

Rice Culture in the Little Traditions of Odisha

JAGANNATH DASH[†]

*Department of Anthropology, Utkal University,
Vani Bihar, Bhubaneswar, Odisha, India
E-mail: jdash1955@gmail.com*

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ABSTRACT: Rice because of its status as a staple food has a great capacity to influence the society and culture, orient them towards an agricultural mode of livelihood, and make them rice-based social structures and organizations. However, rice can never be said to have deterministic effects on society and culture, it becomes a responsible factor or condition to shape them in a definite way. Every culture has its own way of producing and harvesting rice through unique socio-religious and technological procedures and eating them as per their own customs and traditions. The overall rice-oriented social structures and rice-based cultural traditions give rise to a unique identity as peasant society and culture which may be tribal or non-tribal. Rice also shapes social habits and behaviours differently in different ecological set ups. In nut shell, it can be said that rice forms the core element of several cultures which are basically rice-based or rice-oriented and Odisha is no exception to it. Attempts have been made in the paper to discuss the socio-cultural heritage of Odisha as shaped by the cultivation of rice with specific reference to economic, social, political and spiritual heritages on the backdrop of Hindu great tradition.

INTRODUCTION

Rooted from the French word “ris” and Greek word “oruzā”, rice has been a major food in the world since time immemorial. It is chiefly originated as an oriental grass grown in the marshes. It is the staple food in many eastern countries and elsewhere. The world produces about 738,064,040 metric tons of rice each year, come next to sugar and corn, which accounts for 8.30% of total food production out of top 50 food varieties (in Wikipedia, it is mentioned as 751,885,117 metric tons). It is said that “just 15 plant crops provide 90% of the world’s food energy intake (exclusive of meat) with rice, maize and wheat comprising 2/3rd of human food consumption. These three are the staples of about 80% of the world

population, and rice feeds almost half of humanity. A staple food is usually eaten routinely constituting a dominant portion of a standard diet for a given people, supplying a large fraction of energy needs and generally forming a significant proportion of the intake of other nutrients as well.

Primarily rice is a biological product which has two popular domesticated species, namely, *Oryza sativa* and *Oryza glaberrima* which are native to Southern Asia and Southeastern Africa (Crawford and Shen, '98). Ricepedia, the online authority on rice (CGIAR: Consultative Group for International Agricultural Research) says that “rice has shaped the cultures and dietary habits of its cultivators and consumers. Regarding the history of rice cultivation it says further that *Oryza sativa* was domesticated

[†] Former Professor

from the wild grass *Oryza rufipogon* roughly 10,000-14,000 years ago. The two main sub-species of rice - *indica* (prevalent in tropical regions) and *japonica* (prevalent in the subtropical and temperate regions of East Asia) - are not believed to have been derived from independent domestication events. Another cultivated species, *O. glaberrima*, was domesticated much later in West Africa. Ricepedia (online) also states that “recent genetic evidences show that all forms of Asian rice, both *indica* and *japonica*, come from a single domestication event that occurred 8,200-13,500 years ago in the Pearl River Valley region of China.” As already mentioned, it is a grass “*autogane*” which belongs to grass family Poaceae of the Plant Kingdom. In the 57th session of the United Nations General Assembly too, rice has been reported as the staple food of more than half of the world’s population. Therefore, rice has been taken as a major concern for the alleviation of poverty and malnutrition. Rice has also a major role to play in the field of food security too. Perhaps in view of this, the year 2004 had been ear marked as the International Year of Rice (Gnanamanickam, 2009).

Rice is a cereal product and staple food, and it is widely considered as the life line for thousands of millions of people. As the staple food, it has established a deep-rooted position in the socio-cultural system of the dependent people. Because of its permanent role in the livelihood pattern of the concerned people, it has occupied substantial positions in the social system/social structure, economy, politics, religion and rest other aspects of culture. Besides the connection to global issues like hunger eradication, poverty alleviation, food security and economic development, rice exerts a lot of influence on the society and culture of the people. Very popularly, such socio-cultural systems may be denoted as rice-based systems. The social institutions like kinship, marriage, economy, politics, religion, leisure time and recreation, language, folklore, food and nutrition etc. are all directly connected to the cultivation of rice since time immemorial. It has influenced and oriented the society in a specific manner to manage land, labour, water and people for the organization of the rice cultivation. Rice-based activities have also given rise to several conceptual developments like inequality, stratification, rural-

urban, folk cultures, village community, indigenous civilizations, simple and complex societies, simple and complex technologies, little and great traditions, dominant caste and so on in the society. Comparing a rice-based community with that of hunting and food gathering and pastoral ways of life, one can notice significant differences in their society and culture.

Rice-based system has moulded several celebrations at the communal and inter-communal levels to define unity and diversity. On the whole, keeping in view various stages of rice cultivation starting from the tilling the land to harvest, people plan in a structural way all their socio-religious and economic activities throughout the year. Harvest of rice not only brings happiness, it also defines all leisure time and recreational activities in a systematic manner. It is also noticed that - the relationship between rice and people has inspired songs, painting, stories, and other modes of communication in the society. In India as well as Odisha rice has been attributed a divine status, considering rice or paddy as the Goddess Laxmi. In other parts of Asia also rice is similarly considered divine by many Asian emperors and kings in ancient times. The Japanese even to-day refer to rice as their mother and regard rice farmers as the guardians of their culture in the country side.

In view of the above stated aspects, it is very clearly taken for granted that rice because of its status as a staple food has a great capacity to influence the society and culture, orient them towards an agricultural mode of livelihood, and make them rice-based social structures and organizations. However, rice can never be said to have deterministic effects on society and culture, it becomes a responsible factor or condition to shape them in a definite way. Every culture has its own way of producing and harvesting rice through unique socio-religious and technological procedures and eating them as per their own customs and traditions. The overall rice-oriented social structures and rice-based cultural traditions give rise to a unique identity as peasant society and culture which may be tribal or non-tribal. Rice also shapes social habits and behaviours differently in different ecological set ups. In nut shell, it can be said that rice forms the core element of several cultures which are basically rice-based or rice-oriented and Odisha is no exception to it.

THE ODISHA SCENARIO

The culture of Odisha can be conceived as an essential part of the Great Tradition of Indian civilization. Since prehistoric times, Odisha is said to be inhabited by the hunter-gatherers and of late during neolithic times, the cultivators came to this land who started upland and shifting cultivation in different parts of the region. After a long time only, it is also said that the so-called Aryans from northern part of India enter into the state. Even during the age of Ramayana and Mahabharat, the state was named Kalinga and in Mahabharat, it was said to be inhabited by the so-called “*Mlechhas*”(the outcastes). The present culture of Odisha though reveals regional variations, because of their affiliation to the Great Tradition of India, they manifest a mosaic culture. On the other hand, it can be explained that the local, regional or little traditions of Odisha, reveal variations when looked down as individual or particular entities. But when we look at them socially or universally, all of them relate to oneness with the Great Tradition of India. In this context, the cultivation and culture of rice has been one of the major responsible factors contributing to friendly interaction between Great and Little traditions. Amidst all geo-cultural diversities, the cultivation of rice has been the most common element influencing the society and economy of the state and there by rice culture has been one of the responsible factors to bring cultural unity amidst diversities.

Rice Culture in Odisha

As already discussed, rice is the staple food of Odisha and majority of people here are rice cultivators. On the basis of partial or complete rice growing practice, the societies in Odisha can be divided into the following types.

- I. Complete Rice Growing Cultures
 - (i) Caste Groups: Cultivating castes
 - (a) Direct cultivators.
 - (b) Indirect cultivators (higher castes like Brahmin & some Kshatriya castes).
 - (ii) Tribal Peasants: all tribes except hunter-gatherers and pastorals
- II. Partial Rice Growing Cultures

(i) Shifting Cultivators.

(ii) Upland Cultivators.

III. Absence of Rice Cultivation

Mostly the landless people, who sometimes work in the agricultural land of the cultivators as daily wage labourer, do not have their own rice cultivation.

- (a) Hunting and Gathering communities (mostly tribal)
- (b) Pastoral communities (no such tribal community at present in Odisha)
- (c) Artisan communities (both tribal and non-tribal communities)
- (d) Fishermen (mostly scheduled caste communities)
- (e) Nomadic communities (mostly tribal)

Even though the above-mentioned communities don't cultivate rice on their own due to landlessness, they consider rice as their staple food. Therefore, the culture of Odisha is predominantly a rice-based culture. Rightly speaking, in terms of people's basic need in Odisha, rice comes next to Oxygen. They feel so much so obsessed with rice that even if they take a lot of nutritious food, without rice, they feel as if they have not taken any food. Rice is so much so valued in rural Odisha that people taking 'roti' or 'chapati' once or twice a day are mostly looked down. This is mainly because people feel that one, who does not have rice at home, only prefer 'roti' or 'chapati'. It further implies that such people must be landless and poor.

Rice and the Cultural Heritage

Taking the link from the Great Tradition, rice has been broadly responsible for the formation of many a socio-cultural heritage of the country as well as state. Such formations may be broadly considered with reference to the economic, social, political, and spiritual heritages.

(A) Rice Culture and the Economic Heritage

Rice entered into the field of production mainly for the purpose of food consumption. Developing from the wild rice variety through domestication, man has the sole purpose of utilizing it as food as well as for exchange to get other required products. “In an

elementary economy the producer consumes his own product (a hunter catching his food) where as in advanced communities most products are produced for exchange for other products (via money). As the final aim of all production is consumption, rice in this respect brings in a lot of adjacent factors like - land, land management, labour force, capital investment and enterprising behaviour. Beside such basic requirements which are economic, rice cultivation is also directly related to other institutions of the society like kinship, marriage, family, ritual and festivals, traditional political organization etc. which will be mentioned in the context of Odisha later in the paper.

While discussing about the economics of the cultures and the culture of economics with specific reference to rice culture in Odisha, it is quite natural to look at the culture area classification as made in American school of diffusionism. Clark has enlisted ten culture areas for North America, four for South America, and a separate one for Caribbean. Taking subsistence as the most basic factor, Wissler made a scheme of eight food areas. He discussed vividly the related environmental conditions and development of a specific culture around a specific food type. He mentioned that Plains Indian depend on buffalo for food; they didn't fish and have no agriculture. Similarly, he says that North Pacific Coast tribes depend on sea food and have distinct culture accordingly. Wissler further highlighted a culture-centre for each of his culture areas. To him, centre was the place of early settlement from which various traits diffused. At the centre all the culture traits are typically appeared and towards the boundary they

gradually diminish (Wissler, '26 in Upadhyay and Pandey, 2002). Leaving apart the culture area and culture-centre, which are very much debated and criticized in view of the present socio-cultural situation to-day, one can only accept the basic approach of Wissler which has developed the idea of a specific culture growth around a specific food type. Such lessons are most appropriate for the present paper to deal with rice and Odia culture.

Prior to food production (agriculture), the economy was mostly known as archaic or primitive type which was dependent on hunting, fishing and food gathering economies. It is divided into- simple food-gathering economies and advanced food-gathering economies. According to Jacob and Stern ('55) the simple types lacks exchangeable surpluses where as the advanced type produces small exchangeable surpluses. In the economies based on primitive agriculture, which are otherwise known as simple agricultural economies, have small surpluses. But the advanced agricultural and agricultural-pastoral economies, on the other hand, produce large surpluses. Taking clues from the above non-agricultural and agricultural economies, one can assess the influence of rice on the economy and culture, which are based mostly on the surplus productions. Here comes the shaping or designing of cultures out of surplus or non-surplus economy. Through agricultural and surplus economy, rice can be put here for exerting impact on the Odia culture. As Jacob and Stern ('55) have rightly mentioned, with the subsistence and surplus economy, the following socio-cultural and economic features are manifested in the society.

TABLE 1
Different economies and their impact on society/culture

Factors	Simple Food Gathering Economies	Advanced Food Gathering Economies	Simple Agricultural Economies	Advanced Agricultural/Pastoral Economies
1.Population	Sparse except in California.	Many times denser.	Denser than Advanced Food Gathering type.	Except few pure pastoralists, desert-dwellers, population were dense.
2.Economic Units	Bands or communities averaged less than 40 persons.	Self-sufficient village communities averaged 50 persons and more.	Self-sufficient village communities averaged hundreds of persons.	In villages, town & cities, many thousand persons.
3.Strategic Food Collection	Democratically through bands of either sex.	By work parties of either sex, organized and recruited. Male-hunt and fish.Female - food gathering.	By individuals but sometimes community joined in harvesting or other farm work.	Strategic production was by individuals especially nobles, chiefs or monarchs. Important productions are for market sale.
4.Distribution of products	Potentially shared.	Distribution is unequal. Hereditary wealthy received a better and larger portion and the remainder is equally shared.	Products are kept by individual producers and shared only in time of community need.	Distribution is unequal. The owner of land, herds, or slaves received most.
5.Division of labour	Simple sexual division of labour and no further specialization.	Slight specialization over and above the primary sexual division of labour. many individuals for specialized crafts and works.	Primary sexual division of labour was supplemented by in the larger market	Men take over much of the trade. Large number of commodities were sold towns.
6.Surplus products	No significant surplus - no money, commerce, trade or market.	A small number of economically significant surplus products or commodities were sold.	Economically significant surplus products for exchange. and barter	Strategic resources like land, herd etc. were privately owned by the nobility and well-to-do upper class men.
7.Strategic resources	Fishing areas, hunting districts, wild-plant-collecting sites owned by entire band or community. hereditary.	Some strategic resources were privately owned by lineage head men who were wealthy through land developed due to long term assignments.	Strategic resource sites are owned by community. Private ownership of cultivated	Due to inequality in productive resources, specialized occupational strata or castes developed.
8. Equality	No significant inequalities in ownership of wealth.	Inequalities in ownership of productive resources.	There were no noteworthy inequalities in wealth or in class status.	Nobles, monarchs and chiefs were supported by serf like and slave like labourers.
9. Leadership	-----	Nobles received tributes from relatives, fellow clan members or fellow villagers.	No self-perpetuating hereditary leaders present, no forms of taxation or tribute.	-----

From the above-mentioned table prepared out of the data provided by Jacob and Stern ('55), the impacts of hunting-gathering and agricultural economies are very clear. They create the society with reference to population structure, economic units for food quest, procedures for strategic food collection, distribution of products, necessary division of labour, from subsistence to surplus products, ownership of

strategic resource sites, equality, ownership of wealth, political organization and leadership pattern. Taking a similar position of rice, a similar impact on the Odia culture can be built up very well. The effects of diverse economies around the world have brought in several changes in the social or community structures. With the gradual change in the economic pursuits, necessary changes are manifested in different aspects

of the society and culture. On simple food-gathering economics, because of the seasonal movements, people usually live in mere encampments or small bands. But with the shift to advanced food-gathering economics, we see people inhabiting in small villages, moved to larger market villages, mainly due to self-sufficient economy. Similar developments in other spheres of society are also visible. Thus, political autonomy, and uniform cultures are ultimately resulted in the society. In simple agricultural economies, along with small village communities, surplus products and specialization of labour intensifies the socio-cultural network. According to Jacob and Stern, "Thus a network of inter community economic ties develops, and each village tends to become increasingly enmeshed in economic Interrelationships with adjacent villages." A cluster of village communities which share a common territory, language, and culture, and are economically interwoven, is often designated a tribe. As the level of primitive agriculture becomes more advanced, The term 'community' developed wider connotations. In a similar manner the ownership of land, utilization of labour force, property rights and ownership along with political autonomy, rituals and festivals all of which are directly related to the economic pursuit of the society or rice cultivation at present, face changes to suit to rice production.

Taking clues from Jacob and Stern ('55), the rice culture of Odisha may be discussed with specific reference to social, cultural, religious and political structures in the Odia society to-day. At the outset, from the archaeological records the prehistoric findings regarding rice in Odisha may be explored. 'Rice in Odisha' has several connotations. If we go back to prehistoric times, at least ancient times, Odisha had different geographical boundaries and set ups. As Odra, Kalinga and Utkal, it has several names and historical existences. Taking them together major parts, of which have now formed the modern Odisha. In Odisha to-day, rice covers about 69% of the

cultivated area. Mainly because rice is the staple food, the state economy is directly linked with improvements in production and productivity of rice in the state (International Rice Research Institute). Very popularly speaking, rice synonymously stands for food in Odisha (in folk usage: -food means rice and rice means food).

(i) Rice culture and Land classification:

As already mentioned, the most important need for rice cultivation is land. Mainly because rice is the 'staple food' as well as 'life' in Odisha, land has been attributed a very special position among the people. People having more cultivable land are accorded a rich status. As per the suitability of the land for the rice cultivation, land is very critically and seriously classified in Odisha and elsewhere. In the revenue records of Odisha, various nomenclatures are found in view of rice cultivation. They are mostly classified on the basis of their water content and fertility. In order of preference -they are (a) Jhola, (b) Bahal, (c) Berna, (d) Mal and (e) Att.

In government records of Odisha, the following specifications are observed for rice cultivation.

- (i) Autumn Paddy (Rice category - *Biali*) - On high land (mostly early variety)
- (ii) Winter Paddy (Rice category -*Sarada*) - Medium low land (late variety)
- (iii) Summer paddy (Rice category - *Dalua*) - Low land (as a second crop of the year)

Land classifications in different culture zones of Odisha are also made differently as per the local language. As already highlighted earlier, they have been elaborately classified keeping in view the suitability for the rice crop. It is very interesting to note that people of Odisha both tribal and non-tribal, classify land mostly in relation to rice and other minor crops go with it without any special consideration.

In the following classifications the rice-based classification has been presented from all the cultural zones of Odisha.

TABLE 2
Rice-based classification of land

Western Odisha	Northern Odisha (Baleswar and Mayurbhanj)	Central Odisha (Boudh -Kandhmal&Dhenkanal)
Common types:	(i) <i>Jala Jami</i> (Wet land)	(i) <i>Dhepaketa (Att)</i>
(i) <i>Att :Khari</i>	(ii) <i>Kala diha</i> (Homestead land)	(ii) <i>MajhiKandia (Mal)</i>
<i>Khari-Pani</i>	(iii) <i>Pala Jami</i> (River side land)	(iii) <i>Berna</i>
<i>-Mamuli</i>	(a) <i>Gahira Jami</i> (Low land)	(iv) <i>Bahal</i> In Dhenkanal district:
(ii) <i>Mal- Mal - Saman</i>	(b) <i>Dahi /Danga Jami</i> (Upland)	(i) <i>Sarad</i>
<i>Mal - Saman - Khari</i>	(c) <i>Zhenga-Thengi</i> (Waste land)	(ii) <i>Harfasal</i>
<i>-Mal - Saman - Pani</i>	(iv) <i>Ashi</i> - Upland with little slope	(iv) <i>Bazefasal</i>
<i>-Mal - Saman - Mamuli</i>		(v) <i>Toila</i>
(iii) <i>Berna - Berna - Khari</i>		
<i>Berna - Pani</i>		
<i>Berna - Mamuli</i>		
(iv) <i>Bahal - Bahal - Khari</i>	Additional to Sundargarh (From Oraon):	
<i>Bahal - Pani</i>	(i) <i>Goda</i> - Upland	
<i>Bahal - Mamuli</i> Additional to Bolangir:	(ii) <i>Bari bagait</i> (Homestead land)	
(v) <i>Bari : Bari - Khari</i>		
<i>Bari - Pani</i>		
<i>Bari - Mamuli</i>		
(vi) <i>Barcha-Barcha - Khari</i>		
<i>Barcha - Mamuli</i>		
(vii) <i>Bagicha</i> -(for Horticulture purpose)		

In Odisha, tribes like Birhor, Hill Kharia, and Malhar are food-gatherers who are mostly landless. Occasionally, they work in the agricultural fields of other neighbouring communities as wage labourers. Other tribes like Dongria Kondh, Juang, Paudi Bhuinya, Lanjia Saora, Kutia Kondh etc. are mostly shifting cultivators. Few of them also go for wet land

cultivation. Rest other tribes in Odisha are agriculturists. Therefore, the land classifications among these three main categories of tribes reflect how rice is playing the predominant role in the classification of cultivable land. Let us examine the land classification by hunting and gathering tribes like Birhor and Hill Kharia first.

TABLE 3
Classification of land by food gatherers

Birhor's classification of forest land	Hill Kharia and Ujia classification of Forest Land
(i) <i>Dalam</i> - Plains land in forest	(i) <i>Khaman</i> - Plains land in forest
(ii) <i>Belan</i> - Land with bushes & climbers	(ii) <i>Sulia</i> - Gorge with bushes
(iii) <i>Chapal</i> - River/stream side land	(iii) <i>Godharia</i> - Land with bushes and climbers
(iv) <i>Ragha</i> - Land covered with stones/rocks	(iv) <i>Danda</i> - Plains land on the top of hill
(v) <i>Hanga</i> -Land on the mountain slopes.	(v) <i>Dangar</i> - Land on hill
	(vi) <i>Goda</i> - Valley area with slope
	(vii) <i>Nalajaga</i> - Hill stream side
	(viii) <i>Dalaki</i> - Swampy land
	(ix) <i>Pathuria</i> -Land covered with rocks
	(x) <i>Sana</i> and <i>Badaghati</i> - Mountain slopes.

In the above-mentioned classification, Birhors of Odisha refer to the land types mostly in connection with the hills and forest as they are nomadic hunter and gatherer mostly living on the forest collections in North Odisha. On the other hand, the Hill Kharia along with another tribal community Ujia make a classification of land in relatively elaborate manner referring both to the forest and plains, as they are

semi-nomadic live both on the forest collections and wage labour activities in the plains.

Examining land classification of the PVTG category of tribes inhabiting in South and South-Western Odisha, a rice-based classification to cultivation of paddy either on the hill slopes, terraces or plains land may be observed from the Table 4 below.

TABLE 4
Land classification by food producing tribes

Dongaria Kondh (South Odisha)	Chukatia Bhunjia (South-Western Odisha)	Lanjia Saora (South Odisha)	Banjara (South-western Odisha)
(i) <i>Haru</i> - Hill land	(i) <i>Tikra Khet</i>	(i) Terrace land - for paddy	(i) <i>Badi</i> - <i>Mamuli</i> (Kitchen garden)
(ii) <i>Bhoto</i> or <i>Penga</i> - Plain land	(ii) <i>Jorka Khet</i>	(ii) <i>Angling Sar</i> - Upland & Dry	(ii) <i>Ghar</i> - <i>Mamuli</i> (Home stead)
(iii) <i>Bada</i> - Kitchen garden	(iii) <i>Dadar Khet</i>	(iii) <i>Dusorroba</i> (<i>Berna</i> type wet)	(iii) <i>Att</i> - <i>Mamuli</i> (Dry)
	(iv) <i>Vārri Khet</i> (<i>Bahal</i>)		(iv) <i>Bhatta</i> - <i>Mamuli</i> (Dry and Plain)
	(v) <i>Muda Khet</i> (<i>Berna</i>)		(v) <i>Mal</i> - <i>Mamuli</i> (Wet land)
	(vi) <i>Bahara Khet</i>		(vi) <i>Berna</i> - <i>Mamuli</i> (Low, wet)
			(vii) <i>Bahal</i> - <i>Mamuli</i> (Water bed - land)

As shown in the table mentioned above, Dongaria Kondh and Lanjia Saora are mostly shifting cultivators. Paddy cultivation by them on the plain land is very occasional. Therefore, land classification is not found in so much detail. But Chukatia Bhunjia and Banjara, are rice cultivators and their classifications are elaborate and pertaining to rice cultivation. They also maintain certain similarity with the neighbouring agricultural communities.

Along with land classification which is basically exercised with reference to rice cultivation and which is a general classification for the purpose of detailed categorization, one has to go further from the land to soil type. Land is a broad conceptualization for rice, but within it specific details are explored through its soil classification. It is needless to mention that such soil varieties are also classified in accordance with

the need for the rice cultivation.

(ii) Classification of soil on the basis of rice

In Odisha soil is classified in view of all kinds of crops though utmost importance is given to rice. A general type of classification here may throw light on the nature of soil in Odisha.

- (i) Red laterite - poor
- (ii) Red soil - For millets, early paddy
- (iii) Laterite - For millets, paddy
- (iv) Alluvial - For paddy, millet and vegetable.

In the above-mentioned soil types, rice and millet cultivation refer to five types of soil considering early or late varieties. Other types like pulses, fruits and vegetables refer to some specific soil types. Few culture zone specific soil classifications are presented here for reference.

TABLE 5
Soil classification in caste societies

Coastal Odisha and North Odisha	Western Odisha	South-Western Odisha
<i>Matal</i> (clay)	Red forest soil	<i>Khalia</i> - (a) <i>Chandi</i> - <i>Khalia</i>
<i>Dorasa</i> (loamy)	Brown forest soil <i>Mal</i> (Slope)	(b) <i>Gut Khalia</i>
<i>Aul</i> (first class - retain moisture)	(a) <i>Tikra-mal</i>	(c) <i>Genguti Khalia</i>
<i>Balia</i> (sandy) <i>Patu</i> (alluvial)	(b) <i>Saman-mal</i>	(d) <i>Ordinary Khalia</i>
<i>Soem</i> (sand-second class)	(c) <i>Pita-mal</i>	<i>Balia</i> - <i>Pandaka pithia</i>
<i>Doem</i> (2nd class)	Clay - loam	<i>Badmatta</i> or <i>Kanhars</i> (black soil)
	Black cotton soil.	<i>Pankua/Kachharia</i> (loam)
		<i>Bagudia</i>

Among the tribes also a similar exercise for soil classification is noticed predominantly for rice cultivation.

TABLE 6
Soil classification in tribal societies

Dongaria Kondh (PVTG)	Chakatia Bhunjia (PVTG)
<i>Gundi Werga</i>	<i>Kudhurmati</i> (Red)
<i>Puchi Werga</i>	<i>Darhimati</i> / <i>Fundari mati</i> (Grey)
<i>Elu Werga</i>	<i>Gotibiti mati</i> (Black)
<i>Kadini Werga</i>	<i>Kanhamati</i> / <i>Pieurimati</i>
<i>Dinjita Werga</i>	
<i>Tala Werga</i>	

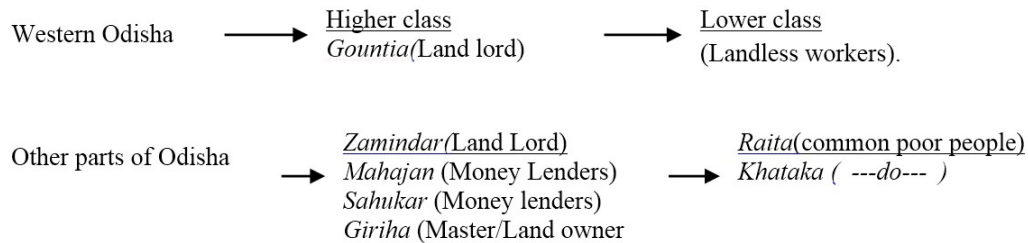
Besides cultivation, land is also classified for various other purposes. They are of various types

like - homestead land (*Kala Jami*), grazing land (*Go-char*), waste land (*Anabadi*), land with water (*Jal Jami*), cremation ground (*Smasan*), land for road (*Patha Jami*) and various types agricultural land. All land types are equally useful and necessary for maintenance of livelihood. But the most important one is agricultural land which provides food and indirectly for earning cash to meet several other needs of life. Therefore, people give utmost priority to select suitable land for cultivation of rice in the surrounding. Land is the most important immovable property which cannot be taken away physically except its ownership. As cultivation is the main stay of the people in rural society who are mostly agriculturists, usually, as per the available land, they choose the paddy variety, from the early to late type. People always give priority to late variety paddy as it is more productive. Such varieties need low land or land with more water content. On such basis, as already discussed earlier, cultivable land has been classified from 'Att' to *Berna* and *Bahal* types. Such classifications are used by majority in Odisha except in some parts of coastal

(eastern) and northern Odisha.

(iii) Rice culture and class formation

It is time and again understood that mainly because rice is the staple food, importance is always attached to it for food and other requirements in daily life. Under such circumstances rice helps to develop a cultural orientation among the agricultural people. Rice and culture reciprocally create conditions for each other to grow and develop a definite identity as a peasant culture. On this backdrop, in rural Odisha, the social status and class consciousness grow due to rice cultivation. In addition, it also helps to develop the concept of dominant caste in rural society. As mentioned earlier, one who possesses more cultivable land and cattle which subsequently help to produce more rice automatically becomes a rich person in the village. The richest person in the village is identified as village landlord and because of his financial capacity or economic power he becomes the dominant person in the village. Thus, rice cultivation makes the following type of class formation in rural Odisha.



Rice and rice-land are, thus, considered the most important indicators of wealth in rural Odisha. When the majority members of a particular caste in the village own maximum land in the village, the concerned caste group becomes economically powerful and controls most of the activities of the village. In addition, a very systematic stratification develops on the basis of the owners of the land and labourers for cultivation work. Rice culture gives rise to a very systematic division of work in the name of *Jajmani* system. The owners of the land are known as masters or *Giriha* and the so-called land less labourers as *Kamin*, *halia*, *mulia*, *chakar* etc. in different parts of the Odisha. Rice based labour system has also various other types of practices in Odisha. 'Goti' or bonded labour system is one among them which is also found in most other states of the country.

(iv) Types of Labour in Rural Odisha

On the basis of the type of contract, duration of work, nature of payment and type of social relationship, the following types of labourers are noticed in Odisha.

1. *Bagalia* - Monthly and annual contract for taking care of the cattle.
2. *Barmasia* - Annual contract labour for rice and other cultivation work (stays in master's house).
3. *Adha-Barmasia* - Annual contract labour for rice and other cultivation (doesn't stay in master's house).
4. *Kothia* - (Bonded labour) - For doing cultivation and other works in the house of the master.

It is needless to mention here that all the above stated labour types are directly connected to rice cultivation under *Jajmani* system.

(B) Rice Culture and Social Structure

According to FAO, agro-biodiversity also known as agricultural biodiversity or the genetic resources for food and agriculture is largely the result of natural selection process, and the careful choice and inventive developments by farmers, herders and fishers over time (FAO, 2005 in Mishra, Chowdhury and Nambi, 2013). It is a vital sub-set of biodiversity, and assumed as the direct consequence of human and nature's interaction as it has a profound relevance to food, livelihood and security and economic development of people at local, regional and national scale. The role of farmers in the development is crucial as cultural and social diversity encountered amongst them has a guiding hand in its creation (Alme Kinders and de Boef, 2000).

From food to livelihood pattern, rice has made a long journey to link social structure. Rice cultivation basically needs suitable land, water from rain or irrigation and man power from the family or community. For organizing all such requirements for the purpose of cultivation, social organization is the prime requirement. It is organized as per the requirement of the cultivation. From egalitarian to complex societies, with all set ups labour force is managed as per the social structure. In homogeneous society which are mostly tribal, people develop labour force on cooperative basis. Often the labour force is kinship oriented if the village is uniethnic or uniclan. All the members are kin to each other and cooperate each other's cultivation activity developing a village level joint labour system. In a heterogeneous society or community, where the villages are multiethnic or multicaste, for the organization of labour force, master-servant relationship as in *Jajmani* system gives rise to a very close interpersonal relationship for continuing the cultivation process. The socio-economic ties among the land-owners and labourers who belong to different touchable or untouchable castes were so intricate in the village communities in the past that it was constantly providing socio-economic security to the labourers. Besides, in an inter-ethnic or inter-caste village community also, a very clear-cut ritual friendship or kinship was existing

among most of them as a factor of motivation. In Odisha, the tribal peasants with egalitarian social set up as among the Juang, Bhuinya, Dongaria Kondh, Kutia Kondh etc. cooperative labour system often based on kinship is noticed. Among the advanced agricultural communities like Oraon, Santal, Kol etc. cooperative labour system was also pervading in the past. Similarly, in caste villages, the so-called complex societies, the ritual friendship system is very much existing to facilitate each other's work, though it is gradually fading due to the coming of modern technology for agriculture.

In Inter-caste villages of Odisha, the village social structure was so maintained to meet all the basic needs for agriculture. With the traditional technology for tilling the land by plough, plough-share and bullocks, the villages needed carpenters, black smiths and other landless people for taking care of the cattle etc. Such inter caste inter-dependency was not only economic all the time, most often it was also social adding greatly to the maintenance of village social structure. The land-owners of Odisha, who were known as '*Gauntia*' in Western Odisha, '*Mahajan*', '*Zamindar*' or '*Sahukar*' in other parts of the state, also maintain socio-economic ties with their labourers in view of their year-round cultivation and other economic activities at home.

(C) Rice Cultivation and Making of local Political Traditions

With the development of rice-based economy, land and soil classification, the transformation of the simple social structure to a complex one and formation of a stratified society through class formation, rice culture along with socio-cultural heritage contribute towards the making of local political traditions. When societies transform from simple type to complex one, gradually with economy, stratification emerge with class consciousness. As Harlambos (2001) has pointed out, in all stratified societies two major social groups develop - a ruling class and a subject class. With the ownership of more rice land, ruling class achieves economic empowerment and starts controlling the society through the local political organization. The so called economically upper- or higher-class people control the political activities and become tyrannous in most of their activities. This is the story of most of the rural societies in Odisha and

outside. Such ruling class, who are the '*Mahajans*', '*Sahukars*' or '*Gauntias*', often exploit and oppress the subject class locally known as '*Raita*' or '*Praja*' in Odisha. Haralambos (2001) further added that as agriculture developed, political power is derived from economic power. It gives rise to the development of the society towards a feudal order and formation of a capitalist society subsequently.

As mentioned earlier, the emergences of such political institutions in the village society are well strengthened by rice cultivation in Odisha. Most conflicts and feuds emerge in the village societies mainly around the occupation and management of rice cultivation as well as rice-land. All minor and major disputes in the village are also related to the cultivation of rice and ownership of rice-land. Firth has also supported such inter linkage between economy and political activity. To him "economic organization is a type of social action". And most social relations have an economic coefficient; many social relations are primarily concerned with economic values" (1971).

During the feudal times in medieval period, mainly because of stratification on the basis of caste and class, land and labour were all available within the village and because of *Jajmani* system, rice cultivation was smoothly operated and managed. Because of the presence of the blacksmiths and carpenters, each and every agricultural requirement was fulfilled within the village and village was relatively a self-sufficient community. Therefore, the village political organization which was dominated by the so-called feudal chiefs or landlords, never allow any dispute or conflict to go outside to the court of law. Through the traditional village '*panch*' or panchayat, all such political matters were decided within the village at present.

Time and again, anthropologists are of the opinion that "since the advent of agriculture, intensification of production and population growth have greatly altered the nature of human society, leading to the development of larger social and political units such as states, nations, and empires" (Howard, 1989). If in place of agriculture rice cultivation is put, development of similar political units may be also directly related to rice. In Odisha and other places too social changes and emergence of political organizations have mainly

occurred like this. As already discussed, rising complexity in social structure and economy, stratification leads to the formation of a traditional political organization for the maintenance of social structure and rice-based economic activities. With the development of the conflict, feud and decision-making process, the political power of the rich class especially the land owners (Zamindars) got enhanced in Odisha. In most parts, monopoly in most of the socio-economic and political activities of the village made the landlords to become tyrannous. Most of the peasants have been tortured in Odisha by their landlords and in some cases their lands were also taken away illegally by the landlords which were kept on lease for taking loan from the landlords at the time of crises.

(D) Rice and the Spiritual heritage

In food gathering societies (mostly tribal), all the annual cycle rituals are oriented towards food collection activities from the forest. Although the year, they mostly propitiate the forest deities for the sumptuous collection of edible and inedible natural resources. They consider all the hills and streams as goddesses and the overall guardian of the forest are the gods. In a similar manner, in peasant community who live in settled villages, rituals are mostly organized around the agricultural activities. Among the peasants of Odisha, rice is taken as the symbol of Goddess Laxmi, the goddess of wealth. Therefore, most of the rituals for rice are celebrated in the name of Goddess Laxmi. Laxmi puja is undoubtedly a significant part of Hindu Great Tradition. In the little or local traditions of Odisha the ritual of Laxmi Puja, is celebrated with great devotion, as the blessings of the goddess will fetch them good luck and a bumper crop of rice. Likewise, Lord Balaram is a deity of Hindu Great Tradition who is said to bring agricultural technology to the Hindu societies by the help of his weapon 'plough'. All tribals and non-tribals equally believe that by his 'plough' he taught how to till the land and produce the crop. Among the tribes of North Odisha, like Bathudi, Hill-Kharia, Saunti etc. the presiding deity of the village is 'Badam' who is believed to teach them cultivation and also to procure wild rice from the forest of Similipal Biosphere Reserve. Looking at the similar contributions of Lord Balram and 'Badam' as well as similarity in their nomenclature,

anthropologists are of the opinion that Lord Balaram belongs to Hindu Great Tradition and the village deity 'Badam' is his counterpart of the Odishan little or local tradition. In Western Odisha, a different type of interaction between little or local traditions of Banjara and Gond, are said to influence the non-tribal or peasant traditions of Odisha and subsequently connected to rice cultivation. As the Banjaras and Gonds say, their presiding deity Bade Raja or Bada Deo, was installed in different parts of Western Odisha during the course of their nomadic or other forms of movement. Similar myths are also said about the goddess Banjari Debi and Maa Samalei of Western Odisha. Bade Raja or Bada Deo in course of time, are worshipped by the local Odia people who are mostly peasants. As the tribals say, their gods and goddesses were gradually becoming an integral parts of Odia culture and directly connected to rice culture of Western Odisha. In this connection, there are few differences found in between western Odisha and rest other parts of Odisha. In western Odisha, all Odia people celebrate the first eating ceremony of rice in the name of 'NuaKhai' for 'Nabanna'. Anthropological investigations show that 'NuaKhai' is not celebrated in other parts of Odisha by the caste people. It is basically a tribal celebration which is performed not only for rice, but also for most other fruits and crops. In Western Odisha, it is celebrated in the month of Bhadrab (Aug.-Sept.). On this day, all

Odia people of Western Odisha offer the first production of rice to goddess 'Samalei' with a grand celebration. Normally in Odisha the early variety paddy types are harvested in between 60-80 days of cultivation and the late varieties take about 180 days to ripe. The early varieties were mostly cultivated on the upland by the tribal. Such tribals celebrate their first rice eating after harvesting paddy which is none but the early variety. It is said that in western Odisha, just like the Odia people accepted the tribal gods and goddesses, similarly they must have adopted the tribal festival like 'NuaKhai' or 'Nabanna' in toto.

In other parts of Odisha, local Odia people worship goddess Laxmi after the first rice is harvested during the month of *Margashira* (Nov.-Dec.). No doubt, such celebration is made with late variety of rice. Instead of celebrating the first eating as *NuaKhai*, Odia caste people here worship goddess Laxmi in all four *Gurubaras* (Thursdays) of the month of *Margashira* (Nov. -Dec.) by offering first production of rice in recognition of her blessings. On the whole, be it a tribal or non-tribal tradition, it is specifically connected to rice cultivation. In general, in the annual cycle of rituals and festivals of Odia Hindus, a good number of festivals are related to rice cultivation. In Hindu or non-tribal Odisha, after tilling the land the agricultural season starts from the ritual of 'Akshaya Tiritiya'. From the following table all the major rice related rituals may be visualized.

TABLE 7
Rice-based rituals in Odisha

Sl. No.	Celebration	Month	Odia castes	Tribals	Purpose
1	<i>Chaita Parab (Bihan Puja)</i>	<i>Chaitra</i> (Mar-Apr.)	—	Yes	Worshipping of <i>Bihan</i> or seeds (paddy) and communal hunting.
2	<i>Akshaya Tiritiya</i>	<i>Baisakh</i> (Apr.-May)	Yes	—	Sowing of seeds started ceremonially.
3	<i>Bihanbuna</i>	<i>Jyestha</i> (May)	—	Yes	Ceremonially check seed quality, find out germination % and start sowing.
4	<i>Raja</i>	<i>Asadha</i> (June)	Yes	—	Annual menstruation of Earth goddess (among castes in Eastern Odisha).
5	<i>Basumati Snana</i>	<i>Asadha</i> (June)	Yes	—	Sacred bath of Earth goddess after menstruation (among castes in Eastern Odisha).
6	<i>Asadhia Jatra</i>	<i>Asadha</i> (July)	—	Yes	To make busheling (weeding) successful.
7	<i>Uanshi Parab</i>	<i>Asadha</i> (July)	—	Yes	-Do-
8	<i>Chitalagi (Chitou) Amabasya</i>	<i>Sravan</i> (July)	Yes	Yes	To safeguard the crop field, livestock& farmers (both caste and tribes)
9	<i>Raksha Bandhan (Gamha Pumima)</i>	<i>Sravan</i> (August)	Yes	—	Worshipping the cows and bullocks.
10	<i>Nanda Utsab</i>	<i>Sravan</i> (August)	Yes	—	Worshipping the cattle.
11	<i>Bandapana</i>	<i>Bhadrav</i> (August)	—	Yes	Worshipping Goddess Laxmi for a bumper crop.
12	<i>NuaKhai</i>	<i>Bhadrav</i> (Aug.-Sept.)	Yes	Yes	Ceremonial eating of first rice (castes of western Odisha and tribes).
13	<i>Garvana Samkranti</i>	<i>Aswina</i> (October)	Yes	—	Celebration of rice in the paddy grains.
14	<i>Osa/ Puja Langaladhua</i>	<i>Aswina</i> (October)	—	Yes	Washing and cleaning of agricultural implements.
15	<i>Diwali</i>	<i>Kartika</i> (November)	—	Yes	Worshipping the cattle.

16	<i>Khet-Puja</i>	<i>Pausa</i> (December)	Yes	–	Worshipping goddess laxmi and other deities after reaping, with gratitude in the agricultural field.
17	<i>Gurubara Manabasa</i>	<i>Margashira</i> (Nov.-Dec.)	Yes	–	Worshipping goddess laxmi after the harvest with gratitude.
18	<i>Pus Parab</i>	<i>Pausa</i> (Dec. -Jan.)	–	Yes	A post-harvest celebration for conveying gratitude to village goddess.
19	<i>Makar Sankranti</i>	<i>Magha</i> (January)	Yes	Yes	Post-harvest festival for conveying gratitude to the deities.

In the peasant communities (the Odia caste groups), most of the annual rituals and festivals are agriculture or rice based. These are also celebrated among the tribes with similar purposes but in different ways. Such rice rituals are performed in two different levels - family and community. Both the tribal and caste communities cultivate diversified rice varieties to fulfill their socio-cultural, economic and religious needs apart from the factor of food and nutrition. As mentioned in the above table, people irrespective of caste and tribe in Odisha, seek the blessings of goddess Laxmi, the goddess of wealth and the cooperation of other deities for supporting the agricultural activities.

Mainly because rice is the staple food in Odisha, people consider rice as their life. They live with rice crop, love it and worship the gods and goddesses for its successful cultivation. In the annual cycle of festivals, therefore, the rice-based rituals are always predominating. Very interestingly, people of Odisha regard rice as the goddess Laxmi and also rice as the wealth. All the important stages of rice cultivation are marked with ritual celebrations to appease goddess Laxmi and other deities for their blessings. Besides various stages of rice cultivation, other material and non-material requirements for rice cultivation like - land water(rain), cattle (bulls, cows and bullocks), agricultural implements and manures are also offered ceremonial importance for the successful harvest of rice.

Rice cultivation has several major stages like-tilling the land, sowing the seeds, transplantation, weeding, watching the crop, reaping, offering the first rice grains to gods/ goddesses, threshing and husking the paddy grains etc. to get rice as a food grain. Each and every stage is ritually observed by the people, making the whole cycle of rice cultivation a major sacred activity for the maintenance of livelihood. Among the tribes like - Bhumia, Gadaba and Paraja and many other tribes of Odisha who are tribal peasants, people usually start tilling the land in April-

May for rice cultivation. After the land is prepared for the cultivation, during early part of April (*Chaitra*) the above mentioned tribals celebrate '*ChaitaParab*' to ritually offer the seeds (paddy) to the respective deities. With the blessings of the deities, such sacred paddy seeds are distributed among the villagers and people to get ready for showing them in the agricultural field. Similarly, Odia caste people, the so-called peasants/farmers ceremonially start sowing the seeds during the second half of April (*Baisakh*) on the auspicious day of '*AkshayaTritiya*' (third day of bright fortnight of *Baisakh* (April)). The meaning of the word '*Akshaya*' in Odia is 'imperishable'. As people believe, the paddy seeds started sowing on this day will not be perished and it will result in a bumper harvest. The seeds are offered to the deities and taken to the agricultural field in a new basket or measuring pot covered with new red cloth. In the agricultural field, after rice cakes are offered to goddess Laxmi in the north-east corner, sowing of the seeds are started by broadcasting method. In Odisha, handful of paddy seeds on this day are ritually known as '*Akhi-Muthi*' which is a corrupted form of '*Akshaya-Muthi*' ('*Muthi*' refers to handful of seeds).

In Odisha, farmers give utmost importance to sun, rain and land along with goddess Laxmi for the cultivation of rice. Because of their prime roles, they are also propitiated as gods/goddesses as per the Odia agricultural calendar. Sometimes the destructive forces or elements are also ritually satisfied to favour a successful rice harvest. In the agricultural calendar of Odisha, next comes the festival of '*Raja*'. '*Raja*' (or '*Raja Swala*') in Odia refers to menstruation. It is a very popular agricultural festival in major parts of Odisha. It is celebrated for three days and the Earth Goddess (the land or agricultural land) is believed to have her annual menstruation. On the first day of the month of '*Mithun*' (June) people ritually invoke rain (*Barsa Abahani*) and sing folk songs like - "*De Mahaprabhu De Ajadi, Ratiki Khaibu Khiri-Khechudi*". It says that - Oh rain god! give us good

showers of rain, we shall offer you rice-pudding in the night. People also sing - *Benguli, Benguli Pani De, Nai Samudar Bhasai De*, which means, Oh, my dear she-frogs! give us water and fill all the rivers and the sea. During the three days of celebration, in the honour of menstruating Earth Goddess and goddess Laxmi, people follow few restrictions. People especially the unmarried girls do not walk on bare feet. The male's members especially the farmers do not pursue any agricultural activity like ploughing the land, sowing the seeds and do not cut any grass or wood. The celebration is usually predominated by the unmarried girls. In all villages, farmers and non-farmers all make bamboo or wooden swings and enjoy with them. All the three days people of Odisha prepare rice cakes of different varieties and enjoy. However, tribes in Odisha do not celebrate this 'Raja' festival. Rather in the month of May (Jyestha) they celebrate the festival of 'Bihanbuna' (sowing of seeds). They ceremonially sort out the seed quality, examine the germination percentage and thereafter start sowing paddy seeds. In the month of July (*Asadha*), tribes of South Odisha like Gadaba, Bhumia and Paraja celebrate '*Asadhi Jatra*' and '*Uanashi Parab*' for successful beushening (weeding). In the next Odia month '*Shravan*' (July), both tribes and castes celebrate '*Chitou*' or '*Chitalagi Amabasya*'. Starting from the great temple of Lord Jagannath to the individual households, everywhere in Odisha this festival is celebrated with rice cakes. Usually the farmers on this day in order to safeguard the agricultural field and livestock celebrate this festival. Preparing rice cakes at home, farmers carry them to the field, and after offering them to the Goddess throw them in the water of agricultural field in the name of the snails (a mollusc) for their satisfaction in order to refrain them from cutting the feet of the farmers and livestock (usually snails have a sharp blade at the mouth of the shell which may cut the feet of the farmers while working in the agricultural field). This is a very popular agricultural festival both among the tribes and castes of Odisha. Next in the month of August (in the same Odia month *Shravan*) people of Odisha celebrate the most popular Hindu festival *Raksha Bandhan* and *Gamha Purnima* on the same day. On this day, sisters tie sacred '*Rakshi*' threads/charms to their brothers as a symbol of safeguarding and protecting their sisters. On the other hand, farmers worship their cattle who support their rice cultivation and tie '*Rakshi*' threads/

charms to them. From the agricultural point of view, farmers celebrate this day as '*Gamha Purnima*'. In the Hindu Great Tradition, cow is one among the '*Sapta Matraka*' (seven mother goddesses). It is said that a demon named '*Gamha*' was killing cows and Lord Balabhadra killed the demon on this day and in its memory the day was memorable as '*Gamha*' festival. Significantly Lord Balabhadra was also born on this day and on this day too he killed the demon to protect the cows. Farmers worship both Lord Balabhadra and cow as they are considered highly essential for the rice cultivation. Hindus believe, Lord Balabhadra (or Balaram), the God of cultivation, invented plough for the cultivation of rice because of which plough is his weapon as well as his symbol. Similarly cow and bullock substantially contribute to traditional agricultural system. Thus, Odia farmers worship Lord Balabhadra and cattle on this day in the name of '*Gamha Purnima*'. Eight days after *Gamha Purnima* people of Odisha celebrate *Janmastami*, the birthday of Lord Krishna and the same day is also known as *Nanda Utsava* in the month of *Shravan* (August). Only the Odia caste people worship the cattle for their contribution to agriculture and human life. Few days after in the month of *Bhadra*, tribals celebrate another agricultural festival '*Bandapana*' in South Odisha and at the communal level they worship Goddess Laxmi for a bumper rice crop. In the same Odia month of *Shravan* (Aug-Sept.) comes the most popular agricultural festival of Western Odisha, '*Nua Khai*'. All people of Western Odisha, on this day offer their first rice to the presiding goddess Samalei and enjoy with first rice and varieties of rice cakes. It was a tribal festival in the past and tribals used to cultivate early variety rice mostly on upland and celebrate the first rice eating ceremony on this day. Afterwards, it was followed by the local Odia (non-tribals) people who continue to celebrate it on the same day and take the help of early variety rice cultivation specifically for this celebration. Otherwise, all over Odisha people prepare late variety of rice which takes around 180 days to be harvested. Next comes the festival of '*Garvana Sankranti*' in the month of '*Aswina*' (October). It is celebrated mostly by the Odia caste people. The coming of paddy inflorescence with flowers and subsequently the growth of rice in the paddy grain is marked by this festival. In Odisha, the pregnant ladies are taken care and provided healthy and nutritious food both for the mother and the embryo.

Similarly, when rice grows in the paddy, peasants/farmers on this day of *Sankranti*, carry fruits, rice cakes flowers in a leaf cup and offer them with a branch of *Ankranti* tree (or *Khada*) to the rice plants in the name of Goddess Laxmi. This ritual is mainly performed by the caste people and in the same month, the tribes of South Odisha, celebrate '*Osa/Puja*' and '*Langal dhua*' ritual in which the ploughs and other agricultural implements are cleaned, washed and kept with care for the next year's agricultural cycle. Tribals in Odisha also celebrate Diwali in '*Kartika*' (Oct.-Nov) and '*Pus Parab*' in '*Pausa*' (Dec.-Jan.) as agricultural festivals. On the occasion of *Diwali*, they worship cattle who are directly connected to rice cultivation. '*Pus Parab*' on the other hand is celebrated as post-harvest festival for conveying gratitude to the village Goddess for her blessings for a good rice crop. Prior to Odia month '*Pausa*' in the month of '*Margashira*' (Nov.Dec.) Odia people celebrate the most important festival of the agricultural cycle that is '*Gurubara Manabasa* (*Gurubara* refers to Thursday)'. It is a post-harvest festival when all caste people worship goddess Laxmi who grace the mankind by blessing them with the harvest of rice. Paddy or rice is symbolized as goddess Laxmi in Odisha. Thursday is also considered a sacred day and the day of the goddess Laxmi in Odisha. In all four Thursdays of the month, known as '*Gurubara*' in Odia, ladies and gents invite and invoke the goddess by smearing the floor and wall with mud and cow dung, making rice paste paintings of goddess Laxmi's feet, lotus flowers on the floor and paddy stalk as well as floral designs on the wall in the honour of goddess Laxmi. Inside the house in a sacred place, on a small wooden seat or stool known as '*Khatuli*', ladies keep fast harvested paddy in a painted measuring pot known as '*Mana*'. The bunches of new Paddy stalks are also hanged around the measuring pot, at the entrance and other parts of the house in honour of the goddess Laxmi. The sacred measuring pot (*Mana*), is smeared with cowdung water and painted with rice paste. Lastly, ladies make a vermilion mark on the measuring pot and worship by offering flowers, rice cakes, rice pudding fruits etc. Here no image or photo of the goddess Laxmi is installed, people worship the paddy in the measuring pot as the symbol of the goddess. All the people poor or rich enjoy the whole day with delicious rice cakes and rice pudding. The month of *Margashira* (Nov. - Dec.) is considered to be the most sacred month of the

year according to the Hindu literature. It is to be remembered here that '*NuaKhai*' festival was celebrated in Western Odisha with the early variety rice whereas '*Gurubar Manabasa*' is celebrated with the late variety rice. Odia people also celebrate another post-harvest festival on '*Makar Sankranti*' on the first day of *Magha* (January). Almost all Hindus celebrate the ritual with much pomp. In Odisha, besides all delicacies like rice cakes, rice pudding etc., people specially prepare raw sacred rice mixed with molasses, milk, curd, coconut scraps, til, ginger, '*Karpur*' (camphor) and sugarcane juice which is popularly known as *Makara-chaula* in all parts of Odisha. All such rice delicacies are offered to Lord Sun and then distributed to people around. This festival is celebrated both by the tribals and caste people all over the state. The tribals often celebrate it with traditional drinks and dance even for about a week or more.

While tribals celebrating '*Pus Punei*' or '*Pus Parab*' as a post-harvest ritual, the caste Hindus celebrate their post-harvest ritual in the same Odia month '*Pausa*' (Dec. -Jan.) in the name '*Khet Puja*'. Of course, in all parts of Odisha this is not followed similarly. After the reaping of the crop is over, people perform it in the agricultural field in gratitude.

Besides the above-mentioned rice-based or rice related rituals, rice has another important contribution to the festival cycle of the farmers in specific and all the Hindus in general. Raw rice or white rice has always been considered the most sacred food grain which is used in almost all Hindu rituals. In addition to the agricultural rituals, in life cycle as well as in all annual cycle of festivals, sacred thread ceremony, wedding and most other ceremonies, rituals never complete without the use of raw rice. Even in daily rituals Hindus use raw rice with vermilion or sandalwood paste on forehead.

(E) Rice and Food Culture of Odisha:

The landless hunter-gatherers like the Hill Kharia, Ujia, Birhor, and Malhar, though do not cultivate rice, they exchange their forest collections for getting rice. Under 'rice and rituals' context, the sacred use of rice has already been deciphered. In Odisha, rice is not only the food of the human beings, it is also offered to Lord Jagannath and all other gods and goddesses. Thus, rice is used both as a sacred and secular food in Odisha. In in all festive occasions rice and milk products play major

roles in almost all recipes. It is taken for granted that in Odisha cooked rice is of two types- raw rice (*arua*) and parboiled rice (*usuna*). Raw rice is usually known as white or '*arua*' rice and considered sacred. In rituals, ceremonies and temple traditions, raw or '*arua*' rice is always used whereas parboiled or '*usuna*' rice is forbidden in sacred performances and temples. It is mostly considered as food by the people at home. In Odisha, majority of people use parboiled (*usuna*) rice. In south and western Odisha, tribals and non-tribal mostly use raw or '*arua*' rice whereas tribals and non-tribals of north Odisha mostly used parboiled or '*usuna*' rice. The culture of Odisha is said to be directly linked with the temple tradition of Lord Jagannath. The food tradition

of Odisha is centered around the temple food of Lord Jagannath. Lord Jagannath temple tradition in this way, is the core element of Odia culture. Therefore, in the context of rice culture, it would be wise to start with the temple food of Lord Jagannath. It has numerous types and categories. However, we are maintaining only the sacred items prepared out of rice here. There are several types of *Bhoga* (sacred food) offerings in Lord Jagannath's temple. They are *Kotha Bhoga* (in morning, mid-day and evening), *Chhatra Bhoga* or *Jajman Bhoga*, *Gopala-ballav Bhoga* or *Adya Sambodhani Bhoga*, *Bala-bhoga* etc. In all such *Bhoga* offerings the following sacred rice preparations are being presented around the year.

TABLE 8
Rice recipes of Lord Jagannath Temple, Puri

Sl. No.	Categories	Names of rice preparations
1	<i>Anna</i> (Cooked Rice)	<i>Abhada</i> (plain rice), <i>Ghia Anna</i> (Ghee rice), <i>Oria Kanika</i> (sweet rice), <i>Ada-Hingu-Khechudi</i> , <i>Pita Anna</i> (yellow rice), <i>Rasbali-Anna</i> , <i>Eka-barni</i> , <i>Chati-bhata</i> (in Makara Sankranti), <i>Dalimba-Anna</i> etc.
2	<i>Pakhala</i> (Watered rice)	<i>Subasa Pakhala</i> , <i>Malli-Phula Pakhala</i> , <i>Tava Pakhala</i> etc.
3	Dried rice	<i>Nirmalya</i>
4	<i>Khiri</i> (Rice Pudding)	<i>Khiri</i> , <i>Khiris</i> etc.
5	<i>Pitha</i> (Rice Cakes)	<i>Amalu</i> , <i>Arisa</i> , <i>Enduri</i> , <i>Gaintha</i> , <i>Chakuli</i> , <i>Khaira-chula</i> , <i>Khusi</i> , <i>Chacheri Bhoga</i> (<i>Sana</i> and <i>Bada Arisa</i>), <i>Chitou</i> , <i>Takua</i> , <i>Dalimba</i> , <i>Taraju</i> , <i>Tipuri</i> , <i>Dhuli</i> , <i>Nanaman</i> , <i>Bada Kanthei</i> , <i>Bada Manohar</i> (<i>Suar</i>), <i>Sana Manohar</i> , <i>Mahadei Bhoga</i> , <i>Modia</i> (in Makar Sankranti), <i>Rose Paika</i> , <i>Sara Bada Pitha</i> (in <i>Gundicha-ghar</i>), <i>Suara Pitha</i> etc.
6	Other categories	<i>Nunuta-Lia</i> (with puffed paddy), <i>Bala Bhoga</i> (with puffed paddy) etc.
7	Rice Drinks	<i>Tanka Torani</i> (rice water)

In addition to the above-mentioned rice recipes of Lord Jagannath Temple, Puri, a few more interesting and beautiful connotations of rice are also there in the temple. Rice before cooking in the temple kitchen is known as *Amunia*. After cooking in the temple kitchen, it is called *Anna*. When *Anna* is carried out of kitchen, it is called *Chheka*. In the temple when *Anna* is kept on the *Bhairavi Chakra* (the sacred place of Offering), it is known as *Bhoga*. After it is offered to the Jagannath Trinity, it is referred to as *Naibedya* which when offered

to Goddess Bimala, it is revered as *Mahaprasad*. Further when *Mahaprasad* is placed before *Pancha-Parameswar*, it is addressed as *Kaibalya*. When *Kaibalya* is consumed /relished by the people (devotees and others), it is called *Abadha*. Lastly when the leftover of *Abadha* is sundried, it is called *Nirmalya*.

Besides the above-mentioned temple rice preparations, there are also a good number of rice preparations made on different festive occasions in Odisha.

TABLE 9
Some sacred rice preparations in festivals of Odisha

Sl. No.	Odia Month	English Month	Festivals	Rice Preparations
1	<i>Baisakh</i>		<i>Akshaya Tritiya</i>	Puffed rice, puffed paddy and fruits.
2	<i>Jyestha</i>		<i>Siva-Bibhaha</i>	' <i>Khechudi</i> ', rice pudding and rice cakes etc.
3	<i>Jyestha</i>		<i>Raja</i>	Puffed rice, <i>Poda-pitha</i> , <i>Enduri</i> , <i>Chakuli</i> , <i>Arisa</i> etc.
4	<i>Jyestha</i>		<i>Debasnana Purnima</i>	<i>Khechudi</i> (Mix of rice, dal, vegetables)
5	<i>Asadha</i>		<i>Chita Sankranti</i>	<i>Chitou</i> and curry
6	<i>Sravan</i>		<i>Chitou Amabasya</i>	<i>Chitou</i> , rice pudding, <i>Khechudi</i> etc.
7	<i>Sravan</i>		<i>Jagulei Panchami</i>	<i>Tala-Manda</i> (Palm-cake), rice pudding, <i>Khechudi</i> etc.
8	<i>Sravan</i>		<i>Gamha Purnima</i>	<i>Enduri</i> cake
9	<i>Bhadrav</i>		<i>Rakshya Panchami</i>	<i>Pura-Chakuli</i>
10	<i>Bhadrav</i>		<i>Janmastami</i>	Puffed paddy, <i>Manda</i> , <i>Chuda-ghasa</i> (with flattened rice), rice pudding etc.
11	<i>Bhadrav</i>		<i>Sasti -Osa</i>	<i>Chakuli</i> (rice cake) etc.
12	<i>Aswina</i>		<i>Mahalaya</i>	<i>Arua</i> rice etc.
13	<i>Aswina</i>		<i>Bijaya Dasami</i>	<i>Khechudi</i> , <i>Manda</i> , rice pudding
14	<i>Aswina</i>		<i>Kumar Purnima & Janhi Osa</i>	Puffed paddy, cheese etc.
15	<i>Kartika</i>		<i>Dipabali (Diwali)</i>	Puffed paddy, Banana etc.
16	<i>Kartika</i>		<i>Rasa Purnima</i>	<i>Habisya rice</i>
17	<i>Margashira</i>		<i>Prathamastami</i>	<i>Enduri</i> , <i>Haldi patra pitha</i> , <i>Khechudi</i> etc.
18	<i>Margashira</i>		<i>Manabasa Gurubara (Laxmi Puja)</i>	<i>Khechudi</i> , <i>Chitou</i> , Curd rice, Rice pudding etc.
19	<i>Margashira</i>		<i>Pandu Purnima</i>	<i>Manda pitha</i>
20	<i>Pausa</i>		<i>Baula Amabasya</i>	<i>Gaintha</i>
21	<i>Pausa</i>		<i>Dhanu Sankranti</i>	<i>Dhanu muan</i> (Sweet puffed paddy)
22	<i>Pausa</i>		<i>Shamba Dasami</i>	<i>Poda pitha</i> , <i>Kakara</i> , <i>Manda</i> , <i>Arisa</i> , varieties of other rice cakes, rice pudding <i>Khechudi</i> , <i>Budha-Chakuli</i> etc.
23	<i>Pausa</i>		<i>Makar Sankranti</i>	<i>Makar</i> rice mixed with cheese, milk etc.
24	<i>Phaguna</i>		<i>Shiva-ratri</i>	<i>Chuda-ghasa</i> (with flattened rice, ghee, sugar etc.)
25	<i>Phaguna</i>		<i>Dola Purnima</i>	Puffed paddy with fruits.
26	<i>Chaitra</i>		<i>Chaitra Mangalbar</i>	<i>Khechudi</i> , rice pudding etc.(offered mostly to village goddess)

Besides the above-mentioned sacred preparations of rice for Lord Jagannath and other deities in Odisha, few more categories of rice preparations are also there for the consumption by common people both rich and poor. Most of the rice preparations in Lord Jagannath temple and other festivals of Odisha are also repeated in common people's rice preparations. An exhaustive list of them is necessary to reveal the role of rice in

food culture of Odisha. In Odisha few special preparations are also found in different culture zones (Eastern, Western, Northern and Southern). Taking all of them together, the following table may present the major rice recipes of Odisha. Common people use three types of rice in their daily life. They are- raw rice (*aru*), Khani rice (*aru* rice preserved underground) and parboiled rice (*usuna*).

TABLE 10
Rice Recipes of Odisha for the common people

Sl.No.	Categories	Types of preparation
1	Rice (<i>Anna or, Bhata</i>)	Plain rice (with water), <i>Oria</i> (with ghee), <i>Kanika</i> (with ghee and sugar), <i>Khechudi</i> (with water, pulses and vegetables), lemon rice, Zeera rice, Fried rice, <i>Badha Bhata</i> , Curd rice, <i>Bhaja Khechudi</i> etc.
2	Rice Cakes (<i>Pitha</i>)	<i>Manda</i> :- <i>Sijha Manda</i> or <i>Pani Manda</i> , <i>Tala Manda</i> , <i>Chhana Manda</i> , <i>Gaja Manda</i> . <i>Chakuli</i> :- <i>Saru Chakuli</i> , <i>Budha Chakuli</i> , <i>Pura Chakuli</i> , <i>Mahula Chakuli</i> , (Western Odisha), <i>Gaintha</i> :- <i>Sada</i> or <i>Pani Gaintha</i> , <i>Tala Gaintha</i> , <i>Dudha Gaintha</i> etc. <i>Enduri</i> :- <i>Pura-enduri</i> , <i>Banjha enduri</i> , <i>Atkali</i> , <i>Patrapoda Pitha</i> , <i>Podapitha</i> ; <i>Arisa</i> , <i>Chhunchi-patra pitha</i> , <i>Tala Pada-pitha</i> , <i>Bobra pitha</i> and <i>Saru patra mahi</i> (Western Odisha); <i>Tholka</i> and <i>Khapar Manda</i> (South Odisha) and <i>Alana Kakara</i> etc.
3	Watered Rice (<i>Pakhala</i>)	<i>Sada</i> (<i>Saja</i> or <i>Fresh</i>) <i>I Pakhala</i> , <i>Basi Pakhala</i> , <i>Basi Tiasi</i> , <i>Ambili Pakhala</i> , <i>Dahi Pakhala</i> , <i>Lemon Pakhala</i> , <i>Sugandhi Pakhala</i> , <i>Guldi Pakhala</i> , <i>Manja Pakhal</i> etc.,
4	Rice Water (<i>Torani</i>)	<i>Kanji Torani</i> , <i>Thir</i> , <i>Torani</i> , <i>Tanka Torani</i> etc.
5	Rice Pudding (<i>Khiri</i>)	<i>Chaula Khiri</i> , <i>Chuda Khiri</i> etc.

6 Dry rice

Khai or Lia (puffed paddy), *Mudhi*(puffed rice), *Chuda* (Flattened rice), *Hudum*(Puffed flattened rice), *Chaula bhaja or Kakkada*(rice fry), *Ukhuda*(sweet puffed paddy), *Mudhi muan*(sweet puffed paddy), *Mudhi muan*(sweet puffed rice); *Nunlia*, *Chirlia* and *Phula lia* (Western Odisha) etc.

The caste Hindus prepare a large variety of rice both in water, oil or ghee, among the tribes, most of the rice cake types are prepared in water.

(F) Rice and Folk Paintings

To the folk painting tradition of Odisha, rice has a very substantial contribution. In the folk art or folk painting traditions of Odisha, white is an essential colour and it is specially collected from raw or 'arua' rice. Out of the raw rice powder or paste, people of Odisha especially the women make paintings on festive or ceremonial occasions. All over Odisha both among the tribes and castes, rice paste is always used for painting on the mud walls and floor in festivals and ceremonies. As mentioned earlier, raw rice is considered the symbol of Goddess Laxmi because of which paste of parboiled rice (*usuna*) is never used. In Odisha, such rice paste paintings on festive occasions are elaborately made in the month of *Margashira* (Nov.-Dec.). All the four thursdays (*Gurubar* in Odia) of the month, ritual offerings (post-harvest) are made to Goddess Laxmi with gratitude and devotion. Designs on the floor and wall are numerous. It reveals the designing and painting skills of Odia girls and women. In Odisha such rice paste paintings are called '*Jhoti*' or *Chita*. Odia women with three finger tips make very popular pyramidal designs on the wall. They also make several floral and paddy stalk designs. On the occasion of Laxmi Puja, footprints of the goddess with lotus designs are painted on the floor for inviting the goddess into the house. On the *Kartika Purnima* day, the day of *Rasa Purnima*, Odia women make several colourful floral designs around the altar of the sacred basil plant. It is interesting to note here that on this occasion; rice paste is never used for making designs or paintings on the altar. The reason is very interesting according to which the sacred basil plant is treated as *Brindabati*, a great devotee of Lord Vishnu or Lord Jagannath. As rice or rice paste is considered the symbolic representation of goddess Laxmi, the consort of Lord Vishnu or Lord Jagannath, rice paste is never used around the altar of the sacred basil plant who is a devotee of the Lord. However, in all festivals and life cycle rituals of Odisha, rice paste

paintings are usually made on the wall and floor as a sacred symbol.

(G) Rice and Odia Cognitive System

In different parts of the world, various activities in the environment for the sake of survivality give rise to repetitive experiences which are duly patterned in a cultural tradition. Rice in a similar vein provides a very systematic as well as cumulative experiences and finds a definite place in the Odia cognitive system. Howard ('89:38), has rightly mentioned that "while Marxists and neo-functionalists sought to explain the function of conflict in society, other schools of thought that began to emerge in the late 1950s and early 1960s focused on uncovering the cognitive or mental structures providing order to culture". Such an effort gives rise to two different approaches - structuralism and ethnoscience to define and explain cognitive structure and its explanation through ethnographic data. Both the approaches corroborate each other. Ethnoscience in American school of thought is also known as cognitive Anthropology in which ethnographic data in minute detail are collected to express the native point of view. In other words, they like to know how people view their world. In addition to the world view emerged through the culture of extensive rice cultivation, another approach also highlights the ideological aspects of culture in which culture is viewed as a system of shared symbols and meaning. Odia world view emerged out of extensive rice-based culture also gives rise to develop a symbolic ideology by conceptualizing rice as the symbolic representation of wealth and goddess Laxmi in all socio-cultural manifestations. In Odisha all connected parts of rice like -the plant, paddy grains, rice grains, rice paste, art and paintings etc. are the symbolic forms of goddess Laxmi. In the arguments of Clifford Geertz (in Howard, '89), "cultural meanings of rituals, myths, kinship and the like require examination, of how they are actually used in the context of social life". Geertz focused on the significant cultural events and the cultural themes. The cultivation of rice has several cultural connections with Odia society. As already discussed, Odia kinship

system, social structure, economic organization, political system, and religious performances are all culturally oriented toward rice cultivation. It has resulted the ultimate Odia world view surrounded by a specific belief system, rice rituals (Lord Balaram and Goddess Laxmi), rice and symbolism, rice and art (*jhoti, chita* or *alpana*), and several other connections of rice in the field of medicine and treatment too. The cognition of the evolution of society from egalitarian type to complex society with social stratification has also been directly connected to the transformation of the human society from the food-gathering economy to food production or surplus economy, with reference to Odisha and other farming communities around the world. In the light of Schultz' and Lavenda's (1995) discussion, one can say that rice in Odisha and other places around the world is meaningfully connected to cultural perceptions, emotions, activities, experiences and traditions, justifying cognition as an open system. Through socialization and enculturation, it grows and continues to go on, but such cognitive development around rice is not same for all different cultures. However, relating to all the rice-based cultural formation and developments in Odisha, one can, on the whole, justify human cognition in the context of rice cultivation as a holistic phenomenon.

(H) Rice and other Dimensions of Culture

Major dimensions of Odia culture related to or influenced by rice cultivation have already been discussed. Few other cultural dimensions which rice cultivation has given rise to are also equally significant.

- (i) Rice as Folk Medicine: Morphologically, rice grain has a chaff (outer husk) on the outer layer which covers the layer of bran and bran residue underneath. By milling and polishing such layers are usually removed. In raw rice (*arua*) such layers are already removed by rice huller. But in parboiled rice all such layers are present, as a result of which rice looks brown and presence of more chaff makes it red. Therefore, in comparison to raw or white rice, brown or red rice is more nutritious. In Odisha such brown or red rice is used for curing night blindness (vitamin A deficiency) malnutrition, arthritis, indigestion, acidity, jaundice, and for mothers while weaning.
- Parboiling causes gelatinization of the starch in the grain and the grain becomes less brittle. The milled parboiled rice retains most of the nutrients and is always considered superior to standard milled rice. As already mentioned, the raw rice in Odisha is sacred and offered to deities whereas the parboiled rice is the food of the common people. Around the world, rice provides 20% of the dietary energy supply while wheat supplies 19% and maize only 5%. In Odisha, people were also using brown rice to prevent beriberi in the past. In South Odisha and Manipur black rice is considered highly nutrition's as well as part of traditional medicine. It is black or purplish colour because it is rich in anthocyanins which are powerful antioxidants and also activate detoxifying enzymes, and prevent cancer cell proliferation. It also contains more vitamin B, niacin, vitamin E, calcium, magnesium, iron and zinc compared to white rice (Chakravarty, 2014)
- (ii) Rice and Disasters/ Calamities: Geographically, Odisha's strategic location has made it prone to flood, drought, storm and cyclone every year. As the people here considered rice as their staple food, in the midst of such natural disasters or calamities, they have devised various adaptive strategies to fight with them and such strategies have become a part of Odia culture too since long. In the drought prone areas, people adopt early variety as well as drought resistant paddy. Similarly, in north Odisha flood area people adopt a special kind of paddy which grows at par with the rise of water level. In the massive crop failure situation due to scanty rain, infestation by insects etc. people perform various rituals and seek the blessings of the supernatural entities for the remedy.
- (iii) Rice and Leisure Time: As already presented earlier, in the ritual calendar of Odisha, most of the ceremonies are planned after the harvest of rice both among the tribes and castes. Most of the marriages, folk dances and folk sports and several other post-harvest celebrations are usually performed

after the harvest. Majority of the people in Odisha are peasants who get leisure time for few months only after the harvest and celebrate all rituals with pomp and pleasure during this period.

- (iv) Rice, Material culture, and Technology of Cultivation: In different parts of the world peasant adopt different traditional technologies in which use of wooden plough, bullocks and a variety of other implements are manually used for cultivation. In this way a unique type and nature of agricultural implements add to the inventory of material culture in the society and Odisha is no exception to it.
- (v) Rice and Technology of Preservation: In addition to the traditional technology emerge out of rice cultivation, the technology of rice preservation both as seed and food grain have been well developed. In Odisha, as seed, paddy is traditionally preserved in straw-made circular packets (*puda or pudia*) for the next year's cultivation. As food grain, the paddy is usually stored in a locally made large size basket known as '*Doli*'. The rich people who have enough surplus paddy they make a special compartment erected on stone or bamboo piles above the ground or floor and call it *Kothi* or *Amara* for storing as well as preserving paddy.
- (vi) Rice and Technology of Measurement: In traditional Odisha the storage technology is rightly followed the technology of measurement and exchange. Since the Olden times, peasants of Odisha have been using different measuring pots which carry different names in different culture zones. Such names are - '*Sera*', '*Mana*', '*Gouni*', '*Pudi*', '*Chhela*', '*Bharana*' etc. Mostly tribal and non-tribal peasants in rural areas use paddy or rice for direct as well as indirect exchange in the market for purchasing required commodities.
- (vii) Rice and Technology of Transportation: Rice is also well connected to a traditional system of transportation. From the crop field, the paddy stalks are usually carried by head-

loads, bullock loads and carrying poles. Few well-to-do people also use bullock carts for this purpose. The paddy grains are also transported by similar means. Among other dimensions, rice-based social status and social structure have already been highlighted with reference to egalitarianism, nomadism, semi-nomadism, caste status, class formation and formation of various title or status groups (as among the Saora and Gadaba). Around rice cultivation, various social interaction patterns like inter and intra caste relations, inter and intra community interactions, *jajmani* system, bonded labour (*bethi* and *goti*) have been also discussed. Rice cultivation is also connected to various socio-cultural taboos, prohibitions and restrictions for the higher caste, lower caste, for men and women, for children and the sick in Odisha.

- (viii) Rice and folk literature: Rice cultivation has given rise to the creation of innumerable aphorisms, songs, myths, legends, riddles and astrological forecasts as well as predictions. Starting from the tilling of the land, leveling the land, sowing of seeds, transplantation, weeding, watching the crop, taking care of the crop, reaping the crop, carrying the crop, separating paddy, husking etc. at each and every level of activity, Odia peasants use several folk songs to relax and make the work enjoyable. There are so many folk astrological forecasts and predictions peasants use to know about the auspicious moments for cultivation work as well as to read the weather. From the behaviour of the animals and birds, they also predict about the weather. Several myths and legends have been also deciphered to recollect the historical connections of rice to the region and human civilization. During the leisure time, young and old test each other's I.Q. by asking rice related riddles. Few popular rice related aphorisms are presented here for reference - "*Chasa Nan-hi Jhahara, Basa Nanhi Tahara*" (One who has no cultivation, has no life), *Chasa, Lakhye Jiba Posa or*

Krushak Lakhye Jiba Poshak (Farmers maintains the lives of lakhs of people). In another aphorism, it is said “*Gouda hudile dine, chasa hudile barase* (when a milkman fails, it is only for a day, but when a farmer fails, it is for a year). Similarly, it is also said - *Hatua hudile palie, Chasa hudile barashe* (when a seller misses a market, it is for a day, but when a farmer fails, it is for a year). Like this there are uncountable number of aphorisms recited by the illiterate Odia farmers. One can just conclude that rice has made the Odia folk literature rich and Odia culture the richest one.

CONCLUSIONS

After discussing several frontiers of rice culture in the context of Odisha's little traditions, it is worth saying that “say yes to rice, say yes to life” (Chatterjee, 2012). Rice has a similar story in other states of India and beyond too. Rice tells the daily life story of the peasants in a rural or tribal village. Rice has multifarious connectivity from the spheres of food to the performance of annual cycle of rituals. After going through all the major contributions of rice as discussed in the paper in the context of Odisha, one will feel that rice is not merely a food grain; it has developed all necessary connections to nature-man-spirit complex. It brings life and culture to the village community with its necessary connections to cows, cow-dung, milk, mud-wall paintings, the popular smell of the fresh hay and boiling paddy, floating chaff odours from cattle-shed, sounds of paddy husking, the visuals of the pyramidal gathering of hay stalks and many more. Rice needs a cooperative form of labour and thereby it brings group orientation in the village life. Amidst love and hate, cooperation and conflict, it establishes unity in diversity and provides food to the world. It defines and discriminates the food of man and god in Odisha and forms an integral part of Odishan culture. With due honour to rice cultivation, people in Odisha celebrate the annual menstruation ceremony giving all privileges to women folk. Thus, with the ritual cognition, people here consider rice as wealth, rice as goddess Laxmi and rice as the life as well as culture. Odias, in general, love rice, worship rice and live with it. Quoting from a 2014 study of Han Chinese Communities where it is

very interestingly found that a history of farming rice makes cultures more psychologically interdependent where as a history of farming wheat makes culture more independent (Talhilm *et al.*, 2014). Lastly, in the words of Normile (2017), it is concluded that “rice so nice, it was domesticated thrice” (in three continents – Asia, Africa and South America). Rice therefore, is not only the culture maker for Odisha or India, but also for the whole world.

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