverage of about 77.50% of the gross cropped area under principal crops in 2000-01.

Geopolitically, the State can be divided into three parts such as Southern Orissa, Western Orissa and Coastal Orissa. Among these three regions, Coastal Orissa occupies a vital place in the agricultural production of Orissa. The presence of alluvium in the delta region of the costal belt has made this region more fertile. This fertile region had attracted Maratha and Moghal Kings for conquering Orissa. The presence of the rivers like the Mahanadi, the Brahmani, the Baitarini, the Salandi and their tributaries have enhanced the fertility of this region. During the colonial period, the agricultural sector of Orissa was not so developed. It was predominantly subsistence in nature. Right from the First Five-Year Plan of the post independent India, there has been constant efforts both by the State and National Governments to give a boost to agricultural growth and thereby to raise the standard of living of its rural population. The construction of the Hirakud Dam on the Mahanadi at Sambalpur in 1956 has brought about remarkable changes in the agrarian history of Orissa. The development of irrigation facilities in the delta region of the Mahanadi help the people of Cuttack, Sambalpur, Dhenkanal districts a lot. Modernization of agriculture in the coastal Orissa has brought about a sea change in the agrarian history of Orissa.

Although a lot of changes have occurred in the field of agriculture in Orissa, the trend of village studies in Orissa reveals a conspicuous absence of dealing with the rural social institutions¹ emerging out of the technological transformation in agriculture. These institutions include Jajmani relation, family, political structure and religion, etc.

It has already been established through the outstanding researches by Epstein (1962) in Karnataka and Frankel (1971) in the States of Kerala, Tamil Nadu, Punjab, Andhra Pradesh and West Bengal that with the changing agricultural practices, rural-social institutions, which are primarily agro-based, have also undergone changes. **In** Orissa, since 1970s, there has been a change in agricultural practices in the form of technological innovations, cropping patterns and crop rotations, efficient water management and capitalization of agriculture, etc. Therefore, it is expected that concomitant changes in the agro-based rural social institutions such as inter *jati* relations pertaining to ownership and control over land including Jajmani relations, family and kinship ties, land-based dominance and in religious practices, social proverbs, riddles and ritual observances might have come about. The present study aims at exploring all these dimensions empirically in a multi-*jati* village in Bhadrak district of coastal Orissa. In general, it is an attempt to understand the interface between agricultural practices and agro-based rural social institutions, where agriculture is understood not merely as a means of livelihood, but as a way of life in India.

REVIEW OF LITERATURE

Studies Conducted on Rituals and Religion

Potter (1971), in his study on some developing countries of the world, found that a change in the major cropping pattern affects the religious life and the annual work cycle of the people.

Frazer (1976) in his 'Golden Bough' has mentioned the beliefs of people of Qatar, Philippines and Mexico regarding agriculture. He found that people sacrifice a

¹ A social institution is an organizing system of social relationship, which embodies certain common values and procedures and meets certain basic needs of a society (Hutton, 1964:206).

human being to the Goddess Earth during ploughing to get more crops. The same kind of beliefs exists among Kondhs of Orissa (Pattnaik 1978 and Behura 1964).

Tyler's (1961) study on USA gives an idea of the beliefs of farmers regarding agriculture. From his study, it is found that there are still some farmers who plant their crops by the sign of the moon, and there are only a few farmers who do everything according to precise scientific formulae.

Chakrabarty (1986) studied the agricultural rituals of the *Santals* of *Ajodhya* Hill and the impact of the effective series of technological operation for growing different crops on their native culture. The major sequences of technical operations and consumption of its products are, thus, invariably accompanied by magico-religious rites.

Bhattacharyya (1976), who studied the impact of modern farm practices on the rites and rituals of farmers of Narayangarh block in West Bengal, mentioned that (i) the farmers have ingrained belief in the interdependence of inanimate objects, planets, lower animals, fellow human beings and a spirit of their ancestors; (ii) A sense of material well-being is pronounced in these rites and rituals. These are for temporal happiness and not merely spiritual happiness. This is clearly noticed in these different rites and rituals; (iii) The rites and rituals are changing very slowly.

Nambiar (1982), in his study in North Kerala, found the beliefs of people regarding the symbolic and ritualistic sexual intercourse with the tree to make the tree bear fruit.

Mohanty (1992), in "Festivals of Orissa" opines that the food grains harvested seasonally are offered symbolically to the Gods and Goddesses to reduce the evil influences caused by cyclic changes of nature (various harvesting festivals).

Satapathy (1996), in his article has described the people's beliefs regarding agriculture. He has mentioned that the people in Orissa think that the goddess *Durga* is the mother of agriculture. They think that if they please her, then She will save them from drought and famine providing abundant crops.

Mishra (1981), in "Purva Bharatara Hundu Loka Myth Oddissa" has described the people's beliefs and myths regarding agriculture in the eastern part of India. Here he has mentioned how the farmers of Balasore district have described the God Langaleswar as a farmer who had cultivated His land by taking the help of *Basua* and *Pabana* (Bullocks) by the river Subarnarekha.

Paikray (1989), in "Utkalara krishi bhitika parva parvani" has described the agro-based folk traditions, rituals and riddles in Orissa.

Mahapatra (1978), in his study on social context of Oriya proverbs in Bantalla village of Cuttack, Orissa, has examined how modern agricultural practices have a great impact on social proverbs through the changing cycle of activities and cropping pattern, the use of chemical fertilizers in place of indigenous manure and availability of assured irrigation etc.

Das and Mahapatra (1979), in "Folklore of Orissa" have described the agro-based rituals. Here they have narrated the colourful process of agro-based rituals in a vivid manner.

Das in "Folklore of Orissa" has described the agricultural rituals and plough songs. Here he has narrated how a farmer expresses his sentiments and emotions through the plough songs.

Studies Conducted On Family

Mathur (1987), in "Change In Agrarian Society" has described that, with the change in agricultural system and the introduction of modernizing process, family function and structure too underwent change. He claimed that the joint family was more seen among the rich class farmers as they thought they would get more social prestige by it. By utilizing their land, they could diversify their function through it; they would get political power. But at the same time, the percentage of the joint family reduced among the lower class families due to low possession of land or landlessness.

Gill and Sinai (1991), in their article 'Social Implication of Green Revolution' have described the impact of Green Revolution on rural family structure. According to them, modern technology and modernization of agriculture have led to individualism. The increase in production as a result of Green Revolution led to family disputes over property distribution. Thus, the joint family system is breaking up predominantly in the farmers' community.

Epstein (1965), in his study on "Economic Development and Social Change" in Karnataka, has argued that the conversion from a subsistence to cash economy led to the break down of the joint family among the peasant farmers.

Singh (1984), conducting a larger study on the consequence of land reforms on family structure in four villages in the district of Begusarai in north Bihar in the district of Begusarai, mentioned that the size of the family is larger among higher stratum of agrarian social structure than the lower stratum.

Study Conducted On Power Structure

Singh (1988) in "Modernization of Indian Tradition" talks of the change in dominance among various castes. At the village level, the dominant castes have to face new challenges from their former subject castes on account of changes due to land reforms and the need to woo the numerically large subject castes to gain access to power in the village Panchayat, the offices of which are now elective. In many villages, it has created contradiction between the rituals and the economic reforms of power, which are still monopolized by upper castes (who are a minority), and the numerical power, which is with the lower castes. In situations, where the lower castes are successful in exploring their numerical power, they have altered the traditional configurations of power.

Betellie (1989), in his study on "Agrarian Social Structure" of Tanjore district, has described about the changing power structure in rural India. He says, with the introduction of adult franchise, growth of absentee land-lordism, coming of land into the market, land reform systems and of village councils, land ownership and traditional

states have ceased to be the only base of power in the village. The strength of organised members has now more importance than it ever had.

Study Conducted On Jajmani Relations

Zaman (1982), in his study on the patron-client relations among the peasants of Bangladesh, observed that the commercialisation of agriculture transformed the traditional patronage relationship between rich peasants and the dependent poor. Added to this, the rich patrons of the village, instead of mobilizing resources from outside the village for the poor clients, collectively attempted to control the inflow of external resources into the community.

Frankel (1971), who studied the socio-economic impact of Green Revolution in India, opines that the introduction of modern technology under the intensive area and the high yielding varieties programmes has not only quickened the process of economic polarization in rural areas but also contributed to increasing social antagonism between land lords and tenants and land owners and labourers. Landlords are now more likely to be influenced by rough calculations of opportunity cost in determining whether or not to lease out part of their land or cultivate directly than by traditional sentiments of personal obligation to customary tenants. Certainly, they do not hesitate to raise rentals in line with appreciating land values and to evict even tenants having long-standing cultivating possession of the land. It contributes to the break down of permanent patron-clients' relationship.

In the same study, the researcher has also mentioned that the economic interest of landlords in converting all kinds of payments to cash their anxiety to buy machinery as quickly as possible, and impersonal bargaining arrangement replace customary patron-client relationship.

Sabharwal (1981) studied the impact of new agro-technology on the agrarian social structure of Haryana and opined that modernization of agriculture has led not only to an increase in productivity and integration of agriculture into broader national market, but also brought about a fundamental change in the social relations of production which

led to the freeing of agricultural labour from all kinds of patronage and institutionalized dependency relationships. Breman, for example, reported that in South Gujarat the traditional dependency and relationships have undergone a fundamental change. He called this process of freeing of agricultural laborer as de patronization (Breman, 1974).

Breman (1993) studied the change in the structure of landlord agrarian labour relation in Gujarat to conclude that a process instrumentalisation contributed to the decline of the traditional rights and obligations on either side. Transactions were increasingly conducted on money basis. Jajmans and Kamins came to regard each other as employers and employees rather than as patron and clients and felt themselves bound more by contract than by status.

Karant (1987) in his study in Karnataka says that the technological change in agriculture does not result in the erosion of the traditional attitude of mutual dependence and obligation between different agrarian categories. On the contrary, it has kept some of the service-specialists relatively busy through out the year.

Singh (1991) in his study on "Farmers Mechanization and Rural Labour Relations" opines that the introduction of machinery, fertilizers, insecticides etc have affected the type and extent of physical labour sought by cultivators. The nature and extent of *Jajmani System* is undergoing changes. It is visibly weakened as the workers do receive some payment for the work done but not completely uprooted.

Negi (1990) points out that the uses of modern tools and techniques of production by Kinnaura tribes are important indicators of the change. The villagers, rich peasants in particular, are now using factory made tools and instruments, which resulted in sharp decrease in the use of implements and services under the Binanany system (*Jajmani*). As a consequence of change in the various aspects of Binanay system, the traditional arrangement of exchange mechanism has undergone change, and cash nexus has replaced the barter system.

Misra (1996) in the article on caste, class and Indian agriculture opines that the Green Revolution with its commodity production, commercialisation of agriculture and

intense mechanization has moved towards dissociating the patrons from their clients and vice-versa. Because of the rise in the number of free labour, the tie between the patron and client has become weaker. Now the patrons or landlords do not have to face its consequence as they have the power to buy labour at any time, where as the clients have lost their security in return of nothing immediately (Shivkumar, 1979; Mencher, 1974).

Sabharwal's study (1981) in Haryana reveals that the process of mechanization has directly affected the employment of agricultural labourers. In his study village, he found that majority of labourers, casual, contract, and annual labourers have substituted the attached labourers and casual labourers (Dandekiir, 1988; Bawa and Kainth, 1985; Thangaraj, 1995; Bezbaruah, 1994).

Shilla Bhulla (1976) also observed the shift in the labour employment in Karnal region of Hariyana. She concluded that the annual labourers no more enjoy the paternalistic relation with their employers with the introduction of tractors in the agriculture (Aggarwal, 1971).

Even though Orissa does not come under the category of intense modernization in agriculture like Punjab, Haryana and Tamil Nadu, the effects of Green Revolution have been felt here. Bharadwaj and Das find commercialisation of agriculture in irrigated areas, where the relationship between the landowners and the tenants or agricultural labourers is severely strained. The dual system of tenurial condition, viz., fixed rent before harvest and share-cropping, is seldom found to be in operation, with the fixed rent overriding the other in irrigated areas, and in the areas where the land is suitable for cash cropping. The authors observe, "... Here we find an apparent shift in the tenurial condition of Orissa and increasing exploitation of the tenants. While the tribal and unirrigated areas do not present any significant threat to the system, the irrigated areas and those with cash crops witness the gradual shift from sharecropping to that of fixed rent" (Bharadwaj and Das, 1978: 221-240).

Ladejinsky, on the other hand, has attempted an evaluation of the changing system of agriculture in the Kosi Project area of Bihar. The commercialisation of agriculture, various land reforms and mutual distrust between the landowners and the

tenant/agricultural labourers have been responsible for a kind of agrarian relation, much different from the traditional one. The landowners, Ladejinsky notes, have started to retain irrigated land under their direct control, got them cultivated by the hired labourers and a frequent change of tenants was affected. On the other hand, the tenants were apprehensive of adopting modern technology due to the reluctance of the landowners to share the cost of the inputs (Ladejinsky, 1969: A 147-162).

Balgovind (1985) in his study at Sambalpur rightly observed that the introduction of water pump has reduced the traditional relationship between farmers and labourers. The causal labourers who were employed in irrigation works mainly by the Gountia and Jhankur were displaced because the Gounita, have been having a pump for the last eight years (Epstein, Dandekar, 1988)

Mohanty (2000) in his study at Sambalpur said that the trend of increasing use of tractors and other mechanical appliances has reduced the demand for labour services, which, in turn, has contributed towards further improvement of the poor peasants and landless labourers.

Nanda (1992), working in the tribal setting of high land Orissa, reported that new constructions irrigation and land reclamation project put up areas the tribal declined the customary organization of work based upon co-operation and recruit the wage labourers replacing it.

Panigrahi and Panda (1998) studied the changing agricultural pattern among the Lanjia Saoura and mentioned that the inclusion of terraced patches to their *podu* cultivation brought about a change in their social organisation that directly affected their labour disposal. The introduction of cash crops changed the character of labour organization from communal and exchange form of labour to family based and paid form of labour.

Lerche Jens (1993) studied the *Jajmani* relation in Coastal Orissa and opined that the economic development, especially development in agricultural practice has brought a

change in traditional patron-client relation. A dominant kind of relation has been developed between farmers and artisans.

In the same study, he argued that the *Saant-Sevak* relation effectively lost its undisputed pre eminence, and exchanged relations. In general, it became less hierarchical after the abolition of Jamindars and Raja. Most of the Sevaks, who enjoyed the *Jagir* land, could keep it without continuing to perform their services for the old landlords, as the landlords had lost the political clout.

The literature review shows that a very few persons have conducted study on the agrarian structure of India. Among those who have done, most of them have focused on economic and feudalistic aspects. A very few sociologists and social anthropologists (Breman, Beteille, Sabarwala, Bhattacharya, Mishra, Panda, Mohanty) have focused on social aspects. However, the other major issues including the changing scenario of agro-based rural social institution are required to be discussed.

OBJECTIVES

The key objectives of the proposed study are as follows:

1. To understand the traditional agricultural practices in rural Orissa and their transformation in recent times.
2. To understand the agro-based rural social institutions and their metamorphosis due to changing agricultural practices.
3. To understand the traditional agro based religious beliefs and rituals in rural Orissa and transformation due to changing agricultural practices.

METHODOLOGY

The present study is based on an intensive fieldwork conducted in Jagadapur village of Bhadrak district, Orissa during the month of March and April 2003. Before the commencement of fieldwork, a pilot study was conducted during the month of January 2003. From that pilot study, the village Jagdalpur of Bhadrak district was selected.

Selection of the district

A comparative picture of Bhadrak vis-a-vis other districts with regard to agricultural performance shows that the district occupied second position in respect of paddy production and fourth position in percentage share of net irrigated area to net area sown, among the thirty districts of Orissa in 1998 (State Agricultural Report 1998). Bhadrak can now be the major rice producing part and, hence, it can inherit the title 'rice bowl' which was earlier bestowed on Balasore.

In this district, about 80% of the total population depend on agriculture. The annual rainfall is 1570 mm of which about 70% is received during the rainy season. (June-Sept.). Rainfall of 10 to 20mm is received in the month of which facilitates sowing of a second crop. The area comes under low moisture deficit zone that favours better soil moisture for *Rabi* cropping. About 50% of the seeded areas are irrigated with the water of rivers like the Baitarini, the Salandi, the Mantei, and the Nuanai. Except canals, lift irrigation facilities are also there. The construction of the Hadagada dam at Hadagada (Keonjhar district) on the Baitarini in 1983 has brought about a sea change in the field of irrigation in this district (Lenka, 2000).

Selection of village

A comparative picture of Bhadrak Block vis-a-vis other six blocks with regard to agricultural performance shows that the Block has occupied first position in respect of cereals and pulses production and the same position in percentage share of net irrigated area shown among the seven blocks of the district (District Statistical Hand Book 1999).

Considering the above factors, the village Jagdalpur of Bhadrak was selected. This village is well irrigated. Nearly 60% of its cultivable land is irrigated by the Salandi Irrigation Project. Around 10% of its cultivable land is irrigated by lift irrigation system (Panchayat Profile). In order to facilitate the process of participatory irrigation management, the State Government has introduced the 'Pani Panchayat' system in this village. The farmers of this area use modern agricultural technology. Multiple cropping systems were introduced here long ago. Over the years, the Government of Orissa and the Orissa University of Agricultural Technology (OUAT) have been collaboratively working in this area for the development of agriculture. These transformations of

agricultural practices in this area helped the present study for proper evaluation of their impact on rural social institutions. The residence of multi *jati* people in this village brought another advantage for us to focus *on jati* relation.

The present study is a qualitative micro level study aimed at understanding the changing form of rural social institutions, which came out due to the technological transformation in agriculture. As the present study deals with the culture and social structure of a society, the qualitative anthropological techniques are felt important. Therefore, the techniques like observation (both participant and non participant), Case studies, key informant interviews, formal and non-formal interviews and schedules were taken into consideration. Both primary and secondary data were collected to state the above objectives.

Schedule

The household schedules were used to find out the detailed socio-cultural and economic information of the family. These include family size, marital status, sex ratio, educational status, and occupation of the family. These were used for the collection of data regarding agricultural aspects such as land holding, sharecropping, irrigated and non-irrigated fields in acres, multiplicity of cropping and amount of production etc.

Observation

Participant observation fulfils the requirements of intensive fieldwork. Intensive fieldwork through participant observation of the social life of the village community in its actualities enhanced gathering of social interactions among different *jati*. It was used to cross check data and get to the reality. This method helped in eliciting information regarding the process and practice of agricultural ritual, their belief and myth regarding agricultural production, the patron-client relation etc. The in-depth study of any closed society necessitates participant observation and long association with different sections of people. So the present study continued for 2 months. To uncover many interesting things about the village, the present study established a very close relationship with the villagers sharing pains and pleasures of their ordinary life.

Case study method

Keeping the objectives in view, the present study is an exploratory one and uses the case study method. The method of exploring and analysing the life of an individual unit is entirely known as the case study method. The case study is termed by Burgess and Burgess (1949) as the social micro scope, while Biesanz and Biesanz (1965) say it as a form of qualitative analysis that involves a very careful and detail observation of a person, a situation or an institution. The present study is predominantly qualitative in nature. This case study method was used in collecting data from old farmers regarding the traditional agricultural practices, village political and family conditions and the traditional rituals, which the native observed in relation with the traditional practices. Through this method, the picture of traditional *inter-jati* relation, landlord and agricultural labourers relations were depicted. This past information, on the other hand, helped us for assessing the impact of modern agricultural practices on rural institutions.

Interview

It is one of the important techniques used for qualitative data collection. This method helped in getting a clear-cut picture of the *changing* scenario of the study village. Basically, unstructured interviews were taken from farmers, landlords, agricultural labourers, different service *jati* like Brahmin, Barber, Potters, Black smith and from key informants. In order to understand the farmers' worldview, the importance of caste relation, the rituals and folk tradition, the farmers and *other jati* people were interviewed. Various questions in relation to beliefs, myth, and value of social proverb, time of cropping and harvesting of different crops were asked. The folk songs relating to agriculture were also recorded.

The sources of secondary data are the published and unpublished reports. Data from secondary sources were gathered from books, articles, journals, published reports, census reports, and Government documents. Quantitative information with regard to land holding, demographic aspects, cropping patterns and irrigation systems were also collected from Panchayat profile and District Statistical Hand Book. The secondary data like books, journals, articles etc, also provided a picture of traditional agro-based folk tradition of Orissa. It helped in giving a picture of traditional *jati* relation in Orissa. The government records (State Agricultural Policy, land reform report, economic survey)

gave an overall idea of technological development in agriculture of the village. To have a picture of the series of rites and rituals that are traditionally prescribed, the present study has referred a few Sanskrit texts and *Khana Vachan* in Oriya.

In order to study the change in relationship between service *jati* and landlords, *jati* were arranged in a hierarchical order and services or occupations considered to be traditionally associated with each caste were identified with the help of village elders and listed. The list was compared with the service each *jati* member had traditionally been performing.

SIGNIFICANCE OF THE STUDY

This study portrays a very intimate account of the life style of the farmers, as agriculture is not merely an occupation but a way of life of the villagers of Orissa. In doing this, it endeavours to understand the rich and colourful rituals of the farmers of Orissa and their worldview. It also helps the social scientists to deal with farming communities. It is of interest to the students of folklore who would find in it how tradition is suggested and preserved in the pages of the scriptures and continuing, getting modified and extended through customary beliefs and practices of the farmers.

LIMITATIONS OF THE STUDY

The time constraint was a major limitation for the present study. Due to many non-working days, because of festivals during the period of study, it was difficult to get a chance to meet the government officials and academicians. Though the study deals with agriculture, it was difficult to enjoy the agricultural practices during the study period due to dry season. And due to the absence of the agro-based festivals during the study period, it was not possible to observe and to take photos of agro based rituals. Due to the impact of modernization and urbanization, the people of the study area were much suspicious which in the beginning had created a lot of problem in establishing rapport with the villagers.

CHAPTERISATION

Chapter I

This chapter first introduces the topic, then it presents the problem of the study, some literature reviews, the objectives of the study. The subsequent chapters are as follows:

Chapter II

This chapter presents the ethnographic profile of the study village.

Chapter III

This chapter presents the agricultural profile of the Orissa.

Chapter IV

This chapter deals with the traditional *inter jati* relations and their changes.

Chapter V

This chapter deals with the traditional rural family and power structure and their changes.

Chapter VI

This chapter looks into the traditional agro-based religion, rituals, folklore and riddles and their changing situation

Chapter VII

It deals with the summery of the findings of the present study and the conclusion of the present study.

CHAPTER II

ETHNOGRAPHIC PROFILE OF THE VILLAGE

Out of the ten agro-climatic zones in Orissa, Northeastern climates zone is one, which belongs to this zone. The district Bhadrak is situated at the northern part of Orissa. It is situated at a distance of 154 km from Bhubaneswar. It is famous for *Bhadra Kali* temple. It has been separated from the undivided district of Balasore and thus, is a new district since 1993. The rivers Salandi, Baitarini, Naunia have made its land more fertile. The total area of this district is 2677 Sq.K.m. The total population of this district is 13,32,249, which occupies 3.6% of the total population of Orissa. This district consists of 7 Blocks, 166 Grama Panchayats, and 1307 villages.

LOCATION

Jagdarpur is the study village, which is a revenue village under Jagdarpur Gram Panchayat. It is located in Bhadrak block of Bhadrak district. The village is situated around 10 kilometers away from Bhadrak, 60 kilometers from Balasore and 3 kilometres from Ranital. . The village Jagdarpur is named after Jaga Dhala, who was a representative of the British government for the collection of revenue.

CLIMATE

The study village comes under the North-Eastern agro-climatic Zone. Mostly, alluvial soil and loamy sands are found in the village. The climate of the village is generally hot and moist, sub-humid in nature. Usually, the area gets rain from the southwest monsoon. About 70% of the rainfall is collected during the rainy season (June -September). Generally, three seasons are experienced in this village. The summer season commences from the middle of February and continues up to the middle of June. The monsoon enters by the middle of June and continues up to the end of September. The average rainfall in the district is 1433 millimetre (District Agricultural Survey 2002). The winter breaks out from the first week of October and continue up to the end of February.

SETTLEMENT PATTERN

Most of the houses in this study village are constructed facing towards the east direction. The village consists of 102 households. Out of these, 9 houses are concrete buildings, 10 houses have concrete floors and walls with asbestos roof. Most of the houses have clay structures thatched with straw. Around 20 households of the village have their separate cattle sheds. Out of 10 concrete buildings 4 houses belong to Brahmin and *Khandayata jati*. No lower *jati* family, including *Dhoba*, *Baric*, *Tanti*, and *Pana* has a concrete house. Some higher-class people have separate storehouses for wood and fuel.

The notion of purity and pollution has segregated the village community into several *Sahis* (street). A few different *jati* living in houses are situated side by side. These *jati* have formed their own separate neighbourhoods and these are called by the name of the *jati* predominant over there, for example, *Kumbhaar Shai*, *Pana Shai*, and *Samal Shai* etc. *Pana jati* people live at one side of the village.

DEMOGRAPHIC PROFILE

The demographic profile of the village represents the numerical strength of different *jati* residing in the village. It also shows the percentage of male and female, and also the sex ratio of the respective village. In order to show the numerical strength of different *jati* of the study village, the present study draws the following table.

Table 2:1 Jati wise distribution of population by sex

Jati	Male	Female	Total
Brahmin	41	30	71 (11.11)
Khandayata	60	43	103(16.11)
Kumbhar	40	26	66(10.32)
Bania	33	32	65(10.17)
Kumar	03	03	06 (0.93)
Tanti	40	42	82(12.83)
Barik	08	12	20(3.12)
Gouda	24	21	45 (7.04)
Dhoba	10	10	20(3.12)
Pana	91	70	161 (25.12)
Total	350 (54.77)	289 (45.23)	639 (100)

Table 2:1 shows that the study village has 10 *jati* such as *Brahmin, Khandayata, Gouda, Tanti, Kumbhaar, Bania, Dhoba, Baric, Kamar, and Pana*. The total population of the village is 639; out of which 350 (54.77%) are male and 289 (45.22%) are female. The *Pana jati* is numerically the highest among the 10 *jatis* of the village; the *Kamar* is numerically the lowest. Where as 25.12% of the total populations of the study village belong to the *Pana jati*, only 0.93% belongs to *Kamar*. The sex ratio of the village is 825. All the people are not restricted to a particular age group. They are distributed among various age groups. The study presents the following table, which provides a clear picture of different age groups.

Table no 2:2 Distribution of population by age

Age group	Male	Female	Total
0-1	6	7	13(2.03)
1-5	20	17	37(5.79)
5-10	33	35	68(10.64)
10-15	39	31	70(10.95)
15-20	35	27	62 (9.70)
20-25	42	25	67(10.48)
25-50	118	105	223 (38.02)
50-60	21	15	36(5.63)
60+	36	27	63 (9.85)
Total	350 (54.7)	289 (45.3)	639 (100)

Table 2:2 shows that, the highest population is seen in the age group of 25-50 (38.02%). Lowest population is seen in the age group of 0-1 (2.03%).

ETHNIC COMPOSITION OF THE VILLAGE

The village is composed of *\0jati*, which are mentioned in table2:1.

Brahmin-Brahmins constitute 11.11% of the total population. Due to the development of communication and educational facilities, most of the Brahmins of the study village have migrated to city area to get some jobs and higher education. Some of them have settled themselves there. Those Brahmins, who did not get these opportunities started to

cultivate their land by taking the help of wage labourers. Now-a-days, only two old men of this *jati* are involved in their traditional work (priest), where as others are involved in services and cultivation with the help of labourers from other castes.

Khandayat- Although the *Pana* are numerically the highest in the village, but *Khandayat* are playing dominant role, both economically and politically due to their possession of more than 30% of the total land of the village. They belong to the *kshyatriya varna*. Most of them are involved in cultivation.

Tanti- All of them have left their traditional occupation of weaving. Now-a-days, they are, however, fully involved in agricultural work. All the members of the total 11 households are working in their own and other's land.

Gouda- Although most of them have left their *jati* occupation, herding still some of them is continuing it. Out of 5, only 2 households are engaged in cow herding work.

Kumbhar- Traditionally they are the potters. But when the aluminum and steel utensils came to market, they were unable to compete in the market with their traditionally made earthen materials. So, they were bound to leave their occupation. 2 out of 9 households are continuing *Xhsivjati* occupation.

Bania- They are popularly known as *Sunaari* (goldsmith). They are the gold ornament makers by occupation. Out of 10, 5 households are still continuing with their own *jati* occupations.

Kamar- They are the blacksmiths. Traditionally, they make iron instruments. But presently all of them are engaged in doing the work of *Badhei* (carpenter). When the company-made-instrument came to the market, people preferred that material and no body came to purchase the products made by the *Kamars*. Simultaneously when the mechanization occurred in the field of agriculture, people preferred to plough their lands by tractor rather than *langal* (plough). So, they lost their occupation. Most of the young members of their houses have now migrated to city areas to work in various industries.

Dhoba- They are the washer men by occupation. They had Jajmani relation with the dominant caste of the village. But now-a-days, due to modernization, higher education, women empowerment, and commercialisation of agriculture, 2 of them have left their *jati* occupation. They are doing other business and working in industries etc.

Barika- They are the barbers. One of them has left their own *jati* occupation. One of them has established a salon.

Pana-They are considered to be the untouchable *jati* in the village. Around 65% of them are landless agricultural labourers. Before 70's around 30% of them were working as *halia* (plough man), but due to availability of other non-agricultural work and modernization in agricultural field, they now like to work as wage labourers.

Before 70's, *jati* feeling was very high among the villagers. The *pana* were isolated from the mainstream village life. They felt as well as appeared very depressed and discriminated. Social mingling was highly discouraged. In spite of this the upper *jati* people act as the positive reference group for them. But the relationship has improved in the post-independence era. Because the lower *jati* people have made remarkable progress in attaining education and employment in recent years

SOCIAL ORGANISATION

The social organization of the village rests on different systems such as: *jati* system, family system, kinship system. Among these the *jati* system appears to be the most significant feature of the village. *Jati* is a system of stratification in which mobility, up and down movements in the status ladder, at least ideally may not occur (Kar, 1998: 79). There are different *jati* and *upajati* residing in the study village whose statistics is mentioned in the following table.

Table 2:3 Distribution of households by jati and Upajati

Jati	Upa-jati	No. Of households
Brahmin	Mohapatra	8
	Panda	2
	Chaudhury	1
Khandayata	Samal	4
	Nayak	7
	Hadi	5
	Patra	1
Kumbhar	Behera	6
	Rana	3
Bania	Sahoo	10
Kamar	Qjha	2
Tanti	Hati	2
	Sutar	5
	Shankhua	2
	Malik	2
Barik	Barika	3
Gouda	Barik	5
Dhoba	Sethi	4
Pana	Jena	19
	Dash	11

The table 2:3 shows that there are 10 *jati* and 20 *upajati* living in the study village while 4 *upajati* are included between *Khandayata* and *Tanti*, 3 are among the Brahmin. No doubt, the political consciousness and Government measures have reduced the traditional *jati* feeling among the villagers, but that feeling persists still. Due to the accumulation of the land, discontinuity of the traditional practices, the positional change has occurred among some *jati* in the study village. For example, the *Gouda* and *Bania* who are considered as lower than *Tanti* in *jati* hierarchy are no more there. Now-a-days, the *Gouda* and *Bania* are getting the status of *Vaishya*, which is superior to *Tanti*, due to the accumulation of number of agricultural lands and giving up of the traditional practices. Even single *Gouda* of this village does not bear palanquin. The *Hadi jati* of this area, in order to get higher status in hierarchy, claim themselves as the successors of *Lord Maharshi Narad*. They tell that *Lord Maharshi Narad* was married to a girl who belonged to *Hadijati*. Inter caste marriage is strictly prohibited among the villagers. No

Brahmin is performing *puja* in a *pana* house. These *pana jati* have their own *Pandit*, *Barik* and *Dhoba*, within their *ovmjati*. Even today, the Brahmin of the village maintain distance from *other jati* while taking their food in any social occasion.

All the *jati* of the study village are endogamous and they practice clan endogamy. Among the villagers, the descent line is traced through the males. Predominantly, they practice monogamy. Although some people are urging for love marriage, now a days, preference is generally given to marriage by negotiation. However, the male and female, who are going to marry, also play important role in the selection of respective mate. First, the parents and the senior most person of the groom go to see the bride. If they like the bride, then they send their son to see the girl. Traditionally during the period of marriage, they give more importance on the matching of the horoscopes of the mates' which is called as *jatak milana*. If both the parties agree, then they select a date for engagement, the *lagna*, on this *lagna* day, the father of the groom along with relatives visit to the bride's home. On this day, the father of the groom presents a ring to the bride. On the same day, they decide the date of marriage. On the marriage day, the groom along with his relatives and friends goes to the bride's home. The marriage ceremony is held there. The bride's father offers a feast there. Then the bride and groom come to groom's house. Dowry system is very prevalent in this region. The ideal age for marriage for male is around 25 years and for female is around 20-22 years. In order to highlight the marital status of the study village, the following table has drawn.

Table 2:4 Sex-wise distribution of population according to their marital status

Category	Male	Female	Total	Percentage
Married	147	147	294	46.00
Unmarried	191	130	321	50.25
Widow/widower	12	12	24	3.75
Total	350	289	639	100

The table 2:4 shows that 46% of the village people are married where as 50.23% are unmarried. The percentage of male unmarried is more than the percentage of female unmarried. The widows and widowers are in an equal proportion in the village.

The families of the study village are mainly of nuclear type. Where the parents and their unmarried children live together. Apart from nuclear families, around 23% of the joint families are found here (Table 5:3). However, all are patrilocal. The oldest male or the father plays an important role in the family. Father takes all the social and economical decision for the family. They also give some importance to the women in the case of decision-making of the family. Women of the lower *jati* families do hard work in fields with their male counter parts. The family, where the father is alive, is mostly joint in nature. Kinship plays an important role for the integration of the group. They use kin term to address relatives and to the villagers.

ECONOMIC ORGANISATION

The main source of livelihood for the villagers is agriculture. More than 75% of the people in the village depend on agriculture. So land plays an important role for their livelihood. Before going to explain other things, it is necessary to present the land holding pattern of the villagers, which is shown in the following table.

Table 2:5 *Jati-wise* land holding pattern of the village

Jati	No. of households	No. Of Landless households	Below 1 acre	>1-3 acre	>3-5 acre	>5-7 acre	>7-10 acre	>10 and above
Brahmin	11	1	2	1		3		4
Khandayata	17	3	3	3	2		1	5
Kumbhar	9			3	3	1	2	
Bania	10	1	3	2	1	2	1	
Kamar	2			1	1			
Tanti	11	2	1	2	2	2	2	
Barika	3	1		1	1			
Gouda	5	1			2	2		
Dhoba	4	2		2				
Pana	30	19	5	4	1	1		
Total HHs	102	30 (29.41)	14 (13.72)	19 (18.62)	13 (12.74)	11 (10.78)	6 (5.88)	9 (8.82)

The table 2:5 shows that in the study village, out of 102 households, 72 households own land. Among the landless *jati* 63.33% are *pana*, who are the important wage earners of the village. Most of the landowners come under the category of 0-1 and > 1-3. One important feature noticed in the table is that when the land holding size increases, the number of landowners decorated. Where 33 households have less than 3

acres of land, 9 households enjoy the status of lowering more than 10 acres of land. Where the Brahmin and *Khandayata* people constitute 27% of the total population and acquire .58.26% of total land. The *pana* who constitute 25% of the total population acquire 3.5% of the total land. The mechanization in agriculture has raised the rate of production. They cultivate commercial crops by using High yielding Variety (HYV) seeds. The multi cropping system has also enhanced their economic position.

Table 2:6 Jati wise distribution of population by occupation

Jati	Cultivation	Agricultural labour	Services	Other works	Students	Dependent	Home work	Share cropper
Brahmin	7	2	5	12	20	5	17	3
Khandayat	10	12	4	15	22	7	24	6
Kiimbhar	12			4	19	5	18	4
Bania	8	5		5	16	5	4	4
iCamar	2	1			5	3	4	
Tanti	11	7		7	25	7	20	2
Barika	2			2	9	3	4	2
Gouda	10			1	15	3	8	
Dhoba	3				6		7	2
Pana	3	31	3	8	39	10	35	14
Total	68	58	12	54	176	48	151	37

Table 2:6 show that out of 639 members, 68 are owner cultivator, 53 are landless agricultural labours and 37 are sharecroppers. All the women agricultural labours belong to Pana. 12 individuals, including both male and female serve in government sector. Around 39 individuals work in different industries, which mostly non- agricultural labourers. Some of the agricultural labourers of the village are working as labourers in Food Corporation of India, which is just 1/2 kilometre away from the village. Some of the villagers are also engaged in business at Ranital market.

IRRIGATION

Before the 80's the irrigation system of the study area was not so developed but in order to facilitate the multi-cropping system in the study area, the post 80's period had come with the significant development in the irrigation of this area. Now-a-days, most of the lands are irrigated. . For better management of water in this area, the government of

Orissa in collaboration with World Bank has introduced the *Pani Panchayat*¹ Programme. However, it is simple in paper and pen. The following table presents the amount of land, which is irrigated.

Table 2:7 Jati-wist distribution of wet and dry land (in acres)

Jati	Wet	Dry	Total
Brahmin	95	18.5	113.5(25.73)
Khandyata	106	37.5	143.5(32.53)
Kumbhara	24.5	14.5	39 (8.84)
Bania	28	2.5	30.5 (6.9)
Kamara	3	1	4 (.9)
Tanti	23	15.5	38.5(8.73)
Barika	3	3	6(1.36)
Gouda	31	16.5	47.5(10.77)
Dhoba	2	2	4 (.9)
Pana	9	6.5	15.5(3.51)
Total	323.5 (73.35)	117.5 (26.65)	441 (100)

According to the table 2:7, 73.25% of the total land of the village is irrigated. During the time of consolidation of land holding, most of the lower caste people, due to lack of knowledge, have lost their irrigated land. While Brahmin and *Khandayata* people hold 62.13% of irrigated land, para households hold 2.78% of irrigated land.

POLITICAL ORGANIZATION

At present the statutory Panchayat is plays an important role in the political organisation of the village. The head of the Panchayat is the Sarpanch. Except the Sarpanch, other members of the Panchayat are called Ward Member. The Ward Members of the Panchayat nominate a Member from themselves who is called Naib Sarapanch. This village is divided into 3 Wards. At present the Sarapanch belongs to the Congress Party. Party politics have brought a serious fraction among the villagers. Although the *Khandayat* are considered as the dominant caste in the village but in the case of village politics, the Brahmins have long hand, due to their ritual status. The present Sarpanch belong to Brahmin *jati*. Whenever some major disturbances or conflicts

¹The Govt, of Orissa view to provide equitable timely and assured irrigation has resulted in the introduction of the concept of pani panchyat's scheme through farmers awareness programmes in its entire irrigation project in 2001. The geographical extent of the programme covers the entire state comprising of about 16 lakh hector of major, medium and minor irrigation command areas in all the 30 districts of Orissa. This reform project involves a decision making approach through farmers participation.

occur, the Sarpanch calls for a meeting to settle it. Except this Statutory Sarpanch, there is a village committee in the study village whose members are elected by the elder members of the village. Presently, the Chairman of this committee belongs to Brahmin *jati* where as the general secretary post is allocated to *Khandayata*. When any dispute takes place in the village, the Chairman calls for a meeting. The *Behera* (messenger), who belongs to the *pana jati*, informs this news to other members of the committee. Generally, the meeting is held near the site of the village deity. The person who violates the social norms has to pay fine. When somebody does not obey the decision of the village committee, other members ostracise him from the village.

EDUCATION

There is a primary school up to the 5th standard and an *Anganwadi* centre in the study village. There is a High School at Ranital market, which is 3 kilometres away from the village. Beside this, there is another school at Maitapur market, 2 kilometres away from the village. After the completion of primary education, most of the village students go to Maitapur High School. After matriculation, most of the students prefer Markona, Charampa, or Balikuda College; where as few of them prefer Bhadrak College. In order to show the educational status of the study village we have presented following table

Table 2:8 /aft-wise Distribution of Population according To Education Received

Jati/ Standard	1-5		6-10		Matric		+2,+3		Above +3		Percentage	Percentage	Total Percentage
	M	F	M	F	M	F	M	F	M	F	M	F	
Brahmin	19	9	15	8	8	5	6	6	1		81.66	65.11	76.73
Khandayat	7	10	12	10	6	3	5	6	3		85.36	96.66	90.14
Kumbhar	9	2	10	7	3	4	8	2			75	57.69	68.18
Bania	9	9	10	6	6	1	1	1	2		84.84	53.12	69.23
Kamar	4	4	1	2	1						66.66	66.66	66.66
Tanti	13	14	9	12	5	1	3	2			75	57.69	71.95
Barika	6	4	3	2	1	1					87.5	75	80
Gauda	6	10	14	2							91.66	61.90	77.77
Dhoba	6	2		1							60	30	45
Pana	37	17	16	15	5	1	2				54.94	47.14	51.55
Total	116	81	90	65	36	17	26	17	8		78.57	62.28	71.2
Grand Total	197		155		53		43		8				

Due to poor economic conditions and unemployment, most of the students are living the college after having their intermediate education. For this reason the percentage of higher education in the village is 5.04, which is very low. Except some of members of *Brahmin* and *Khanadyata jati*, no body in the village has education degree. After the completion of their intermediate education, most of the students of the study village are choose agriculture as their main occupation. Instead of working with traditional practices, they are taking the help of machines and other modern practices, which bring better production for them. The development of agriculture has raised the importance of educated person in the field of agriculture. An educated person is expected to be more alert and more aware of what is going on in the world out side than a farmer who is stuck in the narrow pool of traditional knowledge. Some students have a little bit of computer knowledge too. The percentage of literacy is high among the *Khandayat* (90.14%), where as it is very low among the *Dhobajati* (45%), which is followed by the *panajati* people (51.55%). It is because the lower *jati* people are more conservative and poor. They have a great faith on their fate. As it was revealed at the time of the survey most of the farmers said that, they have been born as labourers, and they must remain labourers, all our life. The total percentage of the literacy is 71.20%; out of which, 75.57% are male and 62.28% are female.

CLASSES IN THE VILLAGE

The farmer classes can be described in terms of those who possess and those who do not possess means of production, those who work and those who do not work those who employ hired labourers and those who do not (Ossoski, 1961; 82).

The nature of the work performed, whether it is supervisory or manual is the important characteristic for the description of class. The economy of the village is based, primarily, upon agriculture and hence the relations of production consist, essentially, of relation between categories of persons contributing in different ways to the process of agricultural production such as, *Malik* (Land lord), *Chasi* (owner cultivator, share copper) and *Mulia* (agricultural labourers).

Malik

Maliks have their own land but do not cultivate it themselves. They entirely depend on sharecroppers. The property owners consisting of 13 households comprise less than 13 percent of the total households but control around 50% of the total land. None of them owns less than 7 acres of land and the average land holding size is 17 acres. The property owners are popularly known as *Malik* who do not work in the field. All of them have pump sets, and, with the help of these machines, they make farming process more easy and profitable. They also have motorcars, motorbikes, scooters etc as a symbol of capital investment and lavish living. The proprietor has a very good contact and rapport with government officials to acquire seeds, fertilizers or other governmental subsidies.

Chasi

On the basis of extent of involvement in actual cultivation the present study classified them into two categories such as owner cultivator and share coppers.

Owner Cultivator

They are popularly known as *hata chasi*. They have their own lands and engage themselves in fields. But they depend mostly on hire labourers. In these cases, the dependency on hire labourer depends on the amount of lands the cultivator owns. The owner cultivator hires all or most of the total if they own relatively large holding or if they have any other occupation. They use a few or a little hired labourers if their size of land holding allows them to do, they do most of the cultivating themselves. Some marginal holders use little or small hired labour and bullock for special work, as they could not afford to own them. 129 households, comprising 28.4 percent of the total household come under this category. Their average land size is less than 5 acres.

Share Cropper

They are popularly known as *bhaga chasi*. Most of them are landless. They take land for lease either from the landowner, cultivators or from the landlords. Some of them own very little amount of land, which is insufficient for their subsistence. So some times, they lease in land with high rent.

Mulia

They are landless and dependent wholly or mainly on selling their labour in agriculture and other allied activities. Majority of the agricultural labour belong to the untouchable, *pana jati*.

LIVESTOCK

Table 2:9 No. of livestock

Jati\livestock	Bullock	Cow	Goats	Poultry	Total
Brahmin	6	9	2		17
Khandayat	12	22			34
Kumbhara	16	10	5	20	51
Bania	16	14	2	2	34
Kamara	3	2	3	4	12
Tanti	22	18	7		47
Barika	4	3			7
Gouda	14	28			42
Dhoba	2	1			3
Pana	22	10	9		50
Total	118	120	28	26	292

Table 2:9 shows that there are 59 pairs of bullocks, 120 cows and 28 goats and 26 poultry owned by the people of the study village. Mostly of those who have kept the bullocks, are sharecroppers. Around 19% of bullocks are owned by the *Pana* and *Tanti* households of the village. Before 90's when mono-cropping system was there all the householders were cultivating only one crop, in during the rainy season. At that time they were keeping the eyes on cattle to protect their paddy land. The introduction of multi-cropping patterns in the study village has created a problem of free herding of cattle and goats. During *rabi* season, only those farmers who have arrangement of regular supply of water, cultivate their lands. Others do not need to keep an eye on cattle. Most of the time, the farmers of the study village found that, and the whole field had been trampled upon by the cows and bulls of their neighbours. It further created conflicts among the villagers. So most of the marginal farmers were forced to sell their cows and bullocks. And this might be a cause for which the number of goats and cows owned by the Goudas has been significantly decreased during the last 10 years. The well off people of all caste has kept cows mainly for milk and cow-dung. During ploughing in the rainy season, there is scarcity of livestock and hence people have to hire it. In the absence of chemical

fertilizers, cow dung was the most used manure and people also did not sell the old and deceased cattle due to religious feeling. The introduction of tractor and power tiller for agricultural operation and transportation of goods has result in lower dependence on bullocks. The availability of abundant chemical fertilizer has reduced the demand for cow dung.

EQUIPMENTS

People in the study village, who are primarily cultivators and the *Kamins* who are practicing traditional occupations, own essential tools. The labourers, however, do not own the minimum tools such as axe, sickle, spade etc. Due to mechanization in agriculture, most of the farmers are taking the help of tractors and power-tillers to plough. Generally, they hire these implements from neighbouring village. Due to the introduction of tractor, a few people have their own *langala* (plough). Around 95% of the owner cultivators have their own threshing machines, irrespective *oijati*. Of these 95 percentage owner cultivators 70% of the cultivators have electric threshing machines, and rest of the cultivators use manual one. Most of them have their own water pumps and sprayers. The cultivators in the village own the basic tools of every day use. But there is also mutual exchange of implements. For example, if someone requires the implements due to heavy works, then he gets implements from other cultivators when the latter are not in need. Every body takes care of the tools and the tools should be returned in good shape. But if there is any sizeable damage, then the borrower replaces or repairs it.

LANGUAGE AND COMMUNICATION

In this village, all the villagers, irrespective of their *jati*, while communicating with each other speak only in Oriya. They use Oriya script for writing. Some of the students, who are studying in schools and colleges, are very well in English and Hindi. It is a village, situated near the National High Ways 5. There are facilities for delivering of regular postal and newspaper. Telephone and telegraph facilities are available there. The post office is just 1 Kilometre away from the village. Local train facilities are available within the village itself. The Ranital Railway station, which is situated in the village, divides the village into two parts. Most of the households have their own televisions,

tape recorders and transistors. The people have their own bikes. Buses, jeeps and tractors are frequently available for communication and transportation

RELIGION AND FOLKLORE

All the villagers of Jagdalpur belong to Hindu religion. They have strong belief in Gods and Goddesses. Apart from agricultural festivals, they celebrate so many fairs and festivals every year. They worship *Lord Siva*, *Lord Jagannath*, *Goddess Laxmi* and *Gram Devata*. Apart from individual observances, they also celebrate festivals as a whole. Sometimes, they also celebrate some festivals within their own *jati* people. For example, *Goudas* celebrate *Dolo* festival among their own *jati* people. During this occasion, all the *Goudas* come together and worship *Lord Krishna*. Just like, *Gouda*, *Kumbhara jati* people also celebrate *Kural Panchami*, after 12 days of *Prathamastami*. They observe it for five days. During this occasion, they establish the idol of *Lord Brahma*, *Vishnu* and *Maheshwara*. All the members of their *jati* come together and arrange a feast. These festival brought unity among the villagers. *Siva Ratri* and *Pana Sankranti* are considered great festivals in that village. For these purpose, all the households of the village contribute something according to their socio economic status.

LIFE CYCLE RITUAL

During the period of 9 month of her pregnancy, the father of the bride sends sweets, fruits and saris to her daughter's house. After offering these things to Gods and Goddesses, the head of the family distributes it among their neighbours. On this occasion, the senior members of the village, after taking meals, bless her. They do not observe any ritual during the period of puberty. They celebrate the marriage ceremony in a grand way, which have been discussed earlier.

After the birth of a child on 21st day, the parents of the child organize a ceremony, which they call *Ekusia Puja*. This is also considered as a happy incident for the family. Although the villagers do not see such distinction between male and female child, the arrangement of this ritual shows that it is more colourful, if a boy child is born. They need a son as they belief that a son is the only one who perpetuates the family alone after

the death of the father. At the time of the puja, they offer a feast to the members who attend it.

During the death of an individual, they observe certain ritual. When a man dies, his younger brother removes the bangles from the hands of the dead man's wife. The dead body is carried on six bamboo strips with a covering cloth. Only *his jati* people and relatives take the body to the cremation ground. The elder son of the dead person first puts fire on the pyre, which is called as *Mukhagni*. They observe it for eleven days. During this period, they do not take non-veg. foods and do not use oil. They also remain unshaved during this time. While the Brahmin offers the feast on the 9th days, the other *jati* people observe it on 11th day of this death. They purify themselves through the ritual, which they call it as *Sudhikriya*. They believe in rebirth. They believe that a person who dies in accident or commits suicide becomes ghost after death. On the 11th night, in one corner of their home, they keep some soil. Near that soil they light a *bati* (lamp), which is covered by a mud pot. They believe that by seeing this soil on the 12th day, they can foretell the next birth of the dead person.

CHAPTER III

TECHNOLOGICAL TRANSFORMATION OF ORISSAN AGRICULTURE

Orissa, the tenth largest and eleventh most populous State of India, occupies 5% of the geographical area (1.56 lakh sq Km.) and 4% of the population (3.67 crore) of the country (2001 Census of India). Agriculture occupies an important place in the economy of the State like Orissa. While agriculture and animal husbandry contributed 28.54 % of the Net State Domestic product of the state in 2000-01, the agriculture alone provided direct and indirect employment to around 64% of the total work force of the state as per the 1991 census. So, it is obvious that the development of the State depends on the development of agriculture. But as agriculture is a complex and multi-dimensional enterprise, its development depends on various factors like agro-climatic conditions, technology, inputs, and system of land holding and other socio-economic factors.

The climate of Orissa is hot and humid. The state's mean annual temperature is 26.89°C. The Indian Council of Agricultural Research (ICAR) has classified the climatic structure Orissa into ten Agro-climatic Zones. The ten Agro-Climatic Zones along with its basic feature is shown in Table 3:1.

Table 3:1 Agro-Climatic- Zones in Orissa

Zone	Climate	Soil	Principal Crops	Other Crops
North-Western Plateau	Hot-Moist	Red & Yellow	Rice	Pulses, Millets & Oilseeds
North-Central Plateau	Hot-Moist	Red loam	Rice	Maize, Pulses, Ragi & Linseed
North-Eastern Coastal Plain	Hot-Moist	Alluvial	Rice	Pulses & Vegetables
East and South-Eastern Coastal Plain	Hot-humid	Alluvial	Rice	Pulses, Jute & Vegetables
North-Eastern Ghat	Hot-Moist	Brown Forest	Rice	Pulses, Oilseeds Sugarcane
Eastern-Ghat Highland	Warm-Humid	Red	Rice	Maize, Wheat, Soybean
South-Eastern Ghat	Warm-humid	Red & Laterite	Rice	Millets, Mesta Sesamum
Western-Undulating	Hot-Moist	Red & Black	Rice	Fruits, Pulses Vegetables
West-Central Tableland	Hot-Moist	Red & Black	Rice	Wheat, Ragi, Sugarcane

Source: *Agriculture in Orissa, D. Lenka.*

Before independence, especially before the advent of modernization the agriculture of Orissa was predominantly subsistent and traditional oriented, in nature. But the introduction of modernization, Research and Extension programmes has brought about significant changes in the traditional agriculture of Orissa. Along with commercialisation of agriculture, several other developments have taken place in the field of land holding pattern, irrigation system, cropping pattern and fertiliser consumptions.

CROPPING PATTERN

Orissa is the traditional home of the largest number of traditional rice. Rice is an ancient crop in Orissa. Traditionally, Orissa is a rice growing State and rice has remained her main crop. At the beginning of the 20th century, the farmers of Orissa were mainly cultivating rice for their survival. Their production was predominantly subsistence in nature. Some people were cultivating crops like *biri* (black gram), *simba* (legume), wheat, etc, only for their own consumption.

Although the origin of rice is yet unsettled, the Botanical Survey Project on Rice of the ICAR in 1970 claimed that Jeypore Tract of Orissa might be the primary centre for the origin of rice. Though it cannot be said exactly the rise of the era of rice cultivation in Orissa, India, but from the evidences available, it could be deciphered that rice was being cultivated prior to 2800 B.C., i.e. 4800 years ago. This survey also claimed that the Sauras and Gadava (tribes) were the first rice cultivators.

Hardly a few farmers were going for multi-cropping depending on the irrigation facilities. They cultivated *SaradDham* (indigenous paddy) till 1950. With a little attention for hybridisation except *Kharif*, a few farmers were going for *Rahi Phasal*. Although the Central Rice Research Institution was established in 1946 at Cuttack, it actually came to function only after Independence. Through the implementation of different five years plans, the Government, of Orissa was succeeded in developing agricultural production. While the total cereal production of the state was 23.12 lakh tons just before the First Five Year Plan, it turned into 49.37 lakh tons at the period of 1968, i.e. just before the implementation of 4th- 5th years plan (Utkal Prasanga, 1970:21). But after 70's, a

tremendous change had occurred in Indian agriculture, due to the advent of technological transformation.

More than 70% of the cultivated area in Orissa is covered under paddy crop. The beginning of the Eighth Five Year Plan marks an effort to divert land from paddy to cash crops like pulses, oil seeds, sugarcane, potato etc. to ensure better reforms. The Table 3:2 present the cropping pattern of principal crops in Orissa from 1996-97 to 2000-01.

Table 3:2 Cropping Pattern of Principal Crops in Orissa

(Area in Thousand Hectares)

SI. No.	Principal Crop	1996-97	1997-98	1998-99	1999-00 (R)	2000-01 (P)
1	2	3	4	5	6	7
1.	Paddy	75.7	74.7	74.4	76.5	77.5
2.	All cereals	79.6	78.0	77.6	79.8	81.1
3.	Total pulses	10.6	12.2	11.8	10.9	9.7
4.	Total food grains	90.2	90.2	89.4	90.7	90.8
5.	Oil seeds	6.9	7.0	6.4T	5.6	5.9
6.	Fibres	1.2	1.2	1.2	1.4	1.4
7.	Other crops (Sugarcane, Potato, Chilly and Ginger)	1.7	1.6	3.0	2.3	1.9
	All Crops	100	100	100	100	100
	Total Area (Thousand hectare)	5897	6022	5980	6020	5721

P: Provisional Estimate, R: Revised Estimate

Source: 1) Directorate of Economics and Statistics, Bhubaneswar

2) Directorate of Agriculture and Food Production, Bhubaneswar

3) Directorate of Horticulture, Bhubaneswar.

The Table 3:2 shows that during 2000-01, Paddy was the major cereal crop in Orissa with the coverage of about 77.7% of the total gross cropped area under principal crops, followed by pulses (9.7%), and oil seeds (5.9%). The area under fibre crops accounted for only 1.4% and other cash crops, which included sugarcane, potato, chilly, ginger and tobacco etc. constituted only 1.9% of the total gross cropped area under principal crops. The percentage of area under principal cereals and fibres increased in 2000-01 over 1996-97 while that of pulses and oilseeds declined. Efforts are being made for diversion of paddy area to non-paddy area.

The contribution of Orissa to the food grains basket of the country, which was 2.41% in 1996-97, is estimated at 2.54% in 2000-01. "The Integrated Cereal Development Programme-Rice" is being implemented in the state since 1994-95, with the objective of augmenting paddy production and enhancing productivity of rice through adoption of a package of scientific practice. A major component of this programme is to increase coverage of area under High Yielding Varieties (HYVs) of seeds. Areas under HYVs have increased by 38.81 % during the period from 1996-97 to 2000-01. The Agriculture Policy 1996 accords priority to multiplication of High Yielding Varieties of seeds to replace the traditional varieties being used in the state. The seed replacement rate for paddy, pulses and oilseeds is proposed to be increased to 13.75%, 5.64% and 15.6% respectively during 2001-02 as against the corresponding figure of 8.50%, 2.14% and 14.72% during 2000-01.

Table 3:3 presents the data relating to area under HYV in the state, from the period of 1996-97 to 2000-01.

Table 3:3 Area under HYV Paddy in Orissa (In thousand hectares)

Sl. no.	Year	Autumn		Winter		Summer		Total	
		Irrigated	Un-irrigated	Irrigated	Un-irrigated	Irrigated	Un-irrigated	Irrigated	Un-irrigated
1	1996-97	22.67	232.52	638.89	735.18	264.14		925.70	967.70
2	1997-98	18.24	269.38	646.70	875.87	232.66		897.60	1145.25
3	1998-99	38.43	265.68	835.13	758.18	263.27		1136.83	1023.81
4	1999-00	22.85	301.61	811.98	1048.64	381.81		1216.64	1359.25
5	2000-01	32.03	367.48	866.08	1155.97	206.74		1104.85	1523.45

Source: Directorate of Economics and Statistics, Orissa, Bhubaneswar.

I = Irrigated

U = Unirrigated

This development has brought about an appreciable shift in agriculture over the years. The rice productivity has gone up from 520 k.g. to 1014 k.g. per hectare in 2000-01. In order to increase production of pulses, it is proposed to increase the coverage of area under pulses and raise productivity through the adoption of *dry farming technology*, adoption of mixed and inter-cropping system, use of quality seeds and use of phosphates

fertilisers. It has been targeted to produce 13.45 lakh Million Ton of pulses in the state during 2001-02.

Groundnut, sesamum, mustard and niger are the main oilseed crops grown in the state. Sunflower cultivation has also been introduced in Western Orissa. Commercial crops like sugarcane, jute, mesta, cotton, soyabean, groundnut, potato, chilly, onion, etc. are being given more attention. In low rain fed areas of Kalahandi, Koraput, Bolangir, Nowrangpur and Rayagada, cotton cultivation has been encouraged. It is programmed to increase the area under cotton from 0.39-lakh hectare in 2000-01 (Economic Survey 2002).

USE OF FERTILIZER AND PESTICIDES

Before the introduction of Green Revolution, most of the farmers were using cow dung and compost as manure in their field. But after the advent of Green Revolution, application of chemical fertiliser has been playing a vital role in increasing the productivity. Consumption of chemical fertiliser in the state has been increased from 30.52 Kg. Per hectare in 1996-97 to 49.73 Kg. Per hectare in 2000-01. During 2000-01, the total fertiliser consumption in the state was 319.21 thousand MT, whereas it was only 7,951 ton during 1955 (Economic Survey - 2002).

Before the introduction of Green Revolution, most of the farmers used to distribute ash as a pest to control the diseases of their plant. But when the HYV seeds came into the use, pesticides became necessary. As high yielding varieties of crops are susceptible to pests and diseases plant protection, measures are essential for sustaining agricultural production.

IRRIGATION

Water resources and irrigation is the most important condition for the process of agricultural production. It was better to acquire a smaller tract of land with flowing water than a larger drier one. Before independence, in the absence of adequate irrigation facilities, agriculture was pathetically dependent upon the monsoons. As monsoon is highly erratic, the agricultural production fluctuated widely from year to year. In old days, the Rajas, Maharajas and Rulers dug tanks for the benefits of the public - for

drinking, bathing, even for irrigation. There were innumerable private tanks in each family backyard to serve the purpose of drinking, bathing and irrigating lands. Some villagers were constructing storage reservoirs to store rainwater for continuous irrigation after rainy season. The ancient Hindu and Maratha Rulers constructed embankments in order to develop the irrigation facilities. To protect the city of Cuttack from the flood havoc, Markata Kesari (935-951 A.D.) constructed the gigantic and famous stone embankment along the banks of river Kathajuri, a branch of Mahanadi. Apart from these tanks, embankments and storages, rivers were the first and foremost mechanisms in watering the lands. Different rivers are found in different zones of Orissa. The Budhabalanga, the Karkai, the Salandi, the Baitarani, the Mantei, the Brahmani, the Subarnarekha, etc. in Northern plateau; the Mahanadi, the Ong, the Tel, etc in Central Table Land; Vansadhara, Nagavali, Indravati, Kolab, Machkund, Rusikulya etc. in Easternghat Zone and Subarnarekha, Baitarani, Kathajodi, Birupa, Kharasuar, Kusabhadra, Daya-Bhargavi, Malguni in Coastal Belt.

Before 1865, droughts and famines were very frequent so that Orissa's costal areas suffered heavily. In 1858, proposals were advanced to use river water for irrigation in Orissa and, accordingly, the East India Irrigation and Navigation Company undertook the task of digging of canals.

The British Government took up the work since the Company was found unsuccessful in his work. Water was first supplied for irrigation in 1865 through the Orissa Canal System. The scheme designed to irrigate 0.64-lakh hectare, also included Taladanda and Machhagaon Canals, the Kendrapada and Pattamundeii Canals and three high level canals. Around 1874, in this scheme weirs were constructed at Naraj in the river Kathajuri at Jobra in the river Mahanadi and the river Birupa, Brahmani and Baitarni. Before independence, Rusikulya Irrigation System was constructed in the Rusikulya River, which irrigates 45.100 hectare of land. Mahendra Tanaya system was constructed in Ramasagar, which irrigates about 4,048-hectare land in Ganjam district. Before 1951, area under irrigation from different sources was 7, 60,000 hectares.

After independence a large number of irrigation projects has been undertaken to bring more area under irrigation to increase crop production. The important projects are

the Hirakud project, Salandi, Delta Irrigation projects. The net irrigation potential created by the end of 2000-01 from all sources was 25.20 lakh hectares, which is 42.71% of the total irrigable land of Orissa (Economic Survey; 2000-01).

The Hirakud Dam was constructed in 1956 at Sambalpur across the river Mahanadi. The left canal of this dam is called Sasan Canal, which irrigates 27,200 hectares in Sambalpur district. The canal from the right dyke is called Baragarh canal and it irrigates 1, 24,800 hectares covering portions of Sambalpur district and Binka and Sonepur areas of Bolangir district. The construction of Salandi dam at Hadagada of Keonjhar district and main canal head workout at Bidyadharpur (Keonjhar) were completed in 1976-77. The canal system, which was constructed in this dam, has the cultivatable command area for 47,170 hectares; area to be irrigated during *Kharif* in 47,216 hectare and during *Rabi* is 18,409 with total annual irrigation of 65,625 hectares. While the blocks like Bhadrak, Bonth, Tihidi and Basudevpur are irrigated from Salandi left canal, the blocks like Bhadaripokhari, Bhadrak and Bonth are irrigated from the right canal system. Simulia and Kharira blocks of Balasore district are also irrigated by this project. The study village Jagadapur of Bhadrak block is irrigated from Salandi left canal. Upper Kolab project is constructed across the river Kolab that originates in the eastern ghat mountains in the district of Malkangiri. It envisages irrigation intensity of 193%, *Kharif* 100%, *Rabi* 54% and summer 39%.

Since the development of agriculture mainly depends on irrigation facilities, apart from these sources of water supply the Government of Orissa is taking all possible steps for expansion of irrigation facilities.

It has been assessed that, out of 65.59-lakh hectare of cultivable land in the state, 59.00 lakh hectare, can be brought under assured irrigation through different types/sources of irrigation. After Independence, large number of irrigation projects have been undertaken to bring more area under irrigation to increase crop production. The irrigation facility has been made in three ways, major and medium irrigation 39.50 lakh hectares. Minor irrigation (flow) 9.70 lakh hectares and minor irrigation (lift) 8.87 lakh hectare. Coming to the situation of Orissa, the irrigation system is shown in Table3: 4

Table 3: 4 Net Irrigation Potential in the State through Different Types of Sources

(Area in Thousand Hectors)

SI NO.	Irrigation sources	Irrigation potential created up to end of				
		1996-97	1997-98	1998-99	1999-00	2000-01
1	Major and Medium	1067.83	1102.40	1142.79	1155.67	1176.14
2	Minor (flow)	422.79	434.63	439.01	441.35	450.37
3	Minor (lift)	314.24	325.04	323.16	330.54	335.93
4	Other-sources*	539.10	547.44	555.36	557.72	557.92
Total		2343.96	2409.51	2460.32	2485.28	2520.36

*Includes water-harvesting structures, irrigation sources created under million Wells Scheme and other schemes of Panchayati Raj Department, minor (lift) sources created from loans from co-operative institutions etc.

Source: Economic Survey 2001-2002

In recent years, the Government has been laying emphasis on drip irrigation system for the development of crop husbandry in agriculture. Till 1994-95, the Government of India used to provide 50% subsidy with a maximum amount of Rs. 50,000 for the establishment of drip irrigation system in farmers' orchards. The remaining 50% of cost was to be borne by the beneficiary. After 1994-95, this 50% subsidy is being shared at the rate of 45% and 5% by Centre and State respectively.

The Government of Orissa's view to provide equitable, timely and assured irrigation has resulted in the introduction of the concept of "Pani Panchayat" scheme through farmers' awareness programmes in its entire irrigation project. The geographical extent of the programme covers the entire state comprising of about 16.00 lakh ha. Of major, medium and minor irrigation command areas in all the 30 districts of Orissa. This reform precept involves a decision making approach through farmers participation. Moreover, to provide irrigation to farmers with less expenditure and in short time, the scheme of Biju Krishak Bikash Yojna (2000-2005) has been implemented. In this scheme, the farmers of K.B.K. districts would bear of expenditure of this scheme, where as remaining districts farmers would bear 20% of the total expenditure of this scheme.

AGRICULTURAL TOOLS AND EQUIPMENTS

The tools and equipments are needed for agricultural operation. In Orissa, many types of tools and equipments are in use from ancient time. Before independence, the agriculture of Orissa was not so developed; bullocks and plough were the most important sources of farm power. With increased emphasis on improved agriculture to reduce the drudgery in farm operations and to make these more efficient, improvements in tools, equipments and farm machineries was thought more important. From mid-sixties with the introduction of high yielding varieties, all round development in research and development in the field of agriculture started with the financial help of World Bank. Intensive agricultural development work started from 1977-78 in the state. During past 30 to 35 years, many useful tools and equipments and farm machineries have been designed, fabricated, manufactured and supplied to the farmers. Many of those have been found very popular, while others are yet to make a dent in farmer's mind. Use of threshers (manual, electric), power tillers, tractors, and motor pumps are increasing rapidly. But the use of trans planter, seed drills, fertiliser drills, seed -cum fertiliser drills, puddler has not become popular because these are heavy for the low drought power bullocks, and are costly and do not perform well in the field conditions.

Although the irrigation system of Orissa is to some extent better, the mechanization of agriculture is not so developed. In the case of mechanization, it is far from some states like Punjab, Haryana, A.P., and so on. Except some few places of costal districts along with undivided Sambalpur district, in most of the places, the traditional tools and equipments are playing dominant role in the agricultural activities.

Land began to be considered as the most valuable asset for man from the very day he started setting down by forgetting the nomadic way of living. When he came to live upon agriculture, the desire for possessing land automatically dominated his mind. In ancient times, there were only two types of owners over land namely the ultimate owner and the occupier or immediate owner. The two fold concepts of ownership over land; soon become three fold, namely (a) the ultimate owner, (b) the mediate owner, and, (c) the immediate owner. With the Muslim invasion in 11th century, the mediate owners turned into the inter mediaries in the tenancy system. With the grant of Diwani of Bengal, Bihar, and Orissa to the Est. India Company on 12-08-1765, the company made

its appearance as an intermediary in the tenancy system of India. In 1772, the company appointed a committee of circuit to make land settlement by auction to the highest bidders for a period of 5 years. In due course the Bengal Permanent Settlement Regulation of 1793 was introduced and estates were settled with Zamindars. The Northern Districts of Orissa came under the companies rule 1803 and only a temporary settlement for 5 years was taken in 1822. The Southern districts of Ganjam and Koraput were covered under the Madras permanent Settlement Regulation 1802. Apart from Zamindari system, the British government had introduced Mahalwari and Rayatwari.

SYSTEM OF LAND REFORM IN ORISSA

After Independence, the Government of India has taken a lot of steps in order to bring certain reforms in traditional landholding patterns, which India had inherited from the colonial administration. To achieve primary aims of land reforms, namely social justice and efficient utilization of land resources measures like a) abolition of intermediary interests, b) regulation of rent, security of tenure to tenants and share croppers, c) conferment of ownership right on share-croppers, sub-tenants, temporary lessees of vested estate, d) imposition of land ceiling on agricultural landholding and distribution of surplus land to agricultural workers and small holders of land, e) consolidation of landholdings and preparation and updating of land records have been undertaken in Orissa.

These major laws, to remove the drawbacks of the early agrarian system, have been enacted in the state since independence. The Orissa Estate Abolition Act, 1951 was introduced to abolish all intermediary interests in between the state and the tiller of the land, and to bring the tenants under direct control of the state. After that, in 1960, the Orissa Land Reforms Act was introduced, which deals with the rights and liabilities of ryots, subtenants, sharecroppers, regulation of rent and finance, and distribution of surplus agricultural land. In fact, this Act brought about reform primarily in tenancy system, which centred around three major areas of agrarian structure. These are: (i) security of tenure (ii) conferment of right of ownership on tenants and, (iii) regulation of rent. This law provides the maximum rent payable by a tenant should not exceed the crop value. According to 6th 5year plan, "maximum rates of rent have been fixed at a level, not

exceeding one fourth on one fifth of Gross Produce in all states except in some states like some areas in A.P., Punjab, Haryana". A tenant can be evicted due to following grounds I) Failure to pay rents II) failure to cultivate land. The Consolidation of Land Holdings and the Prevention of fragmentation of Land Act, 1972 provides for consolidation of fragmented holdings. The ceiling legislation aimed at minimizing the gap between the rich and the poor in the matter of ownership of land and to provide the landless a permanent base to improve their economic status by taking up land-based and other supplementary income generating activities.

As stated earlier, development in Agriculture holds the key to the overall development of the State. With this view, the Government of Orissa has decided to give agriculture the status of Industry. For the first time in history, the Government has taken the revolutionary step of announcing a bold Agricultural Policy, which sets the agenda for growth.

The main objectives of State Agricultural Policy are as follows:

- To double the production of food grain and oilseed crops,
- To enhance the status of agriculture from the present level of subsistence agriculture to a profile, commercial venture, so that the young persons can accept agriculture as a means for self employment,
- To generate adequate employment opportunities,
- To make agriculture the main route for poverty eradication,
- To make the knowledge of modern farming system available at the door step of the farmers,
- To adopt integrated programmes for problem soils such as waterlogged areas, areas with soil erosion, dry/rain fed areas, areas under shifting cultivation, wastelands, saline and alkaline soils etc.
- To create entrepreneurship in the field of Agriculture,
- To create skilled labourers for management of modern agriculture,
- To help mechanization of agriculture for increased productivity,
- To establish Agro-based Industries and Food Processing Industries,
- To be self-sufficient in the production of fruits, flowers, vegetables, potato and onion, milk, egg, fish and meat,

- To increase areas under Tea, Coffee, Rubber, Cashew and other Plantation crops,
- To provide irrigation facilities to 50% of cultivable land through completion of incomplete irrigation projects and promotion of individual and group enterprise,
- To take up extensive training in the field of agriculture and related activities,
- To promote private enterprise in the marketing of agricultural produce,
- To identify and promote thrust crops in the different agro-climatic zones of the State,
- To re-orient agriculture towards export.

In modern context, research and extension can be said as the primary factors for the development of agriculture. In this context, Orissa University of Agriculture and Technology (OUAT) have been established in order to address the above matters. The OUAT, the only such University in the State has the integrated triple roles of teaching, research and extension education for the State. Moreover, the Government of Orissa, along with Central Government, has implemented several agro-based projects in enhancing agricultural development in the State. These are like OADP, NARP, IADP, ORP, CAP, and SPIRP etc.

Moreover, there are number of World Bank Sponsored, Central, State and ICAR research and training institutes in Khurda which cater to the needs of the farming community directly or indirectly through Regional Research Stations, Krishi Vigyan Kendras, Adaptive Research Station, Agricultural Training Centre etc. Recently, the National, Agricultural Technology Project (NATP), sponsored by WB has been formulated to address specific system constraints, weaknesses, and gaps in research and extension with a thrust for bringing about reforms in agriculture through research and extension.

Thus, as stated earlier, agriculture is the main stay for the population of Orissa, where 85% of the population depend on it. There is a shift in agriculture from mono-cropping pattern to multi-cropping pattern in Orissa; moreover, the use of HYV seeds has accelerated the process of agricultural production in the State. For example, there has been a remarkable change in rice production from 520 k.g. per hectare to 1041 k.g.; in the year 1951 and 2001 respectively. Coming to the water resources and irrigation

facilities, it states that the State has achieved a progressive change by irrigating its 47% of the cultivable land. It has been observed that the irrigation facilities in 1951 were 1.54-lakh hectare where as in 2001 it is 25-20 lakh hectare. Thus, there is a remarkable development in irrigation facility to the cultivable land. There is also an increased use of fertiliser in the field of agriculture from 1 k.g. per hectare to 49 k.g. Per hectare in the years of 1951 and 2001 respectively. Moreover, in the year of 2001, the total consumption of fertilisers of the State is 319.21 thousand million ton. The agriculture in Orissa to some extends replaced the manual pattern to mechanical pattern, which is confined to the coastal belt of Orissa and undivided Sambalpur district. Along with the features, the agricultural policy of 1996, the research and extension programmes, have brought about a change in the field of agriculture in Orissa. Though Orissa does not come under the category of intense modernization in agriculture like Punjab, Haryana and Tamilnadu, the sign of green revolution has been prominently shown here.

CHAPTER IV

TRADITIONAL JAJMANI RELATION AND THEIR TRANSFORMATION

An institution is an organizing system of social relationships, which embodies certain common values and procedures and meets certain basic needs of society (Hutton, 1964:206). In other words, man form the social relationship in society to meet such basic needs as stability, law and order; and clearly defined roles of authority and decision-making has created social institutions. Institution in rural society is another form in which society may operate to meet its needs and fulfil other functions. Generally, there are five major institutions in rural society, which have emerged because of such needs: these are political, educational, economic, family and religion.

Among them, economic or maintenance institutions provide basic physical subsistence for society and meet basic needs like food, shelter, clothing and other necessities. Under the economic institutions of production, agriculture, industry and the distribution, exchange and consumption of commodities, goods and services play important roles for human survival. Economic institutions not only produce wide variety of relationships in various parts of the world, but also exist in the rural society. The important systems of economic institution, which are regulating within the rural society, are such as credit and banking systems, co-operatives, etc. The present study focuses on the *Jajmani* relation which is the inter dependence service system, among various *jati*, that plays a significant role in progress and continuation of Indian society.

Jajmani relation is very unique and important feature of traditional village life in India. Under this system, the patrons, who are entitled to receive specialised services from certain *jati* are called Jajmans and the persons rendering these services are called the Kamins. Although the term *Jajmani* is mainly applicable to Hindi speaking parts of India, the network of relations under the system is known by different names in different regions of the country: *Ay am*, *Adade*, *Baluti*, etc. The use of the concept *Jajmani* as a system of mutual interaction between *different jati* in Indian villages started with Wiser's publication, 'The Hindu Jajmani System' (1936). Harper, defining the *Jajamani* system,

said that it is a network alliance between different groups of individuals, following different occupations and living within a contiguous geographical area, to exchange their products and services directly with one another (1959).

Before going to describe the traditional *Jajmani* relations and their transformation due to the changing agricultural practices, it needs clarification regarding *Jajmani* relation as much an aspect of agrarian relation as of inter *jati* relations. Some argue that the term *Jajmani* applies only to such relations in the term of rituals (Pocock, 1962). But, by confining the term's scope only to ritual, we tend to ignore an important aspect of hereditary inter-caste service relationships; namely their secular characteristics (Karanth, 1987). Such secular services, significantly, are also included by the people themselves under the *Jajmani* system and they are engaged for grain under the same principle as in the religious aspects of *Jajmani* relations. In the present study, some specialists, who render both secular and religious services, are viewed as part of *Jajmani* relations.

It is normally assumed in anthropological literature that *Jajmani* system is defined by relationships between land owing Patron and Client households (Fuller, 1989). Beidelman correctly notes that caste duties and land holding are the bases of these relationships. The essence of *Jajmani* system lies in the exchange of grain and other materials benefits for economic and ritual services (Beidelman, 1959). *Jajmani* is conceived as a "system of distribution in Indian villages where by high caste land owning families called Jajmans are provided services and products by various lower castes such as Carpenters, Potters, Blacksmiths, Water carriers, Sweepers and Laundrymen. Purely ritual service may be provided by Brahman priests and various sectarian castes and almost all servicing castes have ceremonial and ritual duties at their Jajman's birth, marriage, funerals and at some of the religious festivals" (Kolenda, 1963:11). The above views given by different scholars regarding *Jajmani* relations show that the *Jajmani* relations are largely based on land. In the absence of land, it is quite difficult to think about *Jajmani* relations.

Whenever the question of *Jajmani* relations comes, it is understood as the relations among the land holding households and service *jati*. But at the same time, other aspects should be looked at, where the service *jati* serves the community as a whole. On

the basis of the empirical evidences, the present study proposes that Jajmani relations should not be looked at as a unitary system, but could be further divided depending upon the complex nature of service relations between the Jajman and the service *jati*. So, on the basis of the nature of service relations between the Jajman and the service *jati* the traditional *Jajmani* relation have been classified into two categories.

(A) Community level services

(B) Household level services

COMMUNITY LEVEL SERVICES

The distinguishing feature of this category of services is that the specialists render their services to the village as the corporate whole. In return, they are generally given land grants for cultivation for specific tenure. In addition to this, particular land owning households of the village pay the functionaries some amount of grain and a bundle of straw.

Priest

There are two temples in the village. One is the temple of Lord *Siva* and another one is the temple of the village Goddess *Khara Khai* (grama devati). Since the establishment of these temples, the priests belonging to the *Mohapatra* family have been rendering services. Presently, in the study village, there are two such priestly households, each serving for a year in rotation. In return of their services, each of the household has been awarded 1 acre of land, by Jaga Dhala, the founder of the temple. According to their routine, they offer *puja* to the deities. The service of the priest is oriented towards the entire village. The priests officiate for everyone by accepting their offering.

Astrologer

The service of the *Jyotisa*(astrologer) was hereditary in nature. He was not only servicing the individual households but also the community as a whole. But there was no land grant in return of his services. He used to receive grains and cash from the villagers for the same.

No *Jyotisa* was residing in the village. A *Jyotisa* used to visit the village in between *Holi* and *Pana Sankranti* (March-April). This kind of practice was there till the

mid 90's. All the elders of the village were gathered near the village deity to listen to the *Jyotisa*. The *Jyotisa* traditionally read out to the villagers the forecast for the year from the *panji* (almanac) about the adequacy of rain, the position of *megha* and colour of the paddy, which would yield better. He also indicated the auspicious time for the observance of *Halasutra* festival (first ploughing). The individual fanner also consulted the *Jyotis* to know the auspicious time for commencement of the different agricultural tasks. In return of his service, the *Jyotisa* collected 1 *pudi* rice (1 K.G.) from each villager. Some also used to pay him in cash.

Service Jati

This includes *Pana*, *Hadi*, *Kumbhar*, *Dhoba* and *Barikajati*. During the period of *Pana Sankranti*, *ajatra* named '*Patua*' was organised by the villagers near the *Gram Devati*, where some of the *Pana* people acted as *Patuas* and *Hadi* as drummers. The post of '*Pahili Patua*' was completely hereditary in nature. In return of their services, the *Patuas* received some amount of grains and straw from every land holding household of the village, and the '*Pahili Patua*' received one acre of land. No drummer received land. They were receiving grain and straw from the villager during the time of harvesting. One *Dhoba*, who was given half acre of land, was washing all the clothes of Gods and Goddesses during the time of festivals. One *Barika* household also received half acre of land. He was collecting all the materials of *puja* and was also informing the news of this *puja* to all the villagers.

In the village, there is one *Behera* belonging to *Pana jati*. Previously he was working both as *chaukidar* and as a messenger. For which, he used to receive half an acre of land as a grant. But now a days, he is working as messenger only. Whenever some meeting is held in the village, his duty is to inform the schedule to all the members of the village.

HOUSEHOLD LEVEL SERVICE

In this category, the specialists perform certain specified tasks for the land holding households. These specialists are paid in kind like, fixed amount of grain and other things. This category includes three distinct types of relations: (i) Land lord-

purohita, (ii) Land lord- service. *Jati*, (iii) Land lord- agricultural labourer relation. This kind of *Jajmani* relations is also mentioned in James Lerce's study in coastal Orissa.

(i) Landlord-Purohita Relations

For each landlord household in the village, a Brahmin *Purohita* performed the rituals needed. Sometimes, he was also consulted on special occasions like illness and other types of distress. Most of the landlord households in the village were taking the help of the *Purohitas* to officiate *Puja* to their household deities. In return, the *Purohita* used to receive three types of prestations, i.e. *Dana*, *Dakshina* and *Barshika*. In the study area, among these prestations, *Dana* is considered as the most important one, which includes a cow, a piece of land, gold and silver, etc. *Dana* is always given in the context of ritual actions that are sate to promote the well being and auspiciousness of the donor, through the transfers of vice (papa), afflictions (Kasta), faults (Dosa), and inauspiciousness more generally from donor to precipitant (Raheja, 1990:82). The *Purohit* had an obligation to receive the *Dana*, where as the *Jajman* had a right to give the *Dana*. Raheja, in his study in Pahansu, said that *Dana* giving is the constituting element of the ritual centrality of the farming caste, and hence one of the basic structural principles operating at the village level. He argues, *Dana* prestation is giving to all service *jati* as well as to the *Purohita* at the most ritual occasions related to the life cycle and agrarian cycle. But, the present study shows that the *Dana* is mainly related to the *Jajman- Purohita* relation, which is also shown in the case of Jens Lerche's study in coastal Orissa. Except the *Purohita*, *Dana* may be given to a household's relatives. But no other *Jati* in the village receives *Dana*. Generally, the death rituals are the occasions when the *Dana* prestation are made. But prestations giving at auspicious occasions such as wedding are not simply looked as *Dana*. Soon after the completion of the rituals, the landowners give *Dakhina* to *purohita*. As it was revealed at the time of interview, most of the landowners said that there was a belief among them, that as soon as they didn't give *Dakhina* to *Purohita* the *Puja* did not produce any fruit for them. The value of *Dakina* was depended on the benevolence of the landlords. It was given in the form of kind or cash. The third type of prestation, which was given to the *Purohita*, is called *Barsika*. It was given to the *Purohit* at the time of harvesting. The *Purohits*, who had

Bartan relation (Jajmani relations) with the landlords used to visit the grain yard of farmers to collect grains.

(ii) Landlord-Service *jati* relation

Jati with non agrarian traditional trades are commonly called "*Servicing jati*". On the basis of the relationship of landlords, these servicing *jati* of the village can be divided into two groups. The first group consists of such *Jati* with whom the landlords had permanent *Bartan* relation (Barika, Dhoba, Kamar, Badhei). The second group consists of all other service *jati* such as potter and goldsmith, whose services were not in regular demand and had no hereditary relationship with the landlords. The latter were not rewarded annually, but rather on the occasions, when their services were required. Pocock, in his study on *Jajmani* relation, had divided the service *Jati* into two groups. The group 1 covers those who provide service (Barber and Washer man) and the group 2 covers those who provide commodity (Potter and Goldsmith).

Apart from their services on ritual occasions, each household of these service *jati* was performing its everyday services for the same specific land holding household. In return of their services, the service *Jati* households received certain payments, which can be divided into three types such as (1) Annual grain payments to a specialist engaged on a permanent basis; 2) Payment of cash, grain or both on a special occasion, to a specialist permanently engaged; 3) Payment of cash or grain on a piecework basis to any specialist. Gould (1964: 16) makes the same distinctions in his discussion on a North Indian village. Except these, Gould also includes payment by exchange of services, particularly by artisans. Kolenda (1963:11-51) in his study has highlighted three kinds of payments. These are: "Formal" which are fixed grain payment after harvest; "consideration" like free food, clothing, fodder, etc; and "Informal emoluments" such as extra amount, gifts, grains, etc. These payments were generally fixed on the basis of established conventions and traditions. Nevertheless, there existed a few exceptions as far as various kinds and quantity of payments were concerned. Even in this traditionally fixed system of exchange, the quantity of grains paid considerably depended upon the size of land holding, the social status and the financial position of the family. Apart from these payments, the permanent service *Jati* people were receiving some other things like free

food, clothes, free wood, credit facilities, free residence site, etc, from their Jajmans. But this completely depends on the sweet will or benevolence of the landlord.

Before 1970s, there was only one *Barika* (Barber) who served this village as well as the near by villages. Hence, his total earning was sufficient for his livelihood. The landlords, who were served by the *Barika* paid, him a fixed quantity of paddy that is 3 Pudi Paddy (1 Pudi = 3Kg.) per married male in a family. The rate was fairly well, standardised throughout the area and did not appear to change markedly from generation to generation. The *Barika* did not charge for cutting hair of unmarried persons. But families indebted for this service often made him gifts some times by request, some times voluntarily. In addition to the shaving and hair cutting, the *Barika* performed several ceremonial roles. In the life cycle rituals, the *Barika* was given a gift, which consisted of a small amount of cash, a piece of cloth, and ingredients for a meal. The exact content and the quantity of a gift was neither standardised nor bargained over, but depended upon the wealth and whim of the donor.

Presently, four *Dhoba* households are residing in the study village. 3 of them are brothers; one among them is not engaged in his *Jati* occupation. But before 70's, there were only two households, who served this village as well as parts of two nearby villages. There was a customary relationship between these two *Dhoba* and all the landlords of the village. The *Dhoba* were washing the clothes of landlords, and in return, they were rewarded. Due to some problem, one *Dhoba* decided to visit his daughter's home for a few months and he engaged one of his young sons to carry on his duties during his absence. Though the landlords were satisfied with their own *Dhoba*, they found the services of his son highly unsatisfactory. Therefore, they invited another *Dhoba* who belongs to other village. However, none of the *Dhobas* of the study areas were prepared to take over the job. They all regarded it as the privilege of the customary *Dhobas*, who in turn had the right and the duty to provide a substitute when they were absent. In fact, all the washer men of the study area boycotted those landlord households who had invited another *Dhoba*. This case shows that there was a strong relation among the service *jati* people. No landlord can change his customary service *jati* people without consulting the village community as well as the respective service households. Regarding serving the Jajman households, the washer man's wife was cleaning

menstrual clothes and postnatal clothes of the women. Every morning, the washer man's wife was going round the village to pick up menstrual cloths of women, which were put away in a corner of the front yard. Apart from this, they were helping the landlord households at different rituals. In return of these services, she was paid five puddies of rice and one bundle of straw per one married couple in a home.

No landlord households had *Bart an* relation with a *Bania* (Gold Smith). But they had particular permanent relation with him. Whenever they needed, they went to a particular *Bania*. The most ritual function performed by *Bania* was to pierce the ears of children and noses of young girls. Members of all landlord households traditionally paid for their services either in cash or in paddy.

No landlord households of the village had *Bartan* relation with *Kumbhar*. But their relations were hereditary. According to the demand of the landlord households, the potters were visiting their houses. During the time of rituals, the landlord households were giving the betel nuts to the potters. They were supplying vessels for the life cycle ceremonies. In return of their services, the payment was made either in cash or in kind.

Presently, 2 *Kamar* (Blacksmiths) households are residing in the village. Both of them are cousins. About 30 years back, the village had only 1 *Kamara* who served all the households in the village for the *Bartan*. After his death, his son and his sister's son had been continuing his traditional works. They were engaged in both carpentry and blacksmith work. They were making ploughs, sickles and other agricultural implements according to the demand of the landlord households. Sometimes, they were also sharpening the agricultural tools. Making and repairing the tools were generally held prior to the commencement of the agricultural season, and again, during the harvest operation. All these *Kamar* households had hereditary and *Bartan* relation with the landlord households. Traditionally, the quantity of the grain paid to the *Kamara* was related to the number of plough owned by a landlord. For one plough owned, a landlord paid 5 puddies of grain and one bundle of straw.

(iii) Landlord and Agricultural Labour Relation

Around 15 years ago, there was a close relationship between the landlord and agricultural labourers. In the study village, the agricultural labourers are popularly known as *halia*. These *halia* belong to untouchable *Pana jati*. However, some *halia* belong to *Khandayat jati*. The relationship that existed between landlord and *halia* was completely different from the relationship existed among the landlord and service *jati*. The *halia* worked only for one landlord and continued it till the end of the contract. Most of them worked till the end of their life. Their relation was purely concerned with non-ritual services.

Halia generally stayed in the landlord's house. Some of them were staying at their own house. They were working at landlords' land since morning to evening. In return of their services, some received a small piece of land to till. They need not had to provide share of the income to their landlord. When the contract terminated, they returned the land to the concerned owner. Apart from it, they used to receive free food, clothes, money and other things. The labourers' wife and children were working in the landlord's house. No doubt, the landlord was maintaining dominance of power over others in the village, but the agricultural labourers were getting lots of benefits from the landlord's household. When some *halia* fell ill, and could not do any work, the master gave him food everyday. Sometimes, the master allotted him a site to build a hut and supplied required materials for it. Each year, the agricultural labourer received some clothes from the landlord. To some extent, the landlord was liberal towards his servant. The *malika* (landlord) did not have employment for his *halia* throughout the year, certainly not for all of them. When there was little or no work for a *halia*, he was allowed to work somewhere else and keep his earnings. If the *halia* involved in a dispute with others, whether untouchable or not, his *malik* helped and supported him during meeting. Similarly, he also helped his *malik* in any problem. For his *malik*, even he was ready to enter into controversy with his *own jati* people. As was revealed at the time of interview, most of the labourers said that their *malika* were looking after them like their own son and they were calling the mausa as *kaka*. Under this system of relation, *halias* were feeling secure. Both of them were getting benefits. While *mulia* was getting assurance of

minimum subsistence level in poor harvest, the *malika* was getting the assurance of labour for cultivating his land.

CHANGE IN TRADITIONAL RELATIONS

As already mentioned in the beginning of this chapter, *Jajmani* relation is an agro-based rural social institution. So, any change in agricultural practice will undoubtedly bring alteration in this relation. But the question is to what extent this vicissitudes have occurred and whether it is necessarily disappeared or it reshapes in a different form with an accommodation to changing practices.

COMMUNITY LEVEL SERVICES

After the advent of agricultural modernization, these traditional *Jajmani* relations are found to be operative more often in services that are oriented towards the community as a corporative whole than in the household level services. The *jati*, who serve to the community as a whole, are usually rewarded with land, which may be said to encourage them to inherit their services. Even today, the service *jati* people like *Dhoba*, *Pana* and *Barika* who had received the temple land, are working at the time of festivals. Now a days, the *Pana* and *Hadi jati*, who used to be paid in kind for their services in village festivals, are not participating in it as before for current irregular payments. Most of the farmers are cultivating cash crops instead of subsistence crops. They are doing it only for market, to get more profit. So, they are not in favour of exchanging this crop with their hereditary service *jati* people. They are much more interested to give cash instead of giving kind to their *Kamins*. For this, these *Pana* and *Hadi jati* people are hardly getting grains and straw from the landlord households of the village.

Household level services

Landlord-Purohita Relation

Recently there has been a decline in the traditional landlord and *Purohit* relation, due to the introduction of tractors, power tillers, cash crops, multi cropping system and high yielding variety of seeds (HYV). Most of the Brahmins organise agriculture for subsistence. Only two Brahmins are continuing with their traditional profession. Now-a-

days, no single *Purohit* of the village goes to any landlord's house to bring *Barshika*. But they have *Jajmani* relations with the landlords. During the time of the rituals, the *Purohit* goes to his *Jajmani* house and takes *Dana* and *Dhakina* in the form of both kind and cash.

LANDLORD-SERVICE *JATI* RELATION

The introduction of irrigation during 1980 enabled its inhabitants to raise commercial crops in large quantities. This tendency of raising cash crops instead of subsistence crops has brought significant change in the traditional payment in *Jajmani* relations. The introduction of mechanization, new technology in the form of HYV seeds, fertilizer and irrigation development have brought a significant change in the amount of agricultural production. The rise of market price of wage, fertilizer and other means of production has raised the cost of production. Rise of the cost of production, on one hand, and decrease of the profit of production due to lack of marketing facilities, on the other hand, have influenced the traditional system of payment. The landholding service *jati* people are not in favour of payment in grain due to its low price. They prefer cash because, along with paddy, they can buy other things, which the landlord cannot relent to. Two *Dhoba* and one *Barika* respondent revealed that the amount of grain given by the landlord was not sufficient to buy the other commodities, which one was able to get previously.

The application of modern technology to agriculture has brought a significant increase of production. Day by day, the landlords are becoming rich. But, for *Barika jati* people, the annual reward in terms of kind has remained the same. The kind of consistency in payment forced these service *jati* people to approach the landlord for an increase in the annual reward. But their approach was futile. The landlord argued that the elders in the distant past had fixed it and they saw no reasons to increase the quantity of agricultural product given annually. Due to their low economic condition and powerful village community, these *Barika* households had no way to leave the traditional relation with them. So, in addition to their traditional service, they searched for other jobs. In order to raise their income, two of the households established salons in Ranital market and started to provide services to their customer in return of cash. The payment of cash

to the *Barika* has *affected* their relations with some of the landholding households. As a result, the latter cut off their *Bartan* relation with the *Barikas*. But the ritual relation is continuing till now. Today, the elder members of the family are also visiting to the salon of the same *Barika* with whom they had *Bartan* relation. But, for shaving, they are now paying cash. The introduction of multi-cropping pattern made some of the landlords busy in their cultivation process. Due to the hectic schedule of the cultivation process, the landlords find it inconvenient to get their hair cut in Ranital town. Another reason of inconvenience is that hair cut cannot be done everyday according to a belief system and have to wait for an auspicious day. Apart from these, the farmer also takes care of their working schedule, which should allow them to visit the town. Due to the above reasons, 6 landholding households belonging to the *Brahmins* and *khandyata* have again started their age-old *bartan* relation with *Barikas*.

The mechanization in agriculture around 90's has compelled most of the *Hadi* people to take up jobs elsewhere. These *Hadi* people were traditionally agricultural labourers and drum beaters. Previously, these *jati* people had no *Bartan* relation with any single landholding households. They were visiting some of the landholding Brahmin houses during the *Dola purnima*. Their role was to beat the drums in a procession of God and Goddess. During the later 90's, around 70% of the *Hadi* people temporarily left the village. While some of them left with their family members, some left alone. As a result, Brahmins faced problem to get the service from the drumbeaters during the *Holi*. In order to solve this problem, 2 Brahmin households of the village gave 2 acres of land to 8 *Hadi* households. Therefore, good relation is now established among them in the village.

The advent of modernization in agriculture has badly affected the landlord and *Kumbhar* relation. Even a single *Kumbhar* in the village is not receiving his payment in terms of kind. The low price of paddy has reduced their interest to exchange their product with grain. All the *Kumbhar* households have their own land, which are sufficient for their survival. So, for survival, they do not depend on grains in exchange for their production. They need it for extra benefit. But still the tradition of receiving the pots at the time of life cycle ritual is going on with the same hereditary *Kumbhar*.

Presently two *Kamara* households reside in the village. The absence of *Badhei* households in the village had compelled these *Kamara* families to work both as *Badhei* and *Kamara*, especially during the last two generation. The development in agriculture has been worse for the *Kamara cum Badhei* than for other service *jati* within the *Bartana* relation.

The introduction of developed irrigation system, cash crops and multi-cropping pattern during the 80's increased the workload of the *Badhei* in relation to agriculture. It is found that *Badhei* was kept busier by their landlord clients than they had been prior to irrigation. Following irrigation, the lands under this study area required more and deep ploughing. Landlords, therefore, had to replace their customary wooden ploughs with iron ones. Not only did these need more maintenance than wooden ploughs, but also demanded greater repair skill. The *Kamara*, who had hereditary relations with the landlords in the village, found that he had to learn how to repair the new iron ploughs. He also found that he was kept busier by his farmer clients than he had been prior to irrigation. Yet, his annual reward in kind remained the same. When he approached the peasant elders about an increase in the customary reward, they flatly refused it. They argued that their elders fixed it in the past and they saw no reason to increase the quantity of agricultural products given annually to *Badhei*, since it was still adequate to feed his family.

Then the *Badhei* carefully considered his position and decided to conclude his hereditary *Bartan* relation with the landlords and thought of working for cash. However, when he proposed his decision to older landlords, who composed the village panchayat, they opposed his suggestion most strongly. They pointed out to the *Badhei* that relations, which had lasted through generations, could not be broken off at one stroke. The landlords of the village threatened that if the *Badhei* refused to perform his customary duties, they would make his life in the village pretty much impossible. They also suggested that if the *Badhei* could find another one who could carry on the traditional relations on the customary terms, he himself would then be free to work, as he liked. The *Badhei* managed to find a *Badhei* from another village who was able to take over his work. Thereafter, the new *Badhei* repaired the wooden ploughs and other traditional tools for which he received his annual reward of a fixed quantity of agricultural product..

But the mechanization of agriculture in the form of tractor and power tiller brought a greater loss to the *Badhei* in the village. The introduction of tractor replaced the importance of *langal* in agriculture. It further led to decrease in the amount of plough work for the carpenters. This mechanization brought a great loss to the *Badhei* on one hand and, on the other hand, it benefited the rich farmers. The low price of fertilizers, pesticides, wages and the developed irrigation system with HYV seeds helped these rich landlords to be richer.

In the study village, the *Badhei* benefited indirectly from the increase in the wealth of the landlords and from the related change in their life style. The increased wealth encouraged the farmers for the construction of new buildings, which ultimately helped the *Badhei* to take up furniture production and house construction. This became the main source of their income. Indeed, this shift towards the production of furniture helped *Badhei* a lot to enhance their status. The commercialisation of agriculture also indirectly helped carpenter to raise their status by reducing the distance between the market and the village.

However, the *Badhei* were able to take the advantage of the availability of cheap wood and market connections to the Bhadrak town, which is 10 k.m. away from the village. But these opportunities also did not exist on a long-term basis. The introduction of company made cheap and designed material raised the farmer's demand for it. So the demand for local *Badhei* production decreased, which ultimately reduced their economic status. In order to adjust themselves to the changing situations, most of them were compelled to leave for urban areas. As a result, most of the young *Badhei* of the study area are now working in furniture production centers in different cities. This kind of labour migration have reduced the emotional attachment among the family members of the carpenters, due to which, the social tension have been raised among their family members.

Owing to the importance of *langal* in agriculture, the landlords had *Bartana* relation with the *Badhei*. In return of their services, the *Badhei* used to receive not only grains but also many other things. However, the mechanization of agriculture reduced all kinds of relation between the landlords and *Badhei*. As a result, even some of the

landlords in the village are not inviting the same carpenters (with whom they had *Bartana* relation) to give the final touches to their new buildings. Even all of the landlords have stopped their offering of clothes and feasts to their hereditary *Badhei* during the time of *Gahma Purnami* (August).

Now-a-days, no doubt, the introduction of machinery, use of fertilizers and pesticides, etc has affected the *Jajmani* relations. The nature and extent of *Jajmani* relation is undergoing change and it has been visibly weakened as the service *jati* people receive some cash for their services. But it has not been completely disappeared.

The following table 4:1 shows that the *Jajmani* system has not yet disappeared because 30% are still working according to this system. But they are not working with the same spirit. In social ceremonies, they work seriously. But at other time, they are free to work anywhere. Around 65% of *Barika*, *Khumbhar* and *Dhoba jati* households are taking payment predominantly in cash, where as only 31% are taking in kind.

Table 4:1 Distribution of Respondents Regarding Traditional System of Working

Category	Respond	No. Of households
<i>Jajmani</i> system	Yes	15(30.00)
	No	35(70.00)
Payment received	Kind	5(31.25)
	Cash	11(68.75)

Though due to the introduction of "new technology" in the form of H YV seeds, advanced irrigation system, fertilisers and mechanization in agriculture have cut off the landlords' *Bartan* relation with *Badhei* and *Kumbhar*, the relations among landlords and *Dhoba*, *Barika* are continuing; but not in a traditional way. Even today, every morning, the washer man's wife goes around the landlords' houses to pick up the menstrual clothes of women. Apart from *Bartan*, in return for her service, she receives cash and kind like grains. Although the service of the *Bartania Barika*, *Dhoba* during the daily life activities are not taken by the landlord households, these landlord households invite the *Bartania Barika* and *Dhoba* at the time of life cycle rituals. No body shift his *Barika* and

Dhoba with whom they had *Bartan* relation. Why do these landlords continue to invite the same specialists with whom they had *Bartana* relation? In answering this question, the landlords told that the available alternatives were not always convenient. The personal relationship involved gives confidence in the workmanship of the *Bartania* specialists and ensures fulfilment of specific requirement. Yet, another reason is that the new one can charge high, where as there is no such bargaining with the *Bartania* specialists. Due to the introduction of cash crops, a very few people of the village are cultivating vegetables for the purpose of selling in market. So it is rarely seen that one gets kinds in terms of vegetables from the village.

Owing to the advent of modernization in agriculture, during the past few decades, drastic changes have taken place in the relation between landlord and agricultural labourers.

In the beginning of the modernization, the adoption of High Yielding Varieties (HYVs) of seeds, fertilizers and canal irrigation created additional demand for labour in farming. The new crop varieties required more care and attention than the traditional varieties. The modern crop husbandry demanded constant crop surveillance and effective water control at an appropriate time. The need for labour increased many fold. Larger harvests resulting from the use of new technology had also increased the demand for labourers in harvesting and post harvesting operation. The introduction of multi cropping system had also created a social tension among the farmers to meet the demand for labourers. At peak periods, such as harvesting, labour demand became more critical because of the need to clear the land quickly and prepare it for the next crop. More production, high demand and low supply of agricultural labourers enhanced the rate of daily wages from Rs. 12 to Rs. 25. Higher wages and assured regular employment at the field were major economic factors which attracted a number of tribal labourers from other regions like Balasore, Mayurbhanj, and Keonjhar. In the initial stage, in order to establish relation with landlords, the immigrant tribal labourers worked more hours with less payment. It created a problem for local labourers. They were forced to move to the cities in search of works. During that time, around 20 agricultural labourers left the village temporarily for getting some jobs in the cities. The landlords cut off their relation with traditional local labourers and bound with the immigrants, especially the adivasi

labourers. This witnessed a change in the relationship between farmers and local agricultural labourers. Earlier, these local labourers were working in the field of landlords with a spirit of *Jajmani* relation. The farmers often provided them food and payment in kind. But due to break up of the traditional relationship, now-a-days, they prefer to give payments in cash. In order to reduce their dependency on agricultural labourers, the rich class farmers adopted various mechanical equipments, like tractor, thresher, power tiller, etc, for agricultural purposes. The mechanization in agriculture changed the dependence of farmers on agricultural labourers. The tractor displaced the plough; motor pump set had replaced the moat. In this process, many agricultural labourers lost their jobs. The process of mechanisation had directly affected the employment of agricultural labourers. Most of the landlord took manual labour according to their need. As it was collected, while during 80's, 15 attached labourers were there during fieldwork; only two respondents was employed on annual basis. Before the introduction of pump set and tube wells, landlords were taking the help of agricultural labourers to irrigate their land. But due to introduction of these machines, both the local and immigrant tribal agricultural labourers suffered a lot. Most of them were engaged in some other agricultural and non-agricultural related industries. During that time, except 15 or 20 days of heavy demand during peak periods like transplanting, harvesting, etc, the labourers remained almost unemployed for the rest of the period. Some of the tribal labourers organised different labour groups under the leadership of different persons. They started to work on a contract basis, which developed a contractual relation among the landlords and labourers. There is no doubt that in the beginning of mechanization, most of the labourers were displaced. But, in the later stage, this mechanization facilitated multiple cropping by reducing land preparation time and raised yield per unit of land because of better ploughing of land. These effects generated more employment opportunities.

Along with this mechanisation, the adoption of new technology in the form of HYY seeds, fertilisers and irrigation development have brought a significant change in the amount of production, which ultimately reduced the price of grains. But, on the other hand, due to increase in of wages, cost of fertilisers and pesticides, cost of cultivation and the decrease in profits, due to proper marketing facilities, have reduced the interest of the sharecroppers to take the land on lease. The unavailability of employment

opportunities has raised the interest of the some landlords to cultivate their own land by taking the help of wage labourers and new technology. These factors again have raised the demand for agricultural labourers.

But again this rise in demand of wage labourers has created social tensions among the landlords to cultivate their own land. In the present situation, there is high competition among the landlords to get the supporting hand of agricultural labourers. The present study shows that a majority of the households feel that, the landlord and the agricultural labourers are mutually interdependent (Table 4:2). There is not a relationship of one-way dependent. Only 24.5 percent respondents said that labourers depend on farmers. But a sizeable number said that farmers depend upon labourers.

Table 4:2 Distributions of Respondents According To Dependence

Statement	Number	Percent
Farmers depend upon labourers	25	24.5
Labourers depend upon farmer	12	11.77
Interdependent	65	63.73

About the visit to each other's house, farmers knock at the door of the labourers more often than the latter do visit the farmer. The workers do not like to visit the farmer's house, if there is no work.

Table 4:3 Distributions of Respondents According To Visit

Statement		Number
Farmers visit to workers House	often	20(19.60)
	Every time	40(39.21)
Workers go to farmers' house	often	30 (29.60)
	Every time	12(11.77)

As it was revealed at the time of interview, most of the heads of the land owning households said that, now a days, the labourers are thinking themselves as *Maliks*, a farmer has to visit the house of the labourer at least twice or thrice in a day, if he has

some work with him. Due to the low price of the grain, most of the workers are interested to take the cash instead of grains. Now-a-days, it is very difficult to get a labourer who takes his payment only in kind. At the time of interview, most of the labourers revealed that they had better relations with landlord than earlier. Although, now-a-days, most of the labourers start the work after sunrise and finish it up before sunset, but some times they continue for longer hours with the request of the landlord.

From the foregoing analysis, it is revealed that the institution of Jajmani relations has adapted itself to suit the changing needs of agricultural practices. The advent of agricultural modernization has badly affected the household's level services than community level services. Within the community level services, *hejati*, who do not get any land grants, have shown irregularity in their services. An examination of *Jajmani* relations in the context of modernization in agriculture shows that this modernization has drastically affected the traditional relations among the landlords and agricultural labourers, landlord and *Badhei cum Kumara* relations. Both landlords and Kamins now give less importance to role relationships and the socio-cultural factors concerning *Jajmani*. There is also a less degree of kin-like behaviour. Money and profit are gradually becoming important considerations. This modernization in agriculture has brought mixed result among agricultural labourers. This mechanization has raised their status from attached to free labourers on the one hand, and has lost the labourer's permanent security, on the other hand. In some cases, it has also helped in the invention of contractual labourers. However, the modernization in agriculture has reduced the monopolization of landlords over labourers. Although some labourers have lost their permanent security due to this mechanization, the availability of non-agricultural jobs, on the other hand, shows that the landlord is not the only source of their livelihood. The table 4.2 and 4.3 show that this mechanization has established a dependent kind of relationship between landlords and labourers, where there is no exploitation.

This mechanization in agriculture has not brought a tremendous effect on traditional landlord and *purohit* relations. Even a single *purohit* in the village is not taking *barsika* from his Jajman's house. Still, he is visiting at the time of life cycle rituals, for which, he is taking payment in terms of both cash and kind. The modernization of agriculture has not significantly affected the traditional landlords and

service *jati* relations, except the carpenter - blacksmiths. Although some of the landlords have cut off their *bartana* relations with hereditary *Barik* and *Dhoba*, the continuity of ritual relation is there. Even in the case of secular services, most of them are taking the service of hereditary service *jati*. Those who have *bartan* relations with the service *jati*, used to pay predominantly in terms of cash rather than kind. Not a single *Kumbhar* and *Bania* in the village is receiving payment in kind. All the villagers have cut off their *bartana* relation with *Bania*. Though no single *Kumbhar* in the village is receives *barsika* from landlords, the tradition of supplying the pots at the time of life cycle rituals is going on with the same landlord.

Though, due to mechanization in agriculture in each *Jati*, some people have adapted new occupation, the economic system of the village is based on functional specialization and interdependence of different *Jati*. The basic ideology behind these relations is reciprocity as a survival strategy through occupational monopoly. Although the modernization in agriculture has mostly replaced the kind transaction with cash, it has not resulted in the complete erosion of the traditional attitude of mutual dependence between different *Jati*. The ethos and values of *Jajmani* is still continuing. In spite of modernization in agriculture, the patronage in between patron and client still survives. Even in contemporary times, the patrons of the village render economic services, gives advises, mediate disputes, use their influences with the authorities in the interest of their clients. The clients also serve the patrons at his home at the time of need. As such, it can be argued that the *Jajmani* as a form still exists, however the content of it has changed. This means that the motives and functions of different *Jati* still exist, while only the change has occurred in personal relations or in institution to institution. Whatever change has occurred that is only in the periphery of this relation, but at the core, that reciprocity still exists.

CHAPTER-V

TRADITIONAL FAMILY AND RURAL POWER STRUCTURE AND THEIR TRANSFORMATIONS

Family, which is a primary social group, is universally recognised to be the basis of all human endeavours and activities. The concept of family is been found to exist since time immemorial and at all levels of human cultures. However, it has been believed that it would be impossible to conceive progress of man without a family organisation. In social sciences, especially in the field of Anthropology, Westermarck (1891) was the first scholar to emphasize on the supremacy of family. His book "The History of Human Marriage" aroused great interest among the scholars and social scientists about the concepts of marriage and family. The concept of the joint nuclear dichotomy of family is usually based on the mode of family organisation. While the nuclear family is defined as a group consisting of spouses and their unmarried children, the joint family is defined as the nuclear family along with all the kin belonging to either side of the spouses living in one home.

Joint family is one of the most important pillars, upon which, the entire Hindu society is based. It is an age-old system, which is deeply rooted in traditional Hindu culture. Different scholars have defined joint family in different times. According to Irawati Karve, "A joint family is a group of people who generally live under one roof, who eat food cooked at common hearth, who hold property in common and who participate in common worship and are related to each other as some particular type of kindred"(1953:10)¹.

Since the formation of society, most of the families in India were predominantly joint in nature. The joint family system originated in India when the society was agrarian in its character, and acted as a stabilising factor as long as the societal processes remained operative in the agriculture based society. These agro-based families were dependant on their family labourers for their agricultural operation, for which they were staying together under a common roof. But when, along with industrialisation, higher

¹Karve, I, *Kinship Organization in India*, p. 10.

education, urbanisation, and the modernizing process in agriculture entered into the contemporary society, the need for joint family living was gradually felt less. Then the joint family showed the sign of decaying. In the process, it lost some of its usefulness and, in the whirlpool of change; the traditional joint family failed to maintain its original form and began to disintegrate. This disintegration of joint family does not necessarily mean its elimination or disappearance. It simply denotes that in many a case the jointness tends towards nuclearity and the number of joint households gradually coming down.

CHANGE IN STRUCTURE OF THE FAMILY

In order to analyse the changed structure of the families in the study village a table is depicted here.

Table 5:1. The type of families among different Jati

Jati house holds	1980-85			2003		
	Total no. of House holds	No of Nuclear Family	No. of Joint Family	Total no. of House holds	No of Nuclear Family	No. of Joint Family
Brahmin	7	3	4 (57.14)	11	7	4 (36.36)
Khanda- Yat	12	5	7 (58.33)	17	11	6 (35.29)
Kumbhar	7	1	6 (85.71)	9	7	2 (22.22)
Bania	6	4	2 (33.33)	10	9	1 (10)
Kamar	1	1	0	2	1	1 (50)
Tanti	8	3	5 (62.5)	11	9	2 (18.18)
Barika	2	1	1 (50)	3	2	1 (33.33)
Gouda	4	1	3 (75)	5	4	1 (20)
Dhoba	2	1	1 (50)	4	3	1 (25)
Pana	20	8	12 (60)	30	25	5 (10)
Total	69	28	41 (58.2)	102	78	24 (23.52)

Before the advent of modernization in agriculture the family system in the study village was predominantly joint in nature. During early 80's out of 69 families 41 were joint in nature. During 80's the introduction of mechanization of agriculture in the form of tractor, power tiller, thresher, etc. displaced most of the agricultural labourers from their occupation. This displacement compelled most of the agricultural labourers to leave their joint families and village communities. During early 90's 3 agricultural labourers migrated predominantly along with their wives and children, while 12 labourers temporarily migrated. The manpower released out of this agriculture found employment in the industrial centres scattered over many distant places in India. This labour migration of young members of the family brought a social tension among the family members. In course of time, this displacement of family members reduced their emotional attachment with other family members. Since a joint family cannot always be maintained in the towns or cities, because of high cost of urban living and problem of accommodation, people afford to live in nuclear type of families. The mechanization in agriculture had influenced the family structure of the *Badhei*. Due to the introduction of tractor, the *Badhei* of the village have lost their traditional occupation and gradually moved to the industrial and urban canters in search of employment. In all the 2 *Badhei* families, except the old man, other youths are working in city. These factors brought about the disintegration of joint family.

Before the onset of multi-cropping system, all the members of the family were getting time to sit together after their dinner. This post- dinner get-together helped to create an atmosphere of nearness, respect and love for each other. Misunderstandings could be mutually cleared up in this close gathering. But the introduction of multi-cropping system made the family members busy through out the year. It became quite difficult to sit together and share their internal feeling. As a result, it created certain gap among the family members, and also reduced the emotional attachment.

On the other hand, when the economy was predominantly subsistence in nature, all the family members were working together for their survival. But the advent of modern technology and mechanization of agriculture led to individualism. The increased production as a result of technological transformations also resulted in family disputes

over its proper distribution. Thus, the joint family system broke down predominantly in farmers' community. The young married couples preferred to stay separate and followed their own way of life.

Before the advent of modernization in agriculture, the production was very less. Especially, the family members of marginal landholders and landless working classes houses were working jointly in order to protect themselves from the natural calamities like, drought, cyclone, flood, etc. But the introduction of 'new technology' in the form of fertilisers, HYV seeds, developed irrigation system and mechanization of agriculture has raised the crop production. As a result of it, the dependence of family members on each other is reduced. This weakens the social bond among the family members and leads to the break down of the joint family.

The introduction of labour displacing machines like tractor and threshers in the field of agriculture had compelled most of the agricultural labourers to leave the village. In later stage, this labour migration had created a greater problem for the landlords to lease out their land. This has been discussed in chapter IV. It encouraged sharecropping system. Some of the members of landless lower class families, who had numerically labour power, separated from the original joint family and established nuclear family. They thought that if they got separated, then by taking some land in lease, they could survive better.

The analysis of change in the family structure of the present study shows that among 102 families, there are 23.5% joint families and 76.5% nuclear families (table 5:1). The incidence of joint or nuclear families varies with the level of status of the family. Looking at the situation through class structure, the study found that joint families are mainly found among the landlords and owner cultivators than the marginal farmers. Where as the percentage of joint family among the landlords and owner cultivators is 58%, it is only 15% among the marginal farmers, land less agricultural labourers and share croppers of the village. Emphasizing on the existence of a strong relationship between class status and family structure, Bose (1978) and Sachchidananda (1970) confirmed that the extended families have existence among the land owning classes, and nuclear families are found among the rural marginal farmers and agricultural

labourers. The obvious reason for more joint families in the categories of landlord was the need of joint ness that grounded on the following facts:

1. Economic purpose, i.e. to manage large fields and new technology - irrigation, fertilization, mechanization of farms and,
2. Social prestige, i.e. through land and jointness they want to maintain political dominance over other members of the village.

Epstein presented the same kind of reason, for joint family among the larger farmers of Wangla and Dalena in his study in Mysore.

CHANGES IN THE FUNCTION OF THE FAMILIES

The structure and function of a society are inter-related. Therefore, whenever the question of structure arises, the question of function comes immediately, as function is an integrated whole. The modernization in agriculture not only affected the structure of an institution, but also its function. As the joint family changes into nuclear family, the socialization of children in the family takes a new direction. The child has to grow in a comparatively much smaller social universe. There are not many kin-men to look after the child all the time. The playmates and the members of the child's peer group have also to be selected from out side the family. It reduces the child's emotional attachment with the members of the family.

The contribution of physical, emotional and psychological security, which was a major function of a traditional family, has undergone significant change. The introduction of labour displacing machines has compelled most of the landless agricultural labourers and carpenters to leave the village in search of jobs outside. This migration has raised the social tension among the parents, and sometimes this migration brings psychological and emotional insecurity among the elder members of the family.

Before the advent of modernization in agriculture, all the members of a family were co-operating each other for the better production to protect themselves from the drozery of drought, cyclone, flood, etc. But the rise of nuclear family, due to this modernization, has changed their economic functions. Whereas, in traditional joint

family, women were mostly working at home, now-a-days, they are engaged in field work with their husbands.

These changes in the family structure have brought an impact on the economic institution of the families. The middle class landholding farmers (owner cultivators) have lost more in comparison to landless agricultural labourers. The labourers are able to raise their status by engaging their family labourers in different fields and by taking the land in lease.

The change in traditional (joint) family brings a great loss to the owner cultivators, because it leads to the fragmentation of landholdings, which in turn affects the agricultural production. The break in the joint family necessitates the division of property and small piece of land owned by the cultivators comes to be further divided, making it impossible for the owners to use scientific methods for cultivation. This adversity affects agricultural yield, the economic status of the family and the economic progress of the society. According to table 2:5, 45% of agriculturalists of the village possess less than 3 acres of land, 35% possess less than 7 acres, 8% less than 10 acres. Only 12% of cultivators possess more than 10 acres. Therefore, 12% of cultivators are well off, 8% are fairly well.

The break down of joint family among the higher classes and *jati* brings a great loss to them. The land and family members are considered as the main source of the political power, and social prestige. Land is generally considered as the prime source of political status and power. Gradually though the acquisition of lands the higher *jati* and class families maintain their power in the village. But the rise of misunderstanding and individualisation among the family members brings down their power in study village. Due to emergence of nuclear family among these families, the lands get fragmented. And this fragmentation of land holding is the root cause of their loss of power in the village. Due to loss of land, they are losing the power of dominance over others.

CHANGE IN INTRA AND INTER FAMILY RELATION

This new technology in agriculture brings about a change in inter and intra family relations. The emergence of nuclear family due to this technological transformation shows that although the joint families are structurally breaking down, some functional interdependences are going on. While around 30% of the share croppers among the Panas depend upon kin labourers and exchange labourers apart from family labourers, only 5% of the share croppers among others of the village depend on kin and exchange labourers. Most of them depend on family and wage labourers. Still, at the time of rituals, the brothers are united and perform the function together. But gradually, in course of time, these nuclear families are becoming very close to their neighbouring families rather than the families of their own brothers. Now-a-days, apart from their family labourers, they are exchanging their agricultural equipments and other things among themselves.

The technological transformation has also brought certain effect on intra-family relations. The traditional (joint) family in India was organised around the important relationships between parents and children, husband and wife and siblings. Relationship between father and son in the traditional family was based more upon respect and fear rather than only on affection. Power and authority in the traditional family based upon generation, sex and relative age, and it was vested principally in males of the older generation. The patriarch was virtually all powerful. It was he who decided the type of education to be imparted to children, the occupation they had to take to, and even the selection of mates for them. He was not obliged to consult the young children on any issues. But in contemporary period, due to agricultural modernization, empowerment, higher education, a lot of change has occurred in intra family relation. The authority is shifting from the patriarch to the father of the children who consults his youngsters on all important issues before taking any decision about them. Even in some families, the women are taken into consideration while taking any decision. Out of 102 households, the present study found that in 5 households, the grand father is the main authority in the family, in 75 households, father is the main authority, in 22 households, all adult members possess the authority jointly. Even in some Pana families, the women are taking the over all charge of the family in the absence of their male counter parts. This shows the shift in the authority from grandfather to the father and the mother.

When the labour displacing machine entered into the agriculture, a few male members went out the home to earn the family living. This has affected not only the traditional structure of joint family, but also the relations among the members. On the other hand, these factory employments have made them financially independent; the authority of the head of the household has weakened further. In the city, in many cases, along with the men their wives also start working and earning. This has affected inter-intra family relations to some extent.

Now-a-days children are to some extent free with their parents. Children today not only discuss their problems with their parents, but they even oppose them when their wishes and ideologies clash with the formalised restraint of their parents.

In spite of all these changes in relations between parents and children, we find that the youngsters today follow the old pattern of respecting the elders. Their attitude is motivated by respect than by fear. The elders also do not attempt so firmly, as in the past, to impose the traditional ways on their children.

The relationship between husband and wife in early families was institutionally weak. Wife was considered to be an outsider. But along with the technological change in agriculture, higher education, women empowerments have influenced the age-old relationship between husband and wife. Today, the relations have under gone considerable change. The women have received certain power in decision-making processes. The emergence of nuclear family brings closeness between husband and wife. The husband is no more suspicious of his wife. In the traditional family, wife was utterly depended on her husband for her own support and the support of her children. But now, husband no longer regards his wife as inferior to him in all respects.

In spite of this change, the traditional outlook of the husband and wife relationships is still strong in our society that we cannot think of a change from patriarchal families to equalitarian families.

Thus the family, being an important institution of society, was found to be in interaction with other institutions of the rural social structure. It displayed the traits of both stability and change. Although still the joint family is continued to dominate among landlords and owner cultivators but its lower existence among the marginal farmers and the lower *jati* in the village shows that a lot of change has occurred in the traditional structure of the family. The technological transformation in agriculture has both directly and indirectly influenced the structure and function of the family. Although the traditional type of jointness in the village family is yielding place to residential nuclearity, the functional jointness still persists among some families. The emergence of nuclear family out of traditional joint family brings a change in its traditional functions. As the joint family changes into nuclear family, the socialization process of children is mostly shifted from the hands of family members to child's peer group and playmates, which reduces the child's emotional attachment with their family members.

This advent of modernization in agriculture also influences the physical, psychological and emotional sedulity function of a family. This advent of modernization influences the inter and intra family relations. It reduces the gap between husband and wife, parents and children. In some of the families, women are consulted in decision-making process of the family. The relations between father and son are no more based on fear but on respect and affection. The break down of joint family brings some loss for higher *jati* and class people in the village, both economically and politically.

Although the traditional type of joint family in the study village is yielding place to residential nuclearity, doesn't mean that it is completely eradicated from the study village.

TRADITIONAL RURAL POLITICAL STRUCTURE AND ITS TRANSFORMATION

The traditional rural political institution, which is considered as an important social institution, plays a vital role in distributing power among different *jati* and maintain social order in rural areas, As a universal aspect of social interaction, social power plays a significant role in shaping affinity among the members of a group (Kar, 1998:118).

Power is the ability to get one's wishes carried out in spite of opposition if any. Max Weber defined power as "the probability that an actor (individual or group) has within a social relationship in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests". (Reinard, B: 1960) Traditionally, this power revolves around the land in rural India. Beidelman, while working on the *Jajmani* system, mentioned that land, which is the prime determinant of *Jajmani* system, is also considered as the main source of power (Beidelman, 1959). Land is the prime source of socio political status and power (Beteille, 1965:204). It is observed that the landholders not only maintain a better standard of living but also exercise direct control over the land less (Beteille, 1977:119). Political power and economic hegemony in Indian village revolve around land ownership. Traditionally, the landlords belong to the higher *jati*. Suraj Bandopadhyay and Donald Von Eschen in their study "Agricultural failure: caste, class, and power in rural West Bengal", reveals, "Power tends to be very closely associated with class and caste. That is those who feel they have power are generally both wealthy and belong to upper caste" (Gupta, 1996). Oscar Lewis and Epstein, in their village studies, have observed that socially influential actors usually stem from higher castes, which are ritually superior and economically better off than the vast majority of middle and lower castes.

In the study village, the available evidence shows that in the early years of the twentieth century, Brahmins owned a considerable quantity of irrigated land in the village. The Brahmins were the first to utilise the new economic opportunities opened to them through Western education, and they gradually moved to towns to enter into the non-agricultural professions. Urban living, and the cost of educating children, which the new economic and education opportunities had brought about, gradually caused the Brahmins to part from their land. Most of these lands passed to non-Brahmins, especially the *Khandayat*, during the forties. Since independence, the *Khandayat* have been playing a dominant role in Jagdalpur. Except the untouchable; *Pana* the *Khandayat* are the numerically biggest *jati* of the village. The bigger landowners are among the *Khandayat*, and the *Khandayat* together own more land than any other *jati* of the village. The percentage of literacy among the *Khandayat* is 90.14%, which is the highest. The ritual rank of *Khandayat* is not very much low. They belong to Kshyatriya, who have occupied second position in *jati* hierarchy. Till 90's, these *Khandayat* were playing an important

role. They used to take all the political decisions of the village. Most of the persons belonged to the *Khandayat* Patrons from the dominant caste can secure a large number of followers than patrons from non-dominant castes. The rural patrons were vote banks for the politicians and, during elections, they were mobilised for votes. In return, patron expected favours -loans for machine, buses and seats in medical and technological colleges for their kinsfolk. Disputes were referred to the patrons for settlement. Most of the times, the patrons used to give decision in favour of their *own jati people*. There was a sense of "we feeling" among the different *jati*. Irrespective of poor or rich, they helped their own *jati* people. Landlords were in favour of their agricultural labourers. Landlords had leased out lands to large number of tenants. This probably helped to consolidate their political power, while increasing their share through the small tenants. Had the land given to a few tenants, the tenants' share would have been more and they would not have depended on landlord for consumption loans, which as a result would have weakened the bond between land lord and tenant. As members of the higher *jati*, the dominant Jajmans used the services of *kamins* to maintain or enhance their prestige for instance, by dissociating themselves explicitly from certain activities or conversely, by laying claim to the help of highly favoured specialists. As Kolenda wrote, basic to the *Jajmani* system is commitment to a royal or Lordly way of life as an ideal (1963:21). The *Khandayat* people were fountain of all matters in the village. Nobody was there to challenge them. But in course of time, since 80's onwards, the advent of modernization in agriculture has brought a change in their position.

The introduction of labour displacing machine (tractor, thresher, power tiller, etc.) in the field of agriculture forced most of the local agricultural labourers to leave the village for an alternative livelihood. But in later stage, this unavailability of agricultural labourers, which the study has discussed in earlier chapter, created a problem for the landlords to cultivate their land. As a result, most of the landlords leased out their land and went for some alternative jobs. Some of them started business, while some went for rice mills. During 90's, 5 landlords, who were cultivating some amount of their land, totally leased out it and started different business. Presently they don't have any close and enduring ties with their tenants. These absentee landowners do not generally have either the opportunities or the interests to maintain control over affairs in the village.

The commercialisation of agriculture transformed the traditional patronage relationship between rich farmers and their dependent poor. Most of the landlords kept formal relation with their labourers. Due to cultivation of cash crops, they did not like to give the *Barsika* (annual payment) in kind to their service *jati*. As their tendency to distribute patronage weakened, their power and influence over tenants and dependents also tended to wane.

Earlier, the landlord had a very close relation with the tenants. Most of the untouchable *pana* had been cultivating the landlords' land for long years. There was no question of change of tenant. But, along with the land reforms in recent years, the land to the tiller slogan has brought a significant change in the existing relationship between the landlords and tenants. Now-a-days, in fear of loosing their lands, most of the landlords are not leasing out their land to lower *jati* tenants. If some gives, he will shift it in every one or two years. This kind of temporary relation has weakened the traditional permanent relation between the landlords and tenants. There is no question of patronage existing within them.

The introduction of consolidation of landholding during 80's has also ruined the traditional relationship between the landlord dominant caste and poor farmers. During the time of introduction of consolidation of land holding, most of the landlords occupied the irrigated and fertile lands of the lower *jati* and class farmers, by taking advantage of their ignorance and illiteracy. But later on, this consolidation of land holding created unity among the lower class farmers. Some of the farmers agitated against the landlords' exploitations. Thus, on the other hand, reduced the traditional relationship between the landlord dominant castes and poor farmers. As a result, the dominant caste lost their support from poor farmers.

Before 80's, *Khandyat* mostly dominated the village committee. Out of 5 members, 3 were *Khandyat* and 2 were *Brahmin*. But the present study shows that, except the chair -man post, the other posts of the village committee are held by non-*Khandayat* of the village. Except *Pana*, all other *jati* are representative of this committee.

An analysis of certain disputes in the village committee shows that the members of the committee have often thrown their weight in favour of those who belong to their class rather than to other *jati*. In this respect, a case study has been given below.

In the disputes between Bhagirathi Behera (a rich *Kumbhar*) and Bhaskar Barik (a poor *Gauda*), the village committee member Dhusasan Barik (a rich *Gaudd*) openly favoured Bhagirathi. In the year 2000, Bhagirathi Behera (kumbhar) promised to sell a piece of land to Bhaskar Barik (Gauda). Before the deal was finalised, he took Rs.5000/- in two instalments. Subsequently, Bhagirathi requested Bhaskar to hold the land on lease against the amount paid. To this, the latter agreed. The condition was that Bhaskar would enjoy the land as long as the debt remains unpaid. Bhaskar sowed paddy in the leased field. As the crop was about to harvest, Bhagirathi forcibly reaped it. Bhaskar sought the help of the village committee. The committee became indifferent and poor Bhaskar lost his money as well his land (case-1).

Similarly, Sasadhar Sutar (a poor weaver) did not get support from his cousin Baburam Sutar. Once in a summer noon, the cow of Mohendra Samal (a rich *Khandayat*) entered into the paddy land of Sasadhar Sutar. Sasadhar Sutar found that his whole field was trampled upon and paddy plant also lopped off by the cow. Suddenly, he became angry and beat the cow. Then Sasadhar went to the Mahendra's house with his cow and scolded him. After a hot discussion, Sasadhar returned to his home and referred this case to the village committee. The committee found fault with Sasadhar. The committee General Secretary Baburam Sutar strongly opposed his cousin brother's demand. At last, Sasadhar also lost his paddy. He was fined Rs.200/-.

The introduction of land ceiling during 70s also helped some of the land less labourers to get some amount of land. With the introduction of HYVs of seeds, these farmers able to produce an adequate amount of paddy for their livelihood. This transformation in agricultural practices has helped the farmer to strengthen their economic position. Now days they are not depending upon landlords. This reduction of poor farmers has reduced the importance of landlords in the village.

In the traditional system, there were no practices, legislatures, Panchayat union or council through which the individual could have acquired power independent of his position in the class or *Jati* structure. No doubt, the membership in the party, in the legislature, in the Panchayat union council, even today, largely depends upon *Jati* and class. But the relation between *Jati* and class and power has become more complex and more dynamic in contemporary society and introduction of adult franchise in particular has opened up new avenues for the acquisition of power. The power of the emerging leaders of the village is not only based on land but also on their numerical support within the village and political contact outside it.

No doubt lack of funds is not always a very serious handicap, since the party as well as various agencies could be tapped for money but the presence of wealth is needed to entertaining guest from outside. A person who is politically influential has to distribute patronage to his followers. It is not possible for landless labourers or for one whose income is very small and uncertain to meet the demands, which are made by followers.

No doubt the change in agricultural practices has reduced landlords' importance in the village. But on the other hand, it has strengthened the economic position of lower *Jati* people. But still, to some extent, they are playing a crucial role due to their economic power. Though changes are taking place in the field of agriculture in rural Orissa, the impact of the changes on the low and lower middle *Jati* is not much significant. It is the higher *Jati* who have been benefited by all these process because they have got ample resources at their disposal to have an ascendancy over others even in the changing circumstances. Contrastingly, low status *Jati* finds it difficult to get accesses to local power politic because of less land holding.

The advent of new technology in agriculture has brought certain changes in the age-old traditional and political institutions of the village. In some extent, the higher *jati* (*Khandayat*), who were playing a dominant role in the village, have lost their traditional dominance. The rise of class like interests disturbs the age-old equilibrium of the *jati* group to an appreciable extent. The members of the village committee have often thrown their weights in favour of those who belong to their class rather than to their *jati*.

Traditionally, the land was the main source of power of the village. But along with technological transformation, the emergence of adult franchise, higher educations have opened up new avenues for acquisition of power. The power of the emerging leader of the villages not only based on land but also on their numerical support within the village and political contact outside it. Now a days, lack of funds is not a very serious handicap, since the party as well as various agencies could be trapped for money. Due to loss of patronage, kind of relationship among the landlords and labourers, the landlord, *Khandayat* are loosing their political support from the agricultural labourers and sharecroppers. Along with land reforms, the adult franchise, the higher educations have raised the economic status of the poor *jati*.

Still, to some extent the *Khandayat* are playing a crucial role because of their economic power.

CHAPTER-VI

AGRO-BASED RELIGION AND RITUAL AND THEIR TRANSFORMATION

Religion has exercised the most profound influence over man's thoughts since time immemorial. Religion had been regarded as the product of civilization until Tylor gave a convincing proof that primitive societies have their own version of religious activities, not very different from that of civilized societies. In all societies of simple technology, people believe that the process of nature and the success of human endeavor are under the control of entities outside the range of everyday experience, whose intervention can change the course of events. Even today, when man has made tremendous progress especially in the quest of science and technology, he believes in his religion for getting some inspiration. In their study of religions, anthropologists are not concerned with the truth or error of specific beliefs. This is a question of theology and philosophy. Rather, they are interested in what these beliefs tell us about the people and their culture and how beliefs operate within the broader cultural system.

Defining religion, E. B. Tylor said that "Religion is nothing but belief in super natural being". According to Ronald L. Johnstone, "Religion is a system of beliefs and practices by which, a group of people interprets and responds to what they feel is supernatural and sacred" (1975:20). But in general, religion means believe in God.

Since the invention of human culture, people have believed on different Gods and Goddesses. These Gods and Goddesses vary from one religion to another. The Gods and Goddesses in Hindu religion are numerous and vary from one state to another, from one religion to other and from one cast or tribal community to another. In spite of these varieties and variations, we may describe different levels of differentiation of these Gods and Goddesses.

Firstly, there are the *Pauranic* Gods and Goddesses, about whom myths are found more or less in a uniform manner all over India. The second level is concerned with certain Gods and Goddesses, especially sacred to certain regions, social communities or

to a village. At the third level, we have deities, who are sacred specifically to an occupational group or a caste group or a tribal group.

The Hindu Gods - *Brahma*, *Vishnu*, *Maheswara*, have occupied their place in the first level. Throughout India, they are popularly known by these names. But some times, these Gods may appear in different incarnations at different places. Lord *Jagannatha* is considered as the incarnation of Lord *Krishna* and also of Lord *Vishnu*. Goddesses *Durga*, *Lakshmi*, *Kali* and *Dharitri* (Goddess Earth), etc is coming under this level. Centering on these Goddesses, a number of religious observances (*Osha* and *Vrata*) are being observed mostly by women.

The various regional or local Gods and Goddesses of state culture like *Bhadrakali Chandi* of Bhadrak, *Balaramjue* in Kendraparha, *Kakatapur Mangala* in Kaktapur represent the second level. On the third level of differentiation, we find some Gods and Goddesses of all India adapted to the local context of the occupational or caste groups. For example, *Vishwakarma* is specifically sacred to the Carpenters, Smiths and in the present days to the engineers. Similarly, Goddess *Lakshmi* is specifically sacred to businessmen. But when Goddess *Lakshmi* is regarded as the Goddess of rice, 'She' is restricted to the farmers.

When we think of the Gods and Goddesses belonging to the folk society or village, we invariably think of the last two levels in addition to those of the first level that is all India level. A number of Gods, Goddesses are worshiped by the villagers. The study village is not an exception from this. The villagers of the study village are used to revere a number of Gods and Goddesses for the fulfilment of different needs. But, out of these Gods and Goddesses, a few have captured the role for the fulfilment of agricultural needs: they are Lord *Jagannatha*, *Siva*, *Indra*, Goddess *Lakshmi* and *Grama Devati Kharakhai* (village deity). Although all these five Gods and Goddesses are venerated by the villagers for the fulfilment of agricultural needs, based on their role in agriculture, Goddess *Lakshmi* occupies the first and foremost place, followed by Lord *Jagannatha*, *Indra*, *Grama Devati* and, *Siva*. Even there is not a single agro-based festival, when the villagers do not worship Goddess *Lakshmi*. The culture of Orissa is known as *Jaganatha* culture and Lord *Jagannatha*, the husband of Goddess *Lakshmi*, is worshipped in each

and every corner of Orissa for the fulfilment of different desires, but whenever the question of agriculture comes, the name of Goddess *Lakshmi* immediately enters into the minds of the villagers. Although the people of Orissa in general consider Lord *Jagannatha* a superior God, the villagers have always argued in favour of *Lakshmi*. For this, they refer a mythological story from *Lakshmi Purana*, where Lord *Jagannatha* surrenders Himself to *Lakshmi* for the fulfilment of His hunger. The story has been described as follows: *Shriya Chanduluni*, an untouchable woman worshipped Goddess *Lakshmi* by observing this festival. Being moved by her devotion, *Lakshmi* left 'Her' permanent abode, the temple, which is situated inside the campus of the temple Lord *Jagannath* and visited *Shreeya's* home. When Lord *Balabhadra*, the elder brother of Lord *Jagannath* came to know about this, she was declared defiled, and was not allowed to come back into the temple. *Lakshmi* was deeply hurt and went to her father *Sagara*. When *Lakshmi* went out of the temple, all the wealth in the temple started vanishing immediately. Later, the God *Balabhadra* and *Jagannath* could not find food to sustain. They came out of the temple in the guise of Brahmin beggars in search of food. Ultimately, they landed at the door of the Goddess *Lakshmi*. *Balabhadra* apologized for the mistake and all of them returned to the temple. The *purana* ultimately teaches all to pay extreme regards to Goddess *Lakshmi* and the person who disregards 'Her' is sure to fall onto the evil days.

In order to convey their gratitude to *Lakshmi* for her benevolence, the farmer's wife organizes the *Manabasa* festival throughout the month of *Margasira* (December - January). On each Thursday, the houses are smeared with cow dung the floors are decorated with beautiful flora designs drawn with rice paste called *Jhoti*. Footmarks are printed from doorstep to the place of worship, as if Goddess *Lakshmi* has entered. The roofs are decorated with *dhana menta* (festoon woven out of paddy stalks). There is a belief among the farmers' wives that on this day, Goddess *Lakshmi* comes from the Heaven to visit their houses. Therefore, they make all these decorations.

After having a bath in the early morning, the housewives put some special variety of whitish paddies in a *Mana* (grain measurer). Then they put three betel nuts on the paddy kept on *Mana*, and on the betel nut, they fix a *dhana menta* and also a piece of sugarcane and radish. At last they decorate this *Mana* as a woman with a piece of cotton

(chita). Then they start worshipping Goddess *Lakshmi* offering 'Her' favourite flowers such as jasmine, gomphrena, mist rose, gardenia, etc. No body uses China rose, red water lily, Sacharam and *Tamala* flower in 'Her' *puja*, as there is a belief among the villagers that Goddess *Lakshmi* dislikes these flowers. So, if they offer these to 'Her', then 'She' will get angry. As a result, the next year production could be lessened. According to the *Lakshmi Purana (Patheon of Lakshmi)*, different varieties of rice cakes and *khiri* are prepared by every household and offered to the deities. On the first Thursday, they offer rice pudding and *khechidi*, on the second Thursday, *Chitau pitha* and curd-rice water, on the third Thursday, cheese, greens and lolley toffee and on the fourth or last Thursday, sandwich. The concluding festivities of the last Thursday of the month are the most elaborate. The lady of the house has to fast to worship the Goddess on ail these four Thursdays. In order to make "Her" please, they keep their house clean. Only members of the family (the married daughters who have changed their *gotra* in marriage, and have their own separate households are excluded) can partake of the oblations, otherwise, Goddess *Lakshmi* may leave the household of the worshiper.

After Goddess *Lakshmi*, Lord *Jagannatha* has also occupied the major place in the field of agriculture. In most of the agricultural festivals, the farmers of the study village pay their obeisance to Lord *Jagannatha*, as an incarnation of Lord *Vishnu*. There is a belief among the farmers that *Ekadasi* is a day particularly sacred to Lord *Vishnu*. So, to respect Lord *Jagannatha*, an incarnation of *Vishnu*, farmers of the village observe *Ekadasi* as a ritual prohibition of ploughing land on this day. They do not plough their land on *Sayan Ekadasi* (the eleventh lunar day of the light fortnight in the month of *Asadha* when Vishnu is said to go to sleep for four months), *parsva Eka dasi* (the eleventh lunar day of the light fortnight of *Bhadra* when, Vishnu is believed to turn upon his side), *Utthara Ekadasi* (the eleventh lunar day of the light fortnight in the month of *Kartik*, when Vishnu is believed to awake up from His sleep).

Lord *Jagannatha* is believed to be the family deity, who protects the villagers from each and every suffering whether it is agricultural or anything else. So, they prohibit ploughing in these days as a respect to Lord *Jagannatha*. In order to make Lord *Jagannatha* pleased, the farmers of the study village use to offer the newly harvested fruits and paddy to Him before giving it to anybody else. They offer the rice pudding

made from the newly harvested paddy. They offer them along with certain flowers such as: oleander, night jasmine, lotus, white tulip, champak, etc.

Lord *Siva* has also occupied an *important* place in the field of agro-based religion. During the time of *Halasutra* festival, the farmers plough for two and half furrows without any break, as they believe that Lord *Siva* who had started *Halasutra* near the *Subarnarekha* River had made two and half furrows. Most of the farmers in the study village revealed that Lord *Siva* is the incarnation of Lord *Balarama*, who is considered as the inventor of plough and methods of agriculture. For this reason, most of the farmers pay their obeisance in village *Siva* temple, during the time of *Gahma Purnami* (the full-moon day of *Shravan*, July-August). The farmers always try to please Lord *Siva* by offering different flowers like stramoni flower, night jasmine, oleander, china rose, mist rose, dhak flower, balsam, white lotus, etc. and fruits like banana, apple, etc. Sometimes the individual farmer's household organises *Panchanana Mela* to please the Lord *Siva*. The farmer's belief that if they do not perform these rituals, Lord *Siva* will get angry with them. As a result, their plough may break down while ploughing, which will create problem for them.

When the irrigation system of the study village was not so developed, the villagers were performing various rites and rituals through ages for receiving rain at the time of drought. It is viewed that the time of difficulties, when there was drought, the villagers used to collectively arrange for the worship of the village deities to bring rainfall. The *Pandit* worshiped the deities. The belief is that if the *Pandit* performs the practice in a proper way, then rainfall will inevitably occur while, the worship is held. The *Pandit* did not leave his *Asana* (seat) until it rains. As we have asked some farmers of the study village, whether they have performed any rites to bring about rain, they have reported to have done it before, but they could not mention any such particular rite. The present study did not find any performances of *Indra Puja* being held by the villagers. When the villagers were asked whether this *Puja* is still going on or not, they immediately said that it used to be held earlier, when there was no development in irrigation facilities and people were fully dependent on rain fall.

Although the practice of *Indra Puja* is completely vanished from the study village, their practice of starting all-agricultural operations from *Isan* (North-East) corner reveals that this is nothing but a respect to Lord *Indra*. As the farmers believe that Lord *Indra* is the protector of Northeast corner, if they do not start the agricultural operation from this *Isan* corner, then there could be flood or drought, which cannot be protected by any developmental mechanism.

The *Grama Devati* (*Khara Khai*) plays an important role in each and every sphere of life of the villagers. In the study village, Goddess *Khara Khai* is represented by a piece of stone, which is restored under an old Banyan tree. It is smeared with a thick layer of vermilion and surrounded by a large collection of earthen houses and elephants. There is a belief among the villagers that the *Khara Khai Takurani* helps people to take crisis at home, in cultivation or in the outbreak of epidemics and drought. For this reason, *Khara Khai Takurani* is presented with flowers and fruits before human beings use them. The farmers believe that this presentation to God or Goddess would bring in more flowers and fruit. Usually, a ritual is organised by the villagers during *Pana Sankranti* in honour of the *Grama Devati*. On this occasion, the villagers sacrifice cocks to propitiate the *Grama Devati*. It is viewed that Goddess *Grama Devati* visits the cornfield during the harvesting period. At the time of drought, *Grama Devati* is worshipped in expectation of rain. On that, day the villagers neither plough their land nor did any agricultural work, as it is viewed that if the villagers will do it, then the Goddess will curse them.

But, in course of time, a lot of change has been taken place in peoples' belief system. The modernization in agriculture has brought an indirect effect on it. Due to developed irrigation system, they are not praying Lord *Indra* to get rain during the drought period. This modernization of agriculture has raised their confidence. No more animal sacrifices near village deities are done today.

AGRO-BASED RITUALS AND THEIR TRANSFORMATION

Since the inception of human culture, certain days or periods of time have been set aside for ritual celebrations. These are occasions or events of agricultural operation, religious or socio-cultural importance. The days or periods generally originated in religious celebrations or treated as sacred occasions are usually called festivals in traditional sense of the term. Festival is an inextricable art of a society, considered as mirrors that reflect the culture of a society. The main objective behind the celebration of these festivals is to appease different Gods and Goddesses for socio-cultural and socio-economic betterment. There is a popular saying in Orissa: "*baramasare tera parba*", which means that the people of Orissa observe thirteen festivals in twelve months. Orissa, which is a land of festivals, is mostly a farmers' land. Therefore, the festivals are mostly agriculture-based. During the period from the advent of sowing till harvesting, festivals are celebrated with great fun and zest. Most of the early civilizations were agricultural in their basic character; their festivals too were mostly related to various agricultural operations. According to the *Tratraya Samhita*, the farmers of Arya civilization were observing five *Jangyans*. They were generally starting the cultivation by performing *Sita Jangyan* before sowing seeds. They were celebrating *Prabapana Jangyan*. While offering new rice to the God and Goddess, they used to perform *Pralabana Jangyan*. During the time of keeping paddy-sheaf in grain yard, they used to perform *Khala jangyan*. And, while they used to store the grains in granaries after the final harvest, they were observing *Parjayana Jangyan*. The above descriptions are inherently inscribed in the following *Shloka*:

"swi:yā khyetresu sārbesu krusesu jārāḍi bāsānte t j
sita: jāngyāh khyetrāsya pu:rba:rōhe uttāra:rōhe ba: ka:ryāh
tātāh sārba:khyetresu bi:d/bāpāne krute prābāpānā jāngyā
kārtaḍbyāh
swi:yā sārba:jāsya lābāna:ntārōm prābālāhā jāngyāh
kārtaḍbyāh
pākwā jāsya khyetra:āa:hrutyā jāsmin prāḍeje
khāli:krute tātrā khāli:jāngyā kārtaḍbyāh
khāli:ḍgruhe ḍha:nyo sāmā:gōthe pārya:yānā jāngyāh kārtaḍb"

(*Traitraya Sahnita*)¹

¹B.Sahu, 1980, *prachina Bharatara Krusi*".

The rituals² and festivals³ associated with agriculture of the study village can be classified as follows: -

1. There are some rituals, which are basically family-oriented and are observed according to the convenience of the individual family. Such rituals do not take place on a fixed date. (*Halasutra, Khetabadha, Puruni*, etc).
2. There are certain family oriented rituals, which take place in same date throughout the village. (*Akhayatrutiya, Gamha Purmami*, etc).
3. Some rituals are purely community based. These rituals are performed on a fixed date or according to the convenience of the village community members (*Dushera, Jantala*, etc).

HALASUTRA

It is considered as the first agricultural ritual of a year. Generally, to ensure safe ploughing of land, the farmers of the study village perform this rite before the beginning of cultivation. No Oriya calendar clearly mentions the convenient day and *Tithi* (the thirtieth part of a whole lunar month) for *Halasutra*. But usually, it is observed after the first rainfall in the month of *Magha* (January- February). Most of the farmers of village celebrate this rite on *Sri Panchami* (fifth day of the bright fortnight of *Magha*). Some farmers also consult the *Jyotisa* (Astrologer) to fix up an auspicious day and *tithi* for observance of this rite in *Magha* or *Phalguna*. All the farmers have revealed that *Magha* is the right month for ploughing the land, because the soil of the land would get proper sunlight during summer and become more fertile. There is a proverb in Oriya, which is given below:

“ f᳚᳚᳚᳚᳚ t᳚s suna: k᳚s
d᳚y᳚᳚᳚᳚ t᳚s mu:lia: pos
t᳚᳚᳚᳚᳚᳚ t᳚᳚᳚᳚᳚᳚ kutumb᳚᳚᳚᳚᳚᳚ pos”

Meaning: If you will till in *Phaguna*, (February-March) you will get golden crop if you till in *Chaitra* (March-April) then your crops will suffice your family only. And if you plough in *Jyostha* (April-May), then the crops you get will suffice your servant only

¹ The organised performance of behaviour in tended to influence spiritual power is known as ritual.

² The specific period or day, when a ritual is organised.

The head of the family takes bath early in the morning. After taking bath, he washes the plough. Before going to plough, he worships the *Langala* (plough) in the courtyard with flower, *duba* (a kind of tender and green grass), vermilion and turmeric paste. After the completion of this rite, the farmer takes it to the land for tilling. Before ploughing, the farmer pays his obeisance to the God and starts ploughing from *Ishan* (North-East) corner. There is a belief among the farmers of the study village that Lord *Indra* lives in the *Ishan* corner. Therefore, if they start ploughing from this direction, then they will get rain in right time. Otherwise, it may bring drought or flood. During the time of *Halasutra*, the farmers plough for two and half furrows without any break, as they believe that Lord Shiva, who started *Halasutra* near *Subarnarekha* River, had made two and half furrows. After this, the farmers come back home with plough and bullock. Then their wives offer them some delicious foods and to the bullocks, some grass.

AGHIRAPURNAMI

The villagers observe the *Aghira poornami* on the full moon day in *Magha*. It is also known as *Magha purnami*, which is considered as an agricultural festival. In this evening, the villagers come with some straw, collected from newly harvested paddy and keep it in a particular place near the village deity. At night, all the villagers come there with vegetables in order to offer these to Goddess *Agni* for the better yielding for next year. After due worship, the image of God in a well-decorated chariot is made to move round the flame in a great speed. Then the villagers throw these vegetables into the fire. At the end, the villagers collect the ash of the *Aghi* and spread it in their own land. They believe that the ash has the power to raise the fertility of the land.

AKSHYA TRUTIYA

This is an exclusively agricultural festival held on the third bright fortnight of *Baisakh* (*April-May*). On this day, the farmers ceremonially start sowing seeds in the field, especially paddy. According to legend, many years ago, this day was marked as the beginning day of *Satya Yuga*. The deities from Heaven had come to the earth and started sowing seeds on this day. *Lord Indra*, regarded as the king of Heaven, had first started ploughing on the field. The aim behind this was to provide enough food to the people as

well as to the other living creatures. Since that day, the farmers follow this ritual for better production of grains (Traveller Orissa 2002). Religious scriptures describe that the *Ganga*, the sacred river of India, landed on the earth on this day from Heaven. She is the perennial source of water for the need of agriculture. Therefore, this auspicious day was chosen to start sowing seed (Patnaik, 1982).

As this date is mentioned in the Oriya calendar, the farmers of the study village individually consult the *Jyotisa* (astrologer) to ascertain the auspicious moment for the ritual. When asked, some old farmers (to know how they are selecting the right types of paddies for sowing) replied that they consult the *Jyotisa* (astrologer) to ascertain the name of *Meghas* (cloud) and *Palakadhipati*, according to which, the variety of seeds for first sowing is to be selected. For instance, they told, if *Drona* is assigned the position of *Megha* in the almanac for a particular year, white coloured paddy is generally chosen.

“ Ørototʃ ʃuk! Øha:nja:ni
 tʃa:nj Øha:nja: nitʃ kwʃtʃit
 kuma:nd kʃrkʃti: tumbi: Ørototʃ ʃ!te bʃhu
 nʃrmʃ!a:tp! bʃllʃvi:ka: bʃnʃmili:ka: ta:rika:
 ka:nti ka:tʃ tʃtha: rʃmva: rʃs na:gʃrʃ tʃnʃkʃ
 mʃØhura:!! kʃra:litʃ bodʃa: bʃhutʃ potʃka:
 ra:gʃba: bʃjʃm ʃnʃebʃ bruðh meghʃ vʃbʃntʃmi”

Meaning: When the *Drona* occupies the position of *Megha*, white paddy grows more and other coloured paddies grow less, vegetables like pumpkin, and cucumber and flowers like green lotus, jasmine and oleander grow more. Tiny fishes grow more. If *Puskar* occupies the position of *Megha*, red coloured paddy is chosen for sowing. As, the position of the *Megha* changes every year, another *Megha* occupies the position in next year, and naturally, different variety of seeds are chosen. On this day, in the early morning after taking abluion, ladies of the every farmer's house generally clean and purify the floor by smearing. Then the images of various kinds of creepers are drawn on a basket using a paste of rice powder called *jhoti*. After taking bath, the farmers wear cleaned clothes. Having offered *pranam* to Goddess *Laxmi* at home, they go to the field along with some flowers, coconuts, beetle nuts, bananas, a pot of milk, a water pot, and a few handful of specified paddy in the basket, which is covered at the top with a new *gamuchha* (napkin). They do not talk to any body nor do they look back before the

completion of the rite. There is a Particular land for the performance of this rite since generations. After arriving at the field, the farmers keep the baskets on the land and remove the covered cloth. Then they sit down on the ground facing towards East and dig up the earth in the *Ishan* (northeastern) corner. After all these preparations, the farmers observe the ritual named *Muthi chuan* (touching of the seed). They offer "*bhogd*" to the Goddess of earth. Then after offering obeisance to different Gods and Goddess, they scatter three handed-full of seeds (*tini mutha dhari*). They pour water on them, hoping for a rich harvest. After the rite, they come back home. According to one custom prevailing in the region studied, the farmers don't take *saga* (green leaves) on this day. Some of them have informed that, if they consume *saga*, then grass may rise in cornfield in large number, which may create harm the paddy. There is a belief that the festival in mid - *Baisakh* follows the annual monsoon into Orissa. Following the rituals, the sowing of seeds starts from this *Akhaya trutiya* day and continues till the middle of the month of June (during the *raja*). Then the natural rainwater helps the seeds to grow faster (Patnaik, 1982).

RAJAPARBA

Raja is one of the most popular festivals of coastal Orissa. Basically, it is observed for three days. The first day of raja festival always falls on the last day of solar month of *Jaistha* (May- June). It is generally considered as a festival of farmers. During this time, the farmers get time for merry making generally after this festival all the cultivators remain busy in agricultural activity as the rain starts after it. So before that every body needs rest. So for providing rest to the farmers all the agricultural activities are prohibited during this time. But different scholars have interpreted it differently. Pandit Nilakantha believes that, *Raja* is the right time, when the Goddess Earth comes in contact with *Parjayandeba*, (Megha) and they consummate. He thinks that this contact will produce the crops. So before coming in contact with *Parjayandeba* the Earth must be fertile to get prepared for the next crops (Mishra, 1981).

It is believed, that the Earth Goddess starts menstruating on the first day of the Raja, after the third day when she takes a ritual birth called "*Bhuidahan*" and returns to normal position. During the menstruation period, the Earth is to be avoided like a

menstruated woman. Therefore, men and women also avoid touching the Earth by refraining from walking bare foot, digging, ploughing and cooking on earthen chulha (Das and Mohapatra, 1999). In Hindu home, menstruating women remain secluded, because of impurity, even don't touch any thing, and are given full rest. So, the mother earth is given full rest for three days, for which all the agricultural operations are stopped (Patnaik, 1982).

CHITOUU AMAVASYA

It is a family festival observed on the new moon day of *shravana* (July-August). This is more or less observed as an agricultural festival on rural Orissa. On this occasion, in the afternoon after taking a holly bath, the farmers go to the paddy field with flowers and a special cake named *chitauppitha*, which is made from rice powder and coconut paste. There they perform *puja* in Northeast corner and offer these cakes to *Goddess Lakshmi* and to other creatures. There is a tradition existing among the farmers to appease the pillas through worship. They worship and pray them to avoid their wrath. Pillas breads enormously in the paddy fields. While the farmers working bare foot in the field, they get their feet cut by the sharp edge of pillas's shells. Therefore, during the festival the pillas is appeased as a female form of evil power known as, "*Gandaisuni*". While offering cake in the cornfield they pray "*oh! Gandaisuna, be appeared and do not cut our feet*". This festival is generally celebrated among the farmer community to get rest and happiness. They offer these cakes to all of their friends, who work along with them in the field.

GAHMA PURNAMI

The full moon day of *Shravana* (July-August) is known as *Gahma purnima* or *Gopurnima*. It is also an agricultural festival. On this day, the farmers, worship the plough, cows, and especially the bullocks as a token of their gratitude towards latter. Bullocks are the most important domestic animals for farmers in India. When ploughing gets over, the farmer venerates the bullock. Generally, the ploughing activities get over by this *purnima*. On this day, they clean the plough, bullock, cow, and cattle shed. They draw the figures of the cattle and agricultural equipments with paste of rice powder.

Bullocks are decorated with flowers and sandal paste. The horns of them are anointed with oil. After that they are fed a small quantity of paddy and straw. After observing certain *puja*, they also hang the plough on the backside of their home. That's why; this festival is known as, "Haladhua". There is a strong belief among the farmers that on this day lord *Balaram*, who is known as the inventor of plough and methods of agriculture, had taken birth from a cow named *rohini* of *Nanda raja* (Patnaik, 1982). This festival brings a unity among the farmers. In the evening the owner cultivator or the farmer provides food and dress to agricultural labourers, which establishes a strong tie between them.

PURUNI

This is a family oriented festival and there is no specific date for the observance of this ritual. Generally, it is performed in the month of *Sravana* and either on Tuesday or Friday, depending on the horoscope of the farmers. This ritual is associated with transplantation of paddy. Till the *puruni* ritual is performed, no body can transplant sapling in his paddy field. In the early morning, having bath, the farmers go to the field along with paddy saplings, flowers, *chakuripitha* (made from black gram and rice). After reaching there, they first worship the saplings, and also *Goddess* Lakshmi. Then they transplant the saplings from North East corner. Then they come back home. On the way, they distribute these cakes to children. Generally, on this day, they do not take non-veg and burnt fruit.

DUSSHERA

Dusshera, which is generally known as *Durga Puja*, is an important festival in coastal Orissa. It is generally celebrated in the month of *Ashnyi* (October). It is also considered as an agricultural festival. There is a belief among the villagers that by the time of *Dusshera* ten varieties of paddy are ripened. Some Brahmin revealed in the interview, that Lord *Durga* in *Chandi* and also in *Markendaya Puran* has said that, during draught and famine, 'She' herself in the name of *Sakambari* will produce paddy and fruits from her body. This song is quoted below reveal this:

“ t̪ətoḥ m̪əkhil̪im̪ lok̪ma:tm̪ə ðəh̪s̪əmuð̪ə v̪əb̪əuh
v̪ərisja:mi sura:m̪ ja:k̪jəra:bl̪əsteh̪ pra:ta:ðha:r̪əkjeh̪
ja:k̪j̪əriti̪ bikhja:tim̪ t̪əða: ja:sja:m̪j̪əh̪im̪ vubih̪
t̪ətrejb̪ə t̪ə b̪əðhisja:mi̪ ðurg̪ma:khj̪im̪ m̪əha:sur̪im̪”

Meaning' Durga says I am the soul of this universe. When there will be drought in the earth, due to lack of rain, at that time, in order to take care of all the creatures, I will take birth on the earth in the name of *Sakambari*, and will produce food from my womb.

The "*BhagabatT* reveals that the Goddess *Durga* is not only *Chandi* but also the mother of grain. It is mentioned in many traditional Hindu myths. The Orthodox Hindu people do pray nine branches of specific trees (*Nabapatrika*) as a symbol of Goddess *Durga*, before preparing a sculpture of it.(Satapathy, 1996).

GARVANA SANKRATI

This festival is celebrated on the first day of the solar month of *kartik* (October). The paddy trees become pregnant by this time. There is a proverb:

“a:ge bunu p̪ət̪f̪he bunu
g̪ərv̪əna:ku̪ tunu tunu”

Meaning: Whether the paddy seeds are sown early or late, by the time of *Garvanasankranti*, the seeds grow to form within the plants. After a long and continuous labour, the ears of corns come out gradually. They mature and toe to and fro in the air. As the cultivation is a hazardous affair, the fanners are not yet sure, whether their sweet dream will be blossomed or not, whether there will be a good harvest or not. Who knows? What would happen tomorrow? Why a new kind of insect or a new kind of pest will not attack the plant? It is therefore, necessary to do something, so that the plants will not suffer from it.

On day, that head of the family takes his bath early in the morning and ties other nine branches (*puala, dimbiri, gadasada, akhanabaata, bausa, bajramula, neem and amba*) with some of the *garvana* trees (*cordia, myxa tree*). Then worships it with flowers, vermilion, turmeric and *tala gaja* (palm fruit) near the *tulasi chaura*. Conchs are

blown at the time. When the worship is completed, the worshiper takes all the *garvana* trees to plant in different places. He keeps one in *amara* (grain store room), another one in *Khatagada* that is manure storing place, and then goes to the field with some trees to plant. The farmer plants these trees in North East corner of the field. He plants these in such a manner that these trees stand erect. It automatically brings to one's mind the picture of a full-grown paddy plant with fully matured corns. While planting these, he recites the following song and offers his *pranam* to the Lord *Vishnu* and Goddess *Lakshmi*.

“mākarā gosein nākarā a:nā
gha:sā ba:lunga: sēburi dhā:nā”

Meaning: O Lord *Vishnu!* Please do not grudge upon us, rather turn the weeds into paddy plants.

“sānkra:ntire ma:ili khāda:
pokā d/okā t/jha:di pēla:”

Meaning: I put the cordial myxa tree on my land here. Let the insect and leech go away.

Then he comes back home with *Khadika* that is a kind of grass used as tooth picks, and keeps it on roof of the house. There is an interesting custom in the village according to which the farmers dine on this day with nine types of vegetables. It is compulsory in the case of all the farmers of the village to take elephant foot, *kalam* green and green gram.

It is also an important day for the farmers; they do not go for any work on this day. The females insist on early taking of food by the males on this day with a wish that, if they take their food early, then they may have a good fortune of having their meals early throughout the year. During the ritual time, the farmers' wives forget about the contribution of Lord *Indra* and work of bullock. They show their worried ness towards their husbands. If their husbands get food every day, then they will perform good work in the field that will ultimately prosper their family. In this context, there is a folk song:

“inōrā bārāse bā!āā t/jse
ma:ipā kāhe mo ghāita: pose”

Meaning: *Indra* rains, the bullock ploughs, but the wife thinks that her husband takes care of her.

MANABASA

Manabasa which, is celebrated on every Thursday in *Margshira* (December-January) is popularly known as *Gurubara Osa* or *Dhanamanika*. This is the month for harvesting. After a long month of toiling in the field, they fill the granaries with the blessing of Goddess *Lakshmi*. In order to convey their thanks and gratitude to *Lakshmi* for Her benevolence, the farmer's wife organise this festival throughout the month. On each Thursday, the houses are smeared with cow dung; floors are decorated with beautiful flora designs and drawn with rice paste called *Jhoti*. Footmarks are printed from the doorstep to the place of worship as if Goddess *Lakshmi* has entered. The roofs are decorated with *dhana menta* (festoon woven out of paddy stalks). The observances of this ritual have been described earlier in this chapter.

NUAKHAI

This is a most intrinsic festival of Western Orissa, which is generally celebrated in the bright half of the month of *Bhadra* on an auspicious day fixed by the astrologer. But, in the study village, it is usually celebrated on *Prathamastami*, which is known as the birthday of Goddess *Laxmi*. This is the eighth day of *Margasira*. This ritual is generally conducted to offer first paddy to Goddess *Laxmi*. *Vishnu* is the family ancestors and family deities. Basically, the farmers celebrate this festival to give thanks to God and Goddess, who have given them, fruits for their survival. "Maharshi in *Taitriyas Upanishadt*", has written one song, where he describes the importance of *Anna*.

“Annam brāhmeti bja:na:t
anna:debā khā!wima:ni vā:ta:ni dja:jante
nna:ni dja:ta:ni dI:bānti
annm prājantjvāsmāmbi, ānti:ti”

(Mohanty and Mohanty, 1991:426).

Meaning: The other name of *Anna* (food) is *Brahma*, the Lord. Every body is born from this *anna*. They get their lives from *anna* and after death they become *anna* for others,

whether it is material or immaterial it has significance on every sphere of life. It is the means of life, source of happiness and part of soul.

For this occasion, in village, new rice is cooked with milk and sugar (*khiri*) and then offered as *bhog* to Goddess *Lakshmi*. They also prepare a special variety of cake, which is known as "*enduri*". This cake is offered especially to goddess *Lakshmi* and to the ancestors. Then they provide this cake to their first-born child. This is a day of great joy for one and all. The landless labourers are assured of a good feast in the house of the Well to do families whom they serve.

SUKRADHAN

It is a ritual, which is observed on *Sukrabar* (Friday) in *Margasira*. It is generally held after *Bichha Sankanti*, as there is a belief among the farmers of the village that the paddy plants die on their own wish after this *Sankranti*. Therefore, it is good to harvest the paddy after the straws dry up. It is a ritual, which is celebrated on the first reaping. When the waves of golden paddy dance in the air and shines in the sunlight, the farmers get ready for reaping. But to them, paddy is something more than the mere result of their labour. For them, paddy is the symbol of *Lakshmi*, the Goddess of wealth and prosperity. They bring the first harvest to their cottage, as they welcome *Lakshmi* to their humble abode, and observe a few rites on this occasion.

Before performing this ritual, the farmers first consult an astrologer to fix up an auspicious *Sukrabar*. On this day, after having bath, the farmers wear good cloths and then move to the field with a new sickle, *bhog* and flowers, etc. There, they cut one tuft of paddy sheaf from the Northeast corner and then worship with flower and offer *bhog* to this sheaf as a symbol of Goddess *Laxmi*. They keep this sheaf of the paddy on head and move to home. After reaching home, they keep it on the thatch of the cottage in Northeast corner. The harvesting begins after this ritual.

MAIDANDI

After completion of the *Sukradhan*, the farmers bring the sheaf to *khala* (grain yard). In order to keep the paddy sheaf, they perform one *puja* on first thursday of *Margasira*. The farmers put one stick on the ground in middle of the *khala*. Then they worship these paddy sheafs and *maidandi* offering vermilion, *bhog*, and flower etc.

KHETAPUJA

This is generally known as "*Kheta Badha*" among the villagers. Usually, they observe this festival in *Makar Sankranti*- the first day of *Magha* (January- February). From this day, they normally start threshing of the paddy. On the last day of harvesting, the farmers leave one sheaf of paddy stalks in the field. It is preserved there and regarded as the symbol of "*Thakur*" or the Goddess of wealth. This ritual is also known as *Thakur othano*. When the farmers bring last sheaf of paddy from field to home, they utter

"ma: 0ila: ba:p ghare , ebe jw fur
gharaku tja:lntu"

Meaning: "Oh! Mahalaxmi, You were at father's home, but now you please move to father-in law's home".

In this morning, the farmers clean the *khala* with sacred water and smear. Then they go to the field. The other members of the family prepare a cane with sugar, milk, and kernels of coconut, rice powder and adding little bit of ginger. It is called "*Makar Chulc*". The farmers come home from the field with last sheaf stalks and keep it on a cleaned low wooden seat, which is decorated with *Chita*, i.e, beautiful designs drawn with rice paste. They also draw the footprints of goddess *Lakshmi*, paddy plants, various implements used in plough, cows and bullock in all over the courtyard and also in *khala*.

Then they worship the sheaf, which symbolizes the idol of Goddess *Lakshmi*. Subsequently, they offer the prepared *Makar Chaula* to the sheaf, to other God and

Goddess and also to *Grama Devata* and *Devati* (local deities). And the *bhog* is distributed to all those who have attended for this festival.

AMARPUJA

After threshing and storing activities of paddy around the second week of *Magha*, each farmer family performs the *Amara Puja*. After completion of threshing of paddy, the farmers do not store the entire paddy inside the courtyard. They generally keep at least one basket full of paddy outside. According to their own convenient auspicious time, they perform this ritual. But they generally do it on their courtyard-established day. They keep that basketful of paddy near the place of worship and perform *puja*, just like other rituals. When the worship gets over, they mix this paddy with the paddy, stored in courtyard earlier. There is a belief among the farmers that if goddess *Lakshmi* favours the devotee, these food grains will never be exhausted, no matter how many basketful of paddy you take from the heap. The same kind of belief is also highlighted in Bhattacharya's study on Orissa (1976).

JANTAL

When the harvesting work is more or less over, a village council meeting is generally held in the village by the initiative of the village headman. The date of celebration of this *jantal* is fixed up at that meeting. It is fixed in such a way that the villagers have at least seven days time to collect materials like rice and fruits for the feast. Generally, this festival is held near by the village deities. In this morning, most of the male members of the village come to that place after having their bath. The *Pandit* performs *Chandi Puja*. The cook prepares the food, while some of the villagers help them. After the completion of the *puja*, the *pandit* offers the food to the Goddess. Then all the villagers, including boys, girls, and old men, irrespective of *jatis* and class, sit together in one place in front of that temple and enjoy the food. After having their meal, they also take some food to their home for the newly married women. It strengthens the unity among the villagers and reduces the class, caste feeling. It also leads villagers to forget the bitter experiences caused by petty differences among them.

CHANGING PRACTICES OF TRADITIONAL RITUALS

When modernization in agriculture entered into the study village, it is no doubt that it brought about a significant change in traditional agricultural practices. As it is revealed in the above description that all the observances of agro-based rituals, beliefs, riddles, folk songs are attached to agricultural practices, there is no doubt that these observances will undergo a change when these traditional agricultural practices change. Now the task is to observe, up to which extent these traditional observances have changed and what kind of relevant effect these changing practices have drawn.

The farmers of the village were observing the agro-based rituals starting from *Halasutra* to *Amarapuja* in a cyclical way when there was a system of mono cropping. But, the introduction of the system of multi-cropping, mechanical instruments and developed irrigation facilities have brought a change in its observances.

The introductions of multi-cropping pattern and the developed irrigation system have facilitated the farmers to plough on any day according to their need. So there is no need of doing *Halasutra* to start ploughing in an agricultural season. Around 60% of the interviewed farmers are not observing *Halasutra* now-a-days. Most of the farmers revealed that the introduction of tractor and power-tiller in ploughing have lessened the importance of the *Langala* (plough). So the observance of *Halasutra* ritual, which was totally attached with *Langal*, is disappearing day by day. Even today no body in the village observes *Halasutra* by relying on ploughing by tractor or power-tiller.

Though the commemoration of *Akhaya trutiya* ritual in the village is going on, the practice of this ritual has changed to some extent, due to the transformation in the traditional agricultural practices. Before the modernization in agriculture, the cultivators of the village were taking the right colour of paddy to their land in *Akhaya-trutiya* according to the advice of the *Jotisa*. But the huge production, and irrigation development have reduced the farmers' dependence on God and position of *Megha*. They are taking the paddy to land according to their own wish. Consolidation of land holding has also some impact on the celebration of this ritual. During 1986, this system was implemented in village, in which, most of the lower caste and class people lost their

ancestral and also *Akhimuthi-land* with which they had emotional attachment. A few households (one *Kumbhar*, two *Pana*), as it was revealed in interview, told that now a days they are not observing this rite. They told that they did not know where to take this *Akhimuthi*, as they lost their land.

There was a belief among the villagers, if the *Aghi* falls towards the Western direction or the flame of it is blue in colour, then flood or drought may occur in coming year. When the irrigation system was not so developed, HYVs of seeds were out of the village; they were carefully watching the *Aghi* and were taking certain remedies to protect them from it. All the farmers were looking for the first down pour in the next day of *Aghira Poornomi*. But due to development in irrigation system, nobody is looking for it these days. The development in agriculture has changed the farmers' perceptions of looking at the *Aghi*. Before that, they were fully dependant on nature. They were praying *Indra* for rain. But now-a-days, except a few old men, nobody in the village is aware about it.

The celebration of *Gamha Poornima* as an agricultural festival is disappearing day by day due to the introduction of modern technology, especially the tractor and power-tiller. Generally, the villagers worship plough and bullocks on this way. But the analysis of village livestock and material status has shown that, due to mechanization in the field of agriculture, most of the households are taking the help of machines. They are not keeping bullocks and plough, as it is more expensive than ploughing by tractor. If they need plough, they are going for rent by paying hundred rupees per day. Only fifty families that are less than 50% of the village households have bullocks. So, as the dependence on plough and bullocks are decreasing, the importance of *Gamha Poornima* is also decreasing. The mechanization in agriculture has forced the village labourers to migrate to industrial area, which has further created a problem for landholders. The unavailability of agricultural labourers and the rise of wage have forced them to lease out their land. Previously the owner cultivators were offering good meals and dress to the labourers on this occasion, but due to change in relation among landlords and labourers, and rise of sharecropping, they are not providing such things. While, on one hand, this mechanization in agriculture has diminished the importance of observance of *Gamha Poornima*, on the other hand, it has enhanced the celebration of *Biswakarma Puja*.

Before 1990, the *Khandayat*, *Kumbhar*, and *Kamar* were exclusively observing it. However, it had no link with agriculture. But when in 1990 the mechanization in agriculture entered into this village, the farmers started to worship the agricultural equipments (machines) on this occasion. They observe this rite for the smooth functioning of machine and also to avoid the accidents, which generally occur during the time agricultural seasons.

"*Land to the Tillers*" slogan has changed the landlords' attitude in leasing out their land to the lower caste people. They are withdrawing their lands within a few years instead of leasing them out for long years. This kind of changing attitude of landlords has reduced the sharecroppers' emotional attachment towards the landlord's land. In this case, no body is performing *Puja* in field. Neither *Malik* (land lord) nor *Chasi* (share cropper) takes *Akhimuthi* to the land. Only in few cases, the *Maliks* are taking *Akhimuthi* to their land depending on their situation.

The celebration of *Manabasa* ritual is increasing day by day. Previously, only the higher caste landholders were observing the *Manabasa* ritual. But due to rise in sharecropping, now-a-days, most of the households are observing. About 60% households of the study village are celebrating this ritual now-a-days.

The celebration of *Jantal*, which is considered as a community-based festival, has completely vanished from the village since last seven year. The rise of multi-cropping system and introduction of HYV seeds have created this problem in some extent. When they were doing mono crop, at that time after completion of harvesting, all the villagers were getting together to celebrate the ritual for the sake of entertainment. But, after the introduction of multi-cropping and early variety of HYV seeds, most of the villagers are busy in cultivation throughout the year, and it is also difficult to get a particular month, when all the villagers complete their harvesting and become free for the observance of this ritual.

Although the performance of *Nuakhai* is going on in the village but this ritual has lost its social importance. Previously, they were observing it in *Margosira* after the paddy harvesting was over. But after the introduction of early variety of HYV seeds,

some are observing it even in *Bhadrav*, when the paddies get ripe. When there was mono cropping system, the farmers of the village were offering paddy to the Gods and Goddesses after the completion of harvesting. But, as it seen at the time of interview after the introduction of multi-cropping, some farmers are providing new rice to deities twice in a year. Even some are also offering black gram and green gram after the completion of *Rabi Fasala* (winter harvesting). No single landlord in the village is observing this rite. When some landlords were asked to know the reasons behind their non-observances of this ritual, most of them told, they were not producing the paddy. They depend on share croppers for its production, so how will they offer this paddy to the God?, It is the duty of the share croppers to offer it to God and Goddesses. From this description it may be argued that the rise of sharecropping is one of the causes responsible for the non-observances of this rite.

The introduction of multi-cropping patterns and the early variety of HYV seeds have affected the farmers' traditional belief regarding the time of harvesting. When there was mono cropping pattern, the villagers were reaping the paddy after the *Bichha Sankranti* by performing *Sukradhan*, as they had a belief that the paddy plants die only after the *Sankranti*. Simultaneously, they were also threshing the paddy after the *Makara Sankranti* by celebrating *Khetapuja*, which is discussed earlier. But, now-a-days, due to the introduction of the multi-cropping pattern and early variety of HYV seeds, they do not wait till *Bichha Sankranti* to harvest the paddy. Similarly, they do not wait till *Makar Sankranti* to thresh it. They are doing this as soon as the paddy ripens.

There is a belief among the villagers that the paddy plants become pregnant at the time of *Garvana Sankranti*. So, they celebrate this ritual on the first day of the solar month of *Kartika* to protect these plants from evil eyes and evil things. But, after the introduction of early variety of HYV seeds, most of the villagers are harvesting paddy as early as the end of *Bhadrav*. So, for them, there is no need to observe this rite.

The analysis of observances of the agro-based rituals in present context of the study village shows that except a few rituals like *Akhayatrutiya*, *Manabasa* and *pooruni*, other rituals are at the stage of disappearing. Even, those who are observing them are not celebrating in a proper way. They are observing it for the sake of observances. Most

of the farmers, as it was revealed in the interview, told that they were not aware about the ritual value⁴ of these rituals, they were celebrating them because their fore fathers' were observing.

Most of the farmers who belong to Brahmins, *khandayats*, *Gaudas*, *Banias*, *Kumbhars* told that there is no objection in offering rice out of HYV seeds to the deities and also using it for *Manabasa*. They also told that, at the beginning of its introduction, they were not offering HYV seeds to the Gods and Goddesses, as they themselves were not taking it. They were producing this paddy only for the market. But, now-a-days, they have no problem of taking the rice made from the HYV seeds for their lunch and dinner. So, they are offering it to the deities. Some farmers belonging to these groups said that paddy is paddy. All paddies are created by God. So what is the problem in offering these things to 'Him'?

All the land holding households among *Panas* and *Dhobas* have shown strong attachment with the tradition. All of them are cultivating white coloured *Desidhana* (indigenous paddy) at least in a half-decimal area (1acre=100 decimal) of their land. They perform all ritual activities in that land. Many of them told that HYV seeds are not offered to the Gods and Goddesses, because chemical fertilizer and poisonous insecticides and pesticides are applied in their cultivation. Some of the farmers, while interviewing, revealed that HYV seeds are *Bidesi*. So, they are not using it. Most of the sharecroppers interviewed told that they are bound to use HYV seeds in *Puja*, although they have no such intention. They said that due to high cost in cultivation they prefer to cultivate HYV seeds rather than *Desidhan* for more production.

The analysis of above data relating to the use of HYV seeds in ritual activities shows that, while the higher *jati* and class farmers are mostly using HYV seeds but, the lower *jati* and class Farmers are using *Desi Dhana*.

⁴ Radcliffe Brown, while propounding his theory of ritual, gives a new term "Ritual value". According to him, "Any thing - a person, a material thing, a place, a ward or name, occasion of event, a day of the week or period of the year- which is the object of the ritual avoidance or taboo, can be said to have ritual value"(Bhattacharya, 1975).

Table 6:1. Distribution of households by castes using HYV seeds in ritual

Jati	No. of Households	No. Of Households observing <i>Manabasa</i>	No. of Households using HYV paddy seeds in <i>Manabasa</i>
Brahman	11	11	8 (72.72)
Khandayat	17	13	11 (84.61)
Bania	10	10	7(70)
Kumbhar	9	9	7(77.77)
Gouda	6	5	3(60)
Dhoba	3	3	0(00)
Kamara	2	2	2(100)
Barik	3	3	1 (33.33)
Pana	30	13	1 (7.69)
Tanti	11	9	7(77)
Total	102	78	48(61.53)

But all the farmers are still using white coloured seeds in their rituals, whether it is HYV seeds or not. This varies from caste to caste and class to class.

The ploughmen constitute the major portion of the mass that sells their labour for square meals a day. They work hard all day long. They have no learning .A cultivator life is one of the hard toil, stern realities and no dreams. Their songs form a part of their daily work (Das, 1991). Through their songs, they express their love, faith, and hope on God. Except bullocks, no body is there to listen them. But still they sing without bothering anything. They explain the sorrows of their family members and portray the character of their master-a messenger from Jam raja in their songs. One of these songs is given bellow:

“sa:hur d/ān/a:!
e pra:ninku kebe na:hin sukh
sa:huku dekhile khat:k
a:sit/hi /m outre”

Meaning: There is no happiness in my family, except the burden of money Lenders' and the tensions of the family members. The coming of moneylender to collect his money makes the borrower perceive the money Lander's image as the messenger of Jama Raja.

Explaining their sorrows to bullocks, through songs, they request their bullocks not to create any disturbances.

" hāda:tā bā!āōāku va:i:re
 be!āitā buda: t/ā:sā
 ta:ta:nge nhebu hāda:re bā!āōā
 kāta:I ēibi gha:sā , rānōha:iēibā kunda:
 ba:ti rākhiēibi bānārā hā!āōi
 kātākā poimunda:"

Meaning: Oh old bullock; don't be naughty. It's already late to plough. I would collect grass, Cuttack spinach, and cooked husk and grind the banal turmeric for you to relax.

Through their songs, the ploughmen describe the Gods and Goddesses as one hard working and painstaking being. They plough and level the grounds, plant, and weed out the fields like common people for their livelihood. The ploughmen go to cultivate their land long before the sunrise, have no time to take their breakfast. But, when the sun scorches, their wives bring rice for them. They put the Gods and Goddesses in their own situation and sing.

"gāhiri: bilāku /e kānha:I nele hā!ā
 āekhu āekhure pāhāde hela: be!ā
 be!ā pāhādku va:I:re
 ra:āha: neut/āhānti ba:si pākha:!"

Meaning: Kahnu, the Lord Jagannath is a cultivator who goes to plough before sunrise. His wife Radha carries food for 'Him'.

These songs reduce their pain and give them energy to work. These also help in establishing a good relationship among the farmers and labourers.

However, the present study shows that the plough songs have completely been disappeared from the agricultural scenario. Due to introduction of tractor and power tiller, now-a-days, it is very difficult to get a wooden plough in the field. As the ploughs have vanished from the village, the plough songs also have been disappeared. The tractor drivers, instead of singing the traditional songs, are singing the modern songs. Previously, for the transportation of agricultural commodities, they were depending on bullock carts. But now-a-days, the presence of tractor has reduced the farmer's dependence on it. In study village, there is not even a single bullock cart. So, how can the cart songs be heard?

Previously, people were using more riddles, folksongs and proverbs during agriculture activities. Proverbs concerned with agricultural activities such as, forecast of

weather, timing of agricultural operations, choice of yoke animals, seeds and work pattern for agriculture in general and different crops in particular.

The present study shows that, in the village, the middle caste groups (*kumbhar*, *Bonia*, *Gauda*) are the largest repositories of the proverbs. The Brahmins and *Khandayats* are less acquainted with proverbs in spite of their superior acquaintance with the literary tradition, as most of them are *Malik* (land lord and owner cultivator) who basically depends on others for cultivation. The lower caste *Panas* and *Dhobas* have the least knowledge of the proverbs, because most of them are *mulias* (agricultural labourers). They do not have knowledge about the method of agriculture.

It is also shown in the study that in comparison to other incidence, (character of individual, and advisory in nature) the lower percentage of proverbs and folksongs is concerned with agricultural activities. The lowest incidence of the proverbs concerned with agricultural activities is the sign of the decay of indigenous practices under the impact of modern technology. The changed cropping pattern, the use of chemical fertilizer in the place of indigenous manure and availability of assured irrigation are the factors, which have made these proverbs and folksongs as obsolete.

Previously, there were certain proverbs with regard to selection of bullock for ploughing. In reaction to the modern agricultural practices, some villagers have developed certain new folksongs, which are mentioned bellow:

“ga:i: kha:igla: gha:s
khat ma:ti ðele rhib f
ma:tire t na:hin rse”

Meaning: in reaction to the use of chemical fertilizer, this song tells that when the excess use of fertilizer makes the soil infertile, at that time, the indigenous manure gets back its fertility.

“pñora: pisa: pñora: ðin
kalkita: ðhna: ma:se
hidma:ti febe hide Iðieubu
bñsi kha:ibu bñrse”

Meaning: The money from port will last for fifteen days and the money from Calcutta will last for a month. But, if you work in your field, you will eat for a year.

But, now-a-days, the farmers of the study village are not searching for bullock to plough their land. They are fully depending on tractors. So there is no need of knowing these proverbs relating to selection of bullock for them.

When the irrigation was not developed and mono cropping system was there, at that time, farmers had developed a strong belief in the proverbs and folksongs, and they were also working according to proverbs for better production. But, when the irrigation process developed and multi cropping pattern introduced, they cultivated throughout the year. They did not see which kind of relation exists between these crops and the proverbs. There are certain proverbs, which were indicative of abundant harvesting, flood, and draught. In this context, some proverbs are given below.

“Asa:de pu:rnā ḍakhyina: bāhe
sehi bārāsre bānya: hue”

Meaning: when the wind blows from the south direction during the end of *Asara*, then there is a chance of flood that year.

“ḍhikā a:mbā ḍhikā ḍha:nā
ḍhikā tintu! bānya: prāma:nā”

Meaning: excess of mango is the sign of excess of paddy. But excess of tamarind is the sign of coming of flood.

Proverbs were helping the farmers in establishing relationship between nature and production of crops. By observing these proverbs, they were talking certain remedies before any incident occurred.

After the advent of modernization in agriculture, the farmers thought that they were not much depend on nature, as before. They could produce more by controlling the nature according to their need. So they are not using those proverbs, which they were using, when they were fully dependant on nature.

The farmers of the village observe certain ritual prohibitions. They do not till their land on some specific days and *tithis*. They do not plough their land in *Purnima* (full moon day) and *Amavasya* (new moon). There is a proverb in *Khana Vachan*, which is given below:

“sankra:nti amā:ba:sya: pu:nima: ka:t
 eka:ḍa:ḥī: ḍine hā! nira:t
 ete ted/ī hā! kribu febe
 ḍha:nā fāsā!āre māngā!ā tebe”

Meaning: If you till your land on some other days than the 11th day of a lunar fort night, on Sankranti (first day of a month), new moon, full moon, then it would be auspicious for paddy crop.

The farmers generally do not plough their land on certain days, like the day of the worship of the village deities. If a particular farmer performs any worship at his home on a particular day, he does not plough the land on that day. When a member of the family dies, the farmer does not furrow the land till the expiry of the period of pollution. The tilling is also prohibited during the time of marriage and *pitru sradha*. Most of the farmers interviewed, told that in order to provide rest to the bullocks, who get tired because of excessive labour during the agricultural season, they observe these ritual prohibitions. When they were asked why they observe these prohibitions, they told that because their fathers were observing it.

All the ritual prohibitions are attached to the *Langala* (plough). Now-a-days, they are tilling their land by tractor even on the day of full moon and new moon. Answering the reason behind the non observances of these ritual prohibitions, some progressive farmers told that the tide in canal generally comes at the time of *Purnima* and *Amavasya* and it is also difficult to get tractor for rent as all require in this time. If we get tractor on that day, we should not loose the opportunity to plough by observing these ritual prohibitions. So if they think about these prohibitions always, then they may face problem in future. The production may decrease without getting proper facilities.

Some of the farmers during their interview revealed that they are generally busy in agriculture. Sometimes they forget the date of *Purnima* and *Amavasya* and therefore till their land unaware of these dates. Thus, from the forgoing analysis it is concluded that the advent of modernization of agriculture has brought a change in traditional religion, rites, rituals and folk songs. But these changes are not so rapid. These rites and rituals offer resistance in some cases to such intended changes.

The advent of modern agricultural practices in agriculture has affected the traditional belief system of people to some extent. The developed irrigation system has raised the people's confidence on themselves. As a result, people have lost the importance to worship the Lord *Indra* at the time of drought. But the farmers are still performing the ritual of *Indra* Puja even today in North-East direction, while starting the agricultural rituals in the field.

Coming to the rituals, it is observed that except a few rituals like, *Akshayatrutiya*, *Manabasa* and *Pooruni*, other rituals are on the stage of disappearing from the village. Even, those who are observing them are not celebrating these rituals in a proper way. Most of the farmers are not aware about the value of these rituals. They are celebrating these rituals just because their fore fathers were observing. Apart from these rituals, farmers have also incorporated a new ritual called "*Biswakarma Puja*", which was earlier observed by the village artisans only. But now the farmers in the study village also celebrate this ritual.

While traditional cultures are resistant to innovation, it would not be correct to assume that they are changeless altogether. No culture is known to have firmly set its face against all changes for all the time. By using their genius, the farmers of the village have successfully tried to avert any clash between new situations and the old rites and rituals. The (HYV) seeds, which did not find, in the initial stage, any room in the world of rites and rituals, are gradually being accepted by the farmers in their performance of rites and rituals now-a-days. In the present study, it is observed that mostly the higher *jati* and class farmers are using (HYV) seeds, while the lower *jati* and class farmers are still using indigenous seeds. But, all the farmers still are use white seeds in their rituals, whether it is (HYV) seeds or not.

In the present study, it is observed that the disappearance of bullock-carts, ploughs have resulted in the disappearance of the plough and cart songs from the village. The tractor drivers who stand in the place of ploughman sing modern songs, instead of the traditional songs.

The lower percentage of proverbs and folksongs are concerned with the agricultural activities. The lowest incidence of the proverbs concerned with the agricultural activities is the sign of the decay of indigenous practices under the impact of modern technology.

The extensive use of tractors and power tillers has reduced the age-old tradition of ritual prohibition. Now-a-days some of them are tilling their land on the day of full moon and new moon.

As change and continuity are the undeniable facts of life, the farmers always try to maintain balance between tradition and modernity. So, while the modern farm practices are followed, the rites and rituals are also honoured. In fact, where possible, they normally attempt to establish continuity with suitable historic past. Although the modernization in agriculture has raised people's confidence on them by reducing the importance of nature and supernatural being, the practice of propitiating nature, which has been done through the observance of rites and rituals, is not therefore abandoned.

CHAPTER VII

SUMMARY AND CONCLUSION

The aim of this study was to examine how far the traditional agricultural practices of Orissa have changed, and the extent to which these changes have affected the rural social institutions like Jajmani relations, family, power structure, agro-based religion and rituals in Jagdalpur village of Bhadrak District.

As stated earlier, agriculture is the main stay for the population of Orissa, where 85% of the population depend on it. After independence, in order to enhance the socio-economic status of the people of Orissa, the government of Orissa has brought different programs and projects during different periods. There is a shift in agriculture from mono-cropping pattern to multi-cropping pattern in Orissa. Moreover, the use of HYV seeds has accelerated the process of agricultural production in the State. For example, there has been a remarkable change in the rice production from 520 kg per hectare to 1041 kg in the years 1951 and 2001 respectively. Coming to the water resources and irrigation facilities, the developmental scenario of the State, states that the Orissa has achieved a progressive change by irrigating 47% its cultivable land. It has been observed that the irrigation facilities in 1951 were 1.54-lakh hectare, whereas in 2001 it was 25-20 lakh hectare. Thus, there is a remarkable development in irrigation facility for the cultivable land. There is also an increased use of fertiliser in the field of agriculture from 1 kg per hectare to 49 kg per hectare in the year of 1951 and 2001 respectively. Moreover, in the year of 2001, the total consumption of fertilisers of the State was 319.21 thousand million ton. The agriculture in Orissa, to some extent, has replaced the manual pattern to mechanical pattern, which is confined to the coastal belt of Orissa and undivided Sambalpur district. Along with these features, the Agricultural Policy of 1996 and the Research and Extension Programmes have brought about a change in the field of agriculture in Orissa. Though Orissa does not come under the category of intense modernization in agriculture like Punjab, Haryana and Tamil Nadu, the sign of Green Revolution is very much conspicuous here.

The Jajmani relation has adapted itself to suit the changing needs of agricultural practices. The advent of agricultural modernization has badly affected the household level services than the community level services. Within the community level services,

the *jati*, who not have any land grants, have shown irregularity in their services. An examination of *Jajmani* relations in the context of modernization in agriculture shows that this modernization has drastically affected the traditional relations among the landlords and agricultural laborers, landlord and carpenter cum blacksmith relations. Both landlords and Kamins are now giving less importance to role relationships and the socio-cultural factors concerning *Jajmani*. There is also a less degree of kin-like behavior. Money and profit are gradually becoming important considerations. This modernization in agriculture has brought mixed results among agricultural laborers. While this mechanization has raised their status from attached to free laborers, on one hand, it has lost the laborer's permanent security, on the other hand. In some cases, it has also helped in the invention of contractual laborers. However, the modernization in agriculture has reduced the monopolization of landlords over laborers. Although some laborers have lost their permanent security due to this mechanization, the availability of non-agricultural jobs shows that the landlord is not the only source of their livelihood. Table 4:2 and 4:3 show that this mechanization has established a dependent kind of relationship among landlords and laborers, which is beyond exploitation.

This mechanization in agriculture has not brought a tremendous effect on traditional landlord and *purohit* relations. Although no single *purohit* in the village is taking *barsika* from his Jajman's house, still he visits them at the time of life cycle rituals, for which, he takes payment in terms of both cash and kind. The modernization of agriculture has not significantly affected the traditional landlords and service *jati* relations, except the carpenter - blacksmiths. Although some of the landlords have cut off their *bartana* relations with hereditary *Bariks* and *Dhobas*, the continuity of ritual relation is noticeably prevalent there. Even in the case of secular services, most of them are taking the service of hereditary service *jati*. Those who have *bartan* relations with the service *jati*, they pay predominantly in terms of cash rather than kind. Not a single *Kumbhar* and *Bania* in the village is receiving payment in kind. All the villagers have cut off their *bartana* relation with *Banias*. Although even a single *Kumbhar* in the village is not receiving *barsika* from landlords, the tradition of supplying the pots at the time of life cycle rituals is going on with the same landlord.

Though, due to mechanization in agriculture, some people have adopted new occupation, the economic system of the village is still based on functional specialization and interdependence of different *Jati*. The basic ideology behind these relations is reciprocity as a survival strategy through occupational monopoly. Although the modernization in agriculture has mostly replaced the kind transaction with cash, it has not resulted in the complete erosion of the traditional attitude of mutual dependence among different *Jati*. The ethos and values of *Jajmani* is still continuing. In spite of modernization in agriculture, the patronage in between patron and client is still surviving. Even in contemporary times, the patrons of the village render economic services, give advices, mediate disputes, and use their influences on the authorities for the interest of their clients. Therefore, it can be argued that the *Jajmani* as a form still exists, but the content of it has changed. This means that the motives and functions of different *Jati* still exist, while only the change has occurred in person to person or in institution to institution relations. Whatever change has occurred is noticed only in the periphery of this relation, but the core reciprocity still exists.

The family, which is regarded as the basis of patron-client relationship, is considered as an important rural social institution. Coming to the family, it can be concluded that the technological transformation in agriculture has both directly and indirectly influenced the structure and function of the family. The present study shows that the joint family is structurally breaking down, but the functional continuity is still there. Even today, the sharing of agricultural instruments and exchange of kin labourers is widely found among the lower *jati*. The percentages of the number of joint family continue to dominate among the landlord and owner cultivators. However, fanners, landless agricultural labourers and lower *jati* witness a lot of change in their traditional structure of the family. The emergence of nuclear family out of traditional joint family brings a change in its traditional functions. As the joint family changes into nuclear family, the socialization process of children is mostly shifted from the hands of family members to child's peer group and playmates, reducing the child's emotional attachment with their family members. The changing structure and function of the family have brought certain change in other social institutions like political and economic institutions of the study village. The fragmentation of land holding, which is the result of structural break down of joint families, has weakened the economic condition of the landlords.

This structural break down of traditional Hindu families has resulted in weakening the rural power structure by distributing lands among the brothers of the landlords.

This advent of modernization in agriculture also influences the physical, psychological and emotional function of a family. This advent of modernization influences the inter and intra family relations. It reduces the gap between husband and wife, parents and children. In some families, women are consulted in decision-making process. The relation between father and son is no more based on fear but on respect and affection. The break down of joint family brings some loss for higher *jati* and class people in the village, both economically and politically.

Although the traditional type of joint family in the study village is yielding place to residential neuclearity, it does not mean that joint family is completely eradicated from the study village. In spite of the change between husband and wife, the traditional impression on the husband and wife relationship is still so strong in our society that we cannot think of a change from patriarchal families to equalitarian family.

The advent of new technology in agriculture has brought certain changes in the age-old traditional, political institutions of the village. To some extent, the higher *jati* (*Khandayats*), who were playing a dominant role in the village, have lost their traditional dominance. An undercurrent of class like interests disturbs the age-old equilibrium of the *jati* group to an appreciable extent. The members of the village committee have often thrown their weights in favour of those who belong to their class rather than to their *jati*. Traditionally, the land was the main source of power of the village. But along with technological transformation, the emergence of adult franchise, higher education have opened up new avenues for acquisition of power. The power of the emerging leader of the village is not only based on land but also on their numerical support within the village and political contact outside it. Now-a-days, lack of funds is not a very serious handicap, since the party as well as various agencies could be trapped for money. Due to the disappearance of patronage kind of relationship among the landlords and labourers, the landlord, *Khandayat* are loosing their political support from the agricultural labourers and sharecroppers. Along with land reforms, the adult franchise, and the higher education have raised the economic status of the poor *jati*. Still to some extent, the *Khandayat jati* are playing a crucial role due to their economic power.

In course of this study on the impact of modern farm practices on the social institutions, the present study was considered with noting the impact of the same on religion, rites, rituals and folk songs observed by the farmers in relation to agriculture.

No doubt, the advent of modernization of agriculture has brought a change in traditional religion, rites, rituals and folk songs. But these changes are not so rapid. These rites and rituals offer resistance in some cases to such intended changes.

The advent of new technology in agriculture has affected to some extent in the belief system of people. The development of irrigation system has raised the people's confidence on themselves. As a result, people have lost the importance to worship the Lord *Indra* at the time of drought. But the ritual of *Indra* Puja is still being performed by the farmers today in north east direction, while starting the agricultural rituals in the field, because *Indra* is considered as the protector of this direction.

Coming to the rituals, it is observed that except a few rituals like *Akshayatrutiya*, *Manabasa* and *Pooruni*, other rituals are in the stage of disappearing from the village. Even, those who observe them are not celebrating these rituals in a proper way. Most of the farmers are not aware of the value of these rituals. They are celebrating these rituals because their forefathers used to observe them. Apart from these rituals, farmers have also incorporated a new ritual called "*Biswakarma Puja*", which was earlier observed by the village artisans only. But now the farmers in the study village are also celebrating this ritual.

While traditional cultures are undoubtedly resistant to innovation, it would not be correct to assume that they are changeless altogether. No culture is known to have firmly set its face against all changes for all the time. By putting their genius, the farmers of the village have successfully tried to avert any clash between new situations and the old rites and rituals. The (HYV) seeds, which did not find any room in the world of rites and rituals in the initial stage, are gradually being accepted by the farmers, now-a-days. In the present study, it is observed that mostly the higher *jati* and class farmers are using (HYV) seeds, while the lower *jati* and class farmers are still using indigenous seeds. But,

all the farmers till now are using white seeds in their rituals, whether it is (HYV) seeds or not.

In the present study, it is observed that the disappearance of bullock-carts, ploughs have resulted in the disappearance of the plough and cart songs from the village. The tractor drivers, who stand in the place of ploughman, sing modern songs, instead of the traditional songs.

The lower percentage of proverbs and folksongs are concerned with the agricultural activities. The lowest incidence of the proverbs concerned with the agricultural activities is the sign of decay of the indigenous practices under the impact of modern technology.

The extensive use of tractors and power tillers has reduced the age-old tradition of ritual prohibition. Now-a-days, some of them are tilling their land on the day of full moon and new moon, which is traditionally prohibited.

As change and continuity are the undeniable facts of life, the farmers always try to maintain a balance between tradition and modernity. So, while the modern farm practices are followed, the rites and rituals are also honoured. In fact, where possible, they normally attempt to establish continuity with suitable historic past. Although the modernization in agriculture has raised people's confidence on them by reducing the importance of nature and supernatural being, the practice of propitiating nature, which is done through the observance of rites and rituals, is not therefore abandoned.

In the preceding analysis of the elements of change in rural social institutions, the study has argued, "*old habits die hard*" In spite of continuous impact of modern agricultural practices, the rural social institutions remain visible; but not in the same traditional form. Some changes have occurred in these. Only some structural changes have occurred and whatever change has occurred is noticed only in the level of periphery. The ideology or the core behind these institutions remains same. Although certain changes have been occurred in the traditional *Jajmani* relations, the basic ideology of reciprocity behind these relations still survives. The ethos and values remain silent. The *Jajmani* as a form still exists, but the content of person-to-person, institution-to-institution relationships has changed. The families, which are involved in this

traditional, inter *jati* relations are also not totally escaped from these changes. The nuclear family has emerged, the inter and intra family relations have changed. But still the traditional form of families exists. Though the joint family is structurally breaking down, it is continuing functionally. However, *the jati* and the families, which are holding a vast amount of land or considered as landlords, are still playing a politically dominant role. The Brahmins, who are considered as ritually higher, also capture certain political power. In spite of higher education, technological transformation, and adult franchise, the lower *jati* people are not in a position to compete with the Khandayat in power struggle due to lower economic conditions.

Although different traditional agro-based rituals, religions and folk songs have lost their importance in society, some are still honoured in modern farm practices. While some folksongs, rituals are in a stage of disappearance; some new rituals and folk songs are also invented in an accommodation or cultural adaptation with new agrarian situation. So nothing remains static in a society, all comes and goes. In fact, they normally attempt to establish continuity with a historic past, whenever it is possible.

Here, the study likes to suggest certain points. As agriculture occupies a pivotal place in Orissa, certain developmental steps should be taken with proper understanding of the culture of a community to improve it. In order to make more mechanization, the mechanical instruments should be distributed among the rural poor with a minimal price. The demonstration of a new machine should be carried out in rural area. Before the introduction of an innovation in agriculture, we should study the cultural resistance of the people to this innovation. The sphere of rites and rituals provides a very important area of study for social and cultural anthropologists. They manifest a scheme of the people's values and thus give us an idea of the culture of a community. So the social and cultural anthropologists should try to understand the values cherished through them, which would give a complete idea of the way of life of the people practising the rituals. Important elements of the worldview of the persons in the community could be constructed through a study of their rites and rituals.

GLOSSARY

<i>Amabasya</i>	New moon Day
<i>Amar</i>	Grain Storing House
<i>Anna</i>	Food
<i>Asan</i>	Seat
<i>Badhei</i>	Carpenter
<i>Bania</i>	Goldsmith
<i>Barika</i>	Barber
<i>Barsa</i>	Year
<i>Barsika</i>	Annual or Yearly Payment
<i>Bartan</i>	Jajamani Relation
<i>Bhaga Chasi</i>	Share Croppers
<i>Bhoga</i>	Prasad
<i>Bidesi Dhana</i>	Foreign Paddy
<i>Budhabar</i>	Wednesday
<i>Chasi</i>	Owner Cultivator
<i>Chaukidar</i>	Watchman
<i>Chavla</i>	Rice
<i>Chita</i>	Piece of Cotton
<i>ChitalJhoti</i>	Different designs drawn on floor with rice
<i>Dakhina</i>	Payment made to Brahmin after the completion of worship
<i>Dana</i>	Gift
<i>Desi Dhana</i>	Indigenous Paddy
<i>Dhana</i>	Paddy
<i>Dhana Menta</i>	Festoon woven out of paddy stakes
<i>Dhoba</i>	Washerman
<i>Dina</i>	Day
<i>Ekadasi</i>	The Eleventh lunar day of a month
<i>Gahma Purnami</i>	The Full moon Day of Shravan
<i>Gamucha</i>	Napkin
<i>Garvana Gacha</i>	Cordia Myxa Tree
<i>Gauda</i>	Herdsman
<i>Gram Devati</i>	Village Deity
<i>Gurubar</i>	Thursday
<i>Hadi</i>	Drum Beater
<i>Hala</i>	Plough
<i>Hali Pratha</i>	The pattern of relationship in which the traditional relationship between the Landlord and the Farm Servant was institutionalised

<i>Halia</i>	Plough man
<i>Halia Gita</i>	Plough Song
<i>Holi</i>	The Festival of Colour
<i>Isan Kana</i>	North-East Corner
<i>Jami/Kheta</i>	Field
<i>Jangyan</i>	Worship a God with Fire
<i>Jantal</i>	Community feast
<i>Jati</i>	Caste
<i>Jotisa</i>	Astrologer
<i>Kamar</i>	Blacksmith
<i>Khadika</i>	A kind of Grass
<i>Khala</i>	Grain Yard
<i>Khandayat</i>	Warrior
<i>KharifPhasal</i>	Harvesting in Rainy Season
<i>Kumbhar</i>	Potter
<i>Lakshmi</i>	Goddess of Wealth
<i>Langala</i>	Plough
<i>Malik</i>	Landlord
<i>Mana</i>	Grain Measurer
<i>Mandira</i>	Temple
<i>Masa</i>	Month
<i>Megha</i>	Cloud
<i>Mulia</i>	Casual Labourer
<i>Muthi Chuan</i>	Touching of the Seed
<i>Panchanan Mela</i>	A Worship organized to please Lord Siva
<i>Panji</i>	Almanac
<i>Pano</i>	Outcaste
<i>Parba</i>	Festival
<i>Parbani</i>	Ritual
<i>Pitha</i>	Cake
<i>Pranam</i>	Salute
<i>Puja</i>	Worship
<i>Puran</i>	Mythology
<i>Purnima</i>	Full moon Day
<i>Purohita/Pandit</i>	Priest
<i>Rabi Phasal</i>	Winter harvesting
<i>Saga</i>	Green
<i>Sagadia Gita</i>	Cart Song
<i>Sahi</i>	Street
<i>Sankranti</i>	The First Day of Solar Month
<i>Santa</i>	Landlord

Sevaka
Sukrabar
Tanti
Thakura
Thakurani
Tithi

Servant
Friday
Weaver
God
Goddess
The thirteenth part of a lunar month

ABBREVIATIONS

OUAT	Orissa University of ^{Agriculture and} Technology Program
OADP	Orissa Agricultural Development Project
NARP	National Agricultural Research Project
IADP	Intensive Agricultural district Program
ORP	Operational Research Project
CAP	Compact Area Program
SPIRP	Specific Programme for Increasing Rice Production
NATP	National Agricultural Technology ^{project}
ICAR	Indian Council for Agricultural Research
HYV	High Yielding Varieties
BKBY	Biju Krishak Bikash Yojna

PHONETIC TRANSCRIPTION

/p/ can be pronounced as the 'pa' in "pen"

/b/ can be pronounced as the 'ba' in "bad"

/t/ can be pronounced as the 'ta' in "tea"

/d/ can be pronounced as the 'da' in "did"

/k/ can be pronounced as the 'ka' in "cat"

/g/ can be pronounced as the 'ga' in "got"

/tʃ/ can be pronounced as the 'tʃ' in "chain"

/dʒ/ can be pronounced as the 'ja' in "jam"

/f/ can be pronounced as the 'fa' in "fall"

/v/ can be pronounced as the 'va' in "van"

/θ/ can be pronounced as the 'tha' in "thin"

/ð/ can be pronounced as the 'the' in "this"

/s/ can be pronounced as the 's' in "so"

/z/ can be pronounced as the 'ja' in "zoo"

/l/ can be pronounced as the 's' in "shoe"

/ʒ/ can be pronounced as the 'ja' in "vision"

/h/ can be pronounced as the 'ha' in "hat"

/m/ can be pronounced as the 'ma' in "man"

/n/ can be pronounced as the 'na' in "no"

/ŋ/ can be pronounced as the 'nga' in "sing"

lʌ can be pronounced as the 'la' in "leg"

/!/ can be pronounced as the 'ala'

/r/ can be pronounced as the 'ra' in "red"

/j/ can be pronounced as the 'ya' in "yes"

/w/ can be pronounced as the 'wa' in "wet"

•**

/i:/ can be pronounced as the 'long English alphabet e' in "see"

/ɪ/ can be pronounced as the 'English alphabet e' in "sit"

ɪd can be pronounced as the 'English alphabet a' in "ten"

/æ / can be pronounced as the 'ei' in "cat"

/ɑ:/ can be pronounced as the 'aa' in "father"

/ɔ:/ can be pronounced as the 'long a' in "saw"

/ʊ/ can be pronounced as the 'u' in "put"

/u:/ can be pronounced as the 'long u' in "too"

/ɜ:/ can be pronounced as the 'short a' in "bird" and "girl"

/ə/ can be pronounced as the 'a' in "about"

/eɪ/ can be pronounced as the 'English alphabet ei combinedly' in "say"

/aɪ/ can be pronounced as the 'aai combinedly' in "five"

/ɔɪ/ can be pronounced as the 'ai' in "boy"

/əʊ/ can be pronounced as the 'au' in "go"

/aʊ/ can be pronounced as the 'aau' in now"

/ɪd/ can be pronounced as the 'English alphabet e and ya in the word yes combinedly' in "near" and "ear"

/ed/ can be pronounced as the 'English alphabet a and ya in the word yes combinedly' in "hair"

/ʊə/ can be pronounced as the 'u and a combinedly' in "poor"

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Plate no. 1 Krishi Vigyan Kendra, Ranital)



Plate no. 2 Farmers purchasing high yielding (H.Y.V.)
paddy seed from K.V.K.Ranital



Plate no.3 Farmers training is going on in K.V.K. Ranital



Plate no.4 Modern agricultural equipments:
Thresher, power tiler, pump set (left to right respectively)

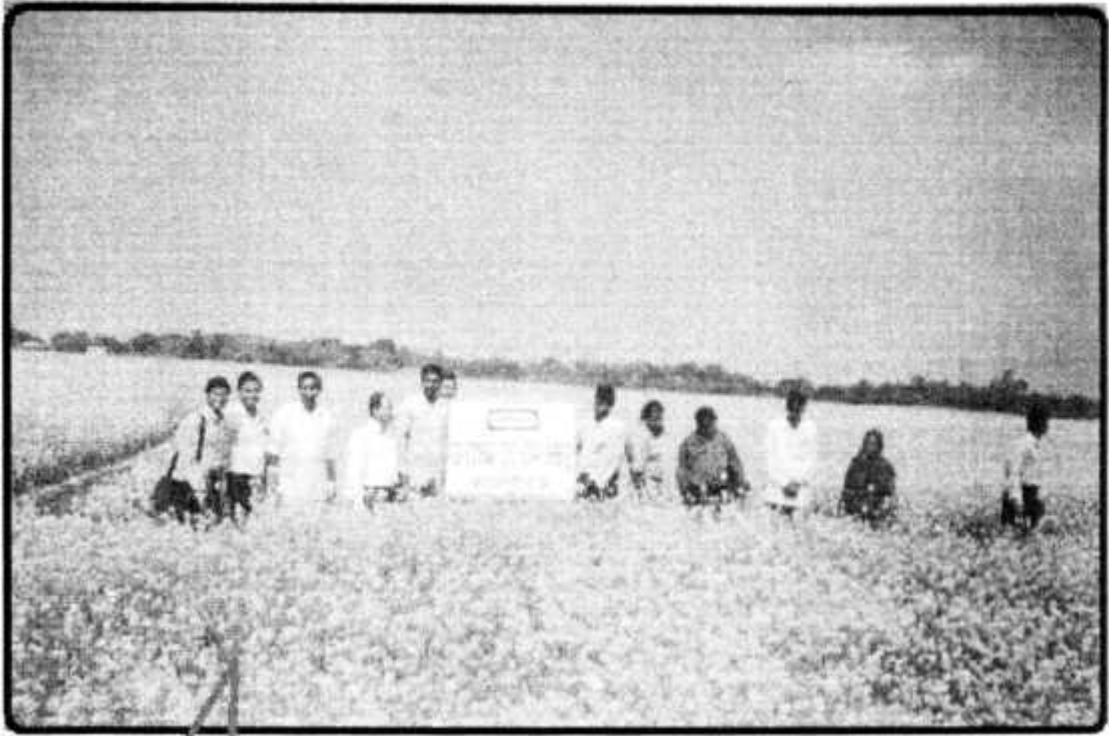


Plate no. 5 **Farmers** and agricultural officials gathered in mustard field



no. 6 An inteniuew with a farmer in the mustard field

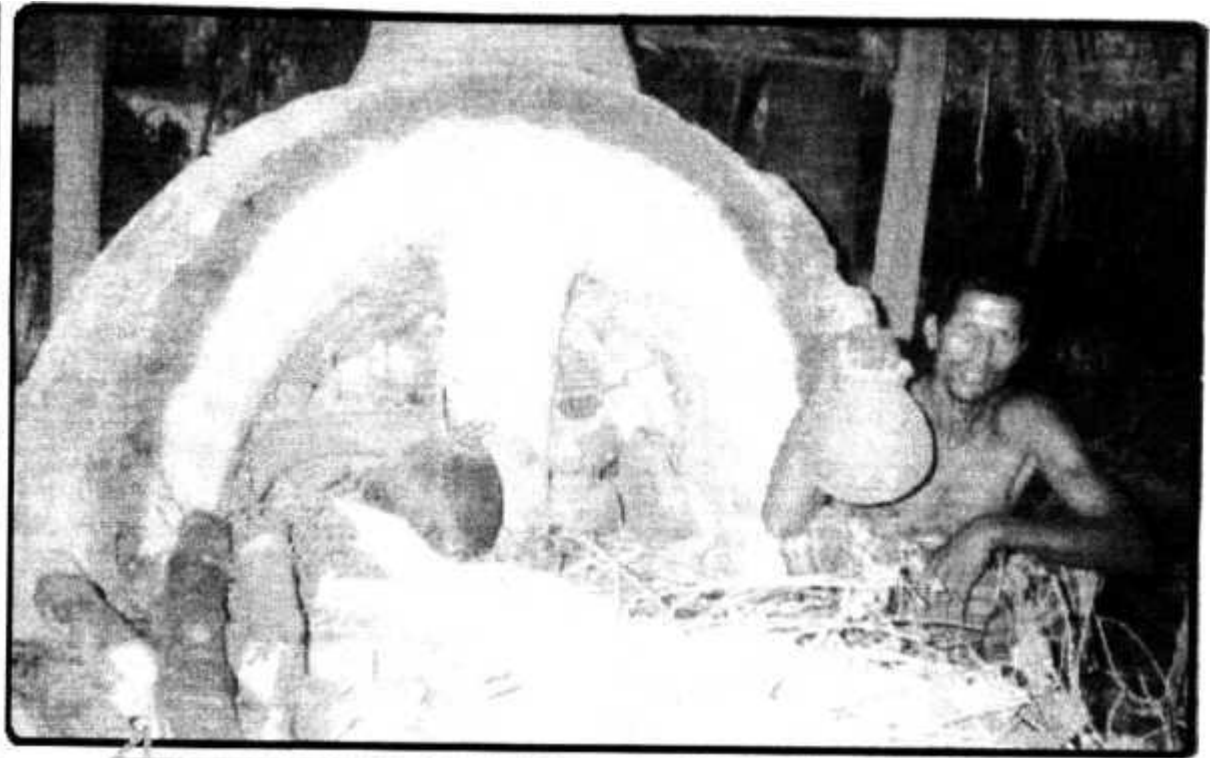


Plate no. 7 A portter is busy with his traditional occupation (making pots)



Plate no.8 An interview with Village Sarpanch