



Pataneswari Temple, Patnagarh

Political Economy of Medieval West Orissa As Reflected in Oral Tradition

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The Ganga royal power of Orissa became weak in the 14th century AD. In 1361 AD, Sultan Firuz Shah Tughluq invaded Orissa and forced the Ganga king Bhanu Deva III to pay tribute. From that time onwards the Ganga power declined steadily (Senapati and Kuanr, 1977 : 88). It was about this time that the Ganga rule in Balangir Patna-Sonepur region of west Orissa came to an end and was supplanted by a new form of oligarchical administration of Asta-Mallik or eight chiefs, which lingered for some time till the advent of the Chauhans who started monarchical system of government in Patna/Patnagarh (Senapati and Sahu, 1968:48). After the disintegration of Ganga Empire of Orissa, ancient South Kosala or roughly the present west Orissa became an uncertain frontier zone between Orissa and Ratanpur. In this uncertainty, the pull for decentralization and political fragmentation came mainly from the partition of ruling families and from grants of villages by the rulers to indigenous tribal chiefs who ended up as independent potentates. In this context, we may refer to the Chauhan Kingdom established in Patnagarh which recognized the overlordship of the Gajapati Maharaja of Orissa and became a *Samanta* or feudatory. Successful campaigns by the successors of Raja Ramai Dev gradually encroached on nearby areas and expanded the Chauhan Kingdom. By the end of the fifteenth century AD it became a vast kingdom (Deo, 2003:98).

In the beginning of the sixteenth century AD, Patna *rajya* was divided into two kingdoms namely Patna and Sambalpur. Balaram Dev, the younger brother of Patna Raja Narasingha Dev (1570-1577 AD), became the *raja* or king of Sambalpur Kingdom. He was an ambitious and war-like prince who established a new line of Chauhan dynasty in Sambalpur. He was a contemporary of Gajapati Maharaja Rama Chandra Dev I, The Raja of Khurda and helped him against the invasion of *Yavanas* or Muslims (Senapati and Mahanti, 1971 :61). Patnagarh was again divided into Patna and Khariar in the first half of the seventeenth Century AD. Gopal Rai, the younger brother of Patna Raja Vikramaditya Dev was given the estate of Khariar where a new branch of Chauhan family was established (Senapati and Sahu, 1968:53). Thereafter, Sambalpur was divided into two kingdoms namely Sambalpur and Sonepur/Suvarnapur in the second half of the seventeenth century AD. Madan Gopal Dev, was assigned to administer Sonepur where he thus established a new line of Chauhan dynasty (Senapati and Mahanti, 1971:62).

Thus the original Chauhan Kingdom or Patna *rajya* was divided into four kingdoms due to partition of the Chauhan Raj families in West Orissa. In all probability, the defeat of Mukunda Dev, the Gajapati Maharaja of Orissa by the Sultan of Bengal in 1568 helped these feudatory

rulers to declare their independence. In other words, this helped the local chiefs to extend their political suzerainty in their respective zones. In order to sustain their Kingdoms, these rulers had to depend upon the *bhogas* and *bhagas*. They had to persuade the tribal people and the indigenous people to become settled agriculturists, so that production would increase; because a tribal economy based on shifting cultivation and hunting cannot sustain an emerging Kingdom (Senapati and Sahu, 1968; 86-88; Deo, 2003:96-101; Pasayat, 2004: 90-96; Pasayat, 2004: 83-89). In the present paper, our endeavour is to study the role and importance of some indigenous Aghrias, Sudhs and Dumas who have substantially contributed to changing the agrarian situation during the medieval period in west Orissa. What it tells us is that the climate, the atmosphere of west Orissa then was dramatically different and perhaps conducive to tribal life only. Understanding why that changed may well provide a whole new perspective of changing socio-economic and political scenario in West Orissa. Our analysis is based with special reference to oral tradition, substantiated by the historical facts. The observations made in this paper are not conclusive but suggestive in nature.

There is an interesting oral narrative regarding the origin of the three agriculturist castes of West Orissa namely Sudh, Dumas and Kulta. It is said that during *banabasa* (exile), Ramachandra was wandering in the forests of Sambalpur region. Once, he met three brothers and asked them for water. Out of these brothers, one brought water in a clean brass pot and as such was called Sudh, meaning pure. The second brother made a *dana* (cup of leaves) and drew water from a well with a rope. Hence, he was known as Dumas. This name Dumas is derived from the words *Dori-mal* meaning a coil or the chord of rope. The third brother is said to have

brought water in a hollow gourd. So, he was named Kulta, which is derived from the word *Kurita*. This narrative does not seem to be quite old and it suggests that these three are connected *jatis* in west Orissa (Senapati and Sahu, 1968; 101). Further, this story serves to show that the Kultas, Sudhs and Dumas have some connection. Reportedly, they take food together at festivals in Sambalpur areas (Senapati and Mahanti, 1971:115).

It would not be out of place to mention that the Sudhs or Suds are also found in the ex-Garhjat areas like Ranpur, Nayagarh, Daspalla, Khandapara and Khurda. Agriculture is the principal occupation of this social group. They believe that in the days of yore, their ancestors were working as soldiers. They worship a deity called *Pancha-Khanda* i.e. the five swords with offering of goats and fowls. Their tutelary goddess Khambeswari represents in the form of *akhamba* (wooden pole). The Sudhs are divided into four sub-castes namely *Bara* or high Sudhs, the *Deheri* or the priest/worshipper, the *Kabat-Konia* and the *Butka*. Among them the *Bara* Sudha rank highest (Senapati and Kuanr, 1977:137). In the context, it may be noted here that the Sudhs are a community with tradition of having formerly been the dominant power in Boudh, with whose chief they claim to have relationship. Though now mostly chasis (cultivators), earlier they used to serve as soldiers or paikas and worship the gun and other war weapons in their houses (Senapati and Kuanr, 1983:63).

In Boudh, there are Dumas who also belong to the agriculturist community. Most of them identify themselves as Nanda Gauras. There is oral tradition about their origin. It is said that they have come out from *dimba* (egg) and thus known as Dumas. Others are of opinion that they were the Gauras/Gaudas of Puri. Everyday, they

used to supply milk, curd and ghee for performance of daily *niti* or rituals in the Shree Jagannath Temple, Puri. Once, a vulture was found sitting on the Neelachakra of the temple. The Pujapanda (priest) had a bad dream. The priest came to know that the ghee served to Lord Jagannath was impure. For this, Lord Jagannath was dissatisfied and the vulture appeared on the temple immediately. This news was communicated to the Gajapati Maharaja who was annoyed with this and decision of Gajapati Maharaja. As a result, those who had supplied ghee to the temple left the place at night with family and fled towards west. After many days, they arrived at Dumbagarh in the Athmallik region of Boudh and settled there. In course of time, these cowherds of Dumbagarh came to be known as Dumal Gauras. Thus, Boudh is their main centre of habitation. Therefrom, they have spread to other parts of west Orissa. Due to heavy concentration of this *Jati* in Boudh, once upon a time, the Raja of Boudh was known as *Dedha-Lakhya Dumbadhipati* or the king of one and a half lakhs of Dumals. The Raja employed many of the Dumals in responsible posts (Senapati and Kuanr, 1983:62; Das, 1969:13).

According to the tradition, the Raja of Boudh gave one family of Dumal and four families of Kultas to the Raja of Patnagarh¹ during the marriage of his daughter. Dumals and Kultas belong to the agricultural community. Perhaps, they played a significant role in agricultural development of Patna Kingdom. In other words the Raja of Boudh provides a group of agriculturists who helped to alleviate the agricultural situation and brought food relief to Patnagarh. In the past, Patnagarh was one of the famous eighteen *garhs* of west Orissa as mentioned in note 1. Patna Kingdom was situated on the valley of Ang, Tel and Swarnarekha and their tributaries. This area was suitable for both extensive and intensive agricultural operation. In

this context, significant observations made by learned scholar P.K. Singh may be mentioned here. He views that water sources were a vital and contributing factor for urban upsurge in earlier days. Most of the early urban centres in west Orissa were located generally on the confluence or bank of rivers (Singh, 2004:51).

In view of the above narrative, ex-state of Boudh is regarded as the ancestral home of the Kultas. Significantly, Boudh was also one of the eighteen *garhs* or *Atharagarhs* of west Orissa as mentioned in note 1. But according to another oral tradition, the Kultas migrated from Ayodhya to Boudh. Their ancestors were employed in the royal house-hold of Raja Dasaratha. They accompanied Ramachandra, Lakshmana and Sita in their *banabasa* (exile) and settled in Boudh during their wandering. Sarsara and Jagati of Boudh are considered to be the main centres of the Kultas. Therefrom, they migrated and settled in different parts of west Orissa. This may be corroborated by the claim of the Kultas of Sambalpur who say that their ancestors lived in Boudh. Also, some of them identify themselves as the Sarsara Kultas and Jagati Kultas. Writing of Cobden Ramsay about the Kultas also substantiates this contention. He writes that the Kultas worship the goddess Ramachandi, whose principal shrine is situated at Sarsara (quoted in Senapati and Sahu, 1968:101).

Kultas belong to a great socio-economic group because Jagati and Sarsara have been a seat of Vaishnavism and Saivism from hoary past. There is one shrine at Sarsara dedicated to Lord Baidyanath. Near the village Jagati at Gandharadi is situated the famous twin temples of Lord Nilamadhaba and Lord Siddheswara exactly similar to each other. Such type of twin temples constructed on a common platform are seen nowhere in the medieval period. Nilamadhaba

temple is dedicated to Lord Vishnu whereas Siddheswara temple is dedicated to Lord Siva. These twin temples exhibit a harmonious co-existence of Saivism along with Vaishnavism. On the basis of the detailed analysis of structural and sculptural features, it becomes clear that these temples may be dated back to the later half of the eighth or first half of the ninth century AD (Senapati and Kuanr, 1983:379-80; Panda, 2004:22). What we want to suggest here is that Kultas belong to a glorious tradition.

The famous twin-temples of Gandharadi, otherwise called Hari-Hara temple and the archaeological remains found in its vicinity speak of the past glory of the region. The significance of the Gandharadi temples lies in the fact that they represent the co-existence of the two major religious faiths of west Orissa during that period. Religious synthesis between Saivism and Vaishnavism achieved a noteworthy success in this place during the eighth-ninth century AD. Thus, historically speaking, Kultas have been associated with a glorious religion-cultural tradition although their principal deity is Ramachandi. It was the period when Lord Vishnu elicited great reverence like Lord Siva in Jagati. The above analysis suggests that in Jagati a great civilization flourished since at least eighth century AD (Sahu and others, 1981:131; Senapati and Kuanr, 1983:33, 134, 379-80; Behera, 1991:310-11; Panda, 2004:22).

The surname of four Kulta families given as dowry to patna Raja were Pradhan, Sahu, Naik and Biswal. Besides that Bhoi title is also found among the Kultas (Senapati and Mahanti, 1971:115; Senapati and Kuanr, 1983:63). In the present state of our knowledge, we cannot say convincingly the precise time and the regime when and by whom these Kultas families were offered to the Raja of Patnagarh, who gave enough boasting to the Kultas and Dumals so that the

agricultural situation of Patnagarh could be improved and enriched.

There were Agharias in Balangir-Patna which the other class of industrious cultivators. The Agharias are said to be the decendants of Bidura of the Mahabharata fame. They claimed to have belonged originally to Kshatriya caste; but later on they adopted agriculture as their profession. They are called Agharias as they came to Patna-rajya from the Agra region of Uttar Pradesh (Senapati and Sahu, 1968:97) when Adil Shah was the Sultan of Delhi. Thus, Agharias, Kultas and Dumals were entrusted with the responsibility of agricultural development in different periods of time in the state of Patna and thereby, the Agharias, Kultas and the Dumals also flourished in Patnagarh. In course of development, the Agharias and Kultas became economically very powerful. Later on, Kultas were divided into a number of sections bearing surnames Barik, Bhoi, Biswal, Naik, Pradhan, Sahu and the like. Though, the *chasas* found in other parts of Orissa have some similarities with the Kultas, marital relationship between the two groups was not common. In other words, Chasas and Kultas are two different endogamous groups/*jatis*. So, it is not possible to say precisely, whether the Kultas are the same as the Chasas found in other districts of Orissa.

Raja Hrudesh Dev (1678-1685) of Patnagarh died leaving behind two young sons. The eldest son Raisingh Dev was brought up by his uncle Vatsaraj Singh who had an evil intention of usurping the *Gadi* (throne). He murdered the widow *Rani* (queen) and also hatched plans to kill the two young princes; but these two boys were secretly carried away by their Mamu (maternal uncle) to Phuljhar, where they were provided with all they needed i.e. shelter, security and education. Raisingh Dev (1685-1762) after

being grown up sought the assistance Dev (1685-1762) after being grown up sought the assistance and co-operation of the Marathas of Nagpur, killed his uncle and thereby succeeded in occupying his father's throne. He had three wives and three sons. The first *Rani* was issueless, the second had two sons and the third was blessed with only one son. The son of the third *Rani* was the eldest and also the favourite of Raja Raisingh Dev (Senapati and Sahu, 1968:54).

The second *Rani* apprehended that the claim of her two sons would be set aside by the *Raja*. Apparently, she mobilized and incited the people to support her cause. Being instigated, the people rose to the occasion and thereby paved the way for a rebellious atmosphere in Patnagarh. The magnitude of reaction owing to this event perhaps stirred the mind of the people and created a far-reaching situation. State machinery was paralysed. Raja Rai Singh was too old to control the internal disturbance. It was in a complete state of insurrection and thereby Patnagarh suffered from severe mal-administration. The king was thoroughly demoralized and finally he fled away to Sonapur/Suvarnapur out of fear. Confusion engulfed Patnagarh, which remained in almost anarchical condition for about three years. During this period, the three queens, their sons and partisans quarreled among themselves on the most contentious issue of succession. The situation was so intense that many responsible persons of Patnagarh felt their life and property to be insecure and fled to Sonapur panic-stricken (Senapati and Mahanti, 1968:54) and perhaps to other nearby areas like Bargarh also.

In view of the above facts, it may be inferred here that all these developments had far-reaching effect on the socio-economic and political condition of Patnagarh. Apparently, during this period of general disturbance and lawlessness the Chauhan hold on Patnagarh was

weakened which later on paved the way for the interference from outside too. It will be reasonable to say that amidst chaos and confusion which prevailed in Patnagarh, probably one Kulta *gauntia* (village headman) of Patnagarh also fled away with his men and property, crossed the border i.e. the river Ang/Ong² and entered into the territory of Sambalpur kingdom. Thereafter, they marched further and crossed another river, the Jira and reached Gaisama, situated 13 kms south-east of Bargarh and settled there. Bargarh, also situated on the bank of the river Jira, was then an important seat of power and one of the eighteen *garhas* (fort) of west Orissa. It was a flourishing centre of trade and commerce. It is known from history that these Kultas have been living in large numbers in Bargarh area in the basins of the rivers namely the Mahanadi, the Jira, the Ang/Ong and Tel. The original name of Bargarh was *Baghar Kota* as known from an inscription of the eleventh century A.D. It was known as Bargarh most probably from the time of Raja Balaram Dev, the first Chauhan Raja of Sambalpur, who made it for some time his headquarters and constructed a big fort for its protection (Senapati and Mahanti, 1971:510, 522-23 : Pasayat, 2004 : 235-40).

Thus, some Kultas might have migrated from the ex-state of Patnagarh to Bargarh-Gaisama area during the last phase of the reign of Raja Ajit Singh of Sambalpur; but it may also be suggested here that some of them migrated to this part much earlier, in around the first half of the sixteenth century A.D during the reign of Raja Balaram Dev who constructed a fort in Bargarh and made it for some time his headquarters. This may be substantiated by the following facts. There is a Kulta dominated village namely Kamgaon, situated 13 kms. north of Bargarh town. This village is a very old one and is said to have been established by the Kultas, when they migrated to

this part of Bargarh from Boudh in around the first part of the sixteenth century A.D. It contains a temple of Ramachandi, which is held in great veneration by the Kultas. Their chief families the Bhois and the Pradhans are its priests. The temple is maintained by *maufi* lands in the village (Senapati and Mahanti, 1971: 528). However, as per the tradition, the Aghrias also migrated from the kingdom of Patna and settled in the Sambalpur kingdom during the rule of Raja Madhukar Sai (1630-1660 AD), the fourth Chauhan Raja of Sambalpur. They made their first settlement in the village Laira/Laida and later spread over different parts of Sambalpur and the ex-state of Gangpur, Bamra and the neighbouring region of Chhattisgarh too. Notably, Laida is still regarded by the Aghrias as their place of early settlement in the district (Senapati and Mahanti, 1971: 113-114). What we want to suggest here is that both the Kultas and the Aghrias, who migrated to Sambalpur kingdom have played significant role in agricultural development of Bargarh-Sambalpur area.

Later on, some Kultas migrated to Kalahandi from Sambalpur kingdom, most probably from Bargarh area near about the year 1867 for agricultural development in Kalahandi. In this context, it would not be unwise to mention about the significant contribution of Raja Udit Pratap Deo (1853-1881 AD) of Kalahandi for the improvement of agriculture in his state. He married to Asha Kumari Devi, the only issue of Maharaja Narayan Singh, the last ruler of Sambalpur. She had taken some Kulta families probably from Bargarh area to Kalahandi near about the year 1867. This was a great step for development of agriculture in Kalahandi. Reportedly, Raja Udit Pratap Deo was the most illustrious among the Nagavamsi rulers of Kalahandi. He abolished various levies and declared his state open to trade and commerce. As a result of this, merchants from outside his

state began to flock there. His rule was peaceful except that the Kandhs in Rampur-Madanpur *zamindari* rebelled for sometime; but the Kandhs were firmly suppressed by the ruler (Senapati and Kuanr, 1980: 60-61,86).

In view of the above analysis, it may be suggested here that agricultural development in Kalahandi by the Kultas had negative side too. The great Kandh rebellion of Kalahandi in 1882 was associated with the Kultas. The Kandhs had great grievance against the Kulta *chasis* or cultivators who received the benevolent patronage of the royal household of Kalahandi. The Kultas exploited the poor and simple-minded Kandhs and deprived them of the best of their lands. Perhaps, they had taken away illegally the most valuable lands from the possession of the aborigines (Senapati and Kuanr, 1980: 59-61, 86).

Most probably, the continuous exploitation, harassment and oppression of the Kultas of Kalahandi had made aborigines socio-economically degraded to an extent, which could not be imagined in any civilized society. The socio-economic condition of the aborigines were in a very bad shape. Perhaps, the royal authority remained callous in this matter. In other words, the royal court was also in favour of the Kultas during the rule of Raja Udit Pratap Deo. This speaks of the liberal patronage and tolerant outlook of the ruler towards the Kultas. So, after the death of Raja Udit Pratap Deo, the Kandhs took advantage of the weak rule of the old queen Asha Kumari and decided to take revenge on the Kulta cultivators. Large number of Kultas were killed in cold blood. However, the rising was suppressed with the help of the British troops (Senapati and Kuanr, 1980:61). What we want to emphasize here is that the Kultas as a group is the shining example of dominant agriculturist *jati* in west Orissa.

Regarding migration of Kultas to Gaisama/ Gaisima we find an interesting narrative. As per the tradition, there was a Kulta *gauntia* family in Patnagarh in the reign of Raja Raisingh Dev as mentioned earlier. The surname of this family was Sahu. The *gauntia* had two sons named Kuvera Sahu and Amar Sahu and also a beautiful daughter. An influential noble of the royal family of Patnagarh was smitten with surpassing beauty of his only daughter and wanted her hand; but the proposal was not readily acceptable to the reigning beauty and her family. Apprehending trouble, one night the old *gauntia* left the territory of Patnagarh with his family and belongings loaded in one hundred carts and a thousand cows and bullocks. When exactly they left is difficult to say due to want of evidence. However, the Sahu family marched relentlessly throughout the whole night and crossed the river Ang/Ong. Reaching the territory of Sambalpur kingdom early in the morning, they heaved a sigh of relief. The old *gauntia* stood there and pointing his right hand towards the rising sun, took an oath that in future he or his descendant would never cross the river Ang/Ong. Thereafter, they proceeded further north, passed through Barpali, crossed the river Jira and spent the night on the northern bank of the river (Senapati and Mahanti, 1971:522-23; Pasayat, 2004:235).

At that time, Sambalpur was also passing through a phase of political turmoil. Raja Ajit Singh (1725-1766) the ruler of Sambalpur was an indolent and weak ruler. He was completely under the evil influence of his Dewan who was virtually ruling over Sambalpur kingdom. The ruler was taking very little interest in the administration of Sambalpur and his authority was grossly misused by the wicked and corrupt Dewan whose integrity was always doubted (Senapati and Mahanti, 1971:65). From this, it can be inferred that the Kultas did not want to proceed further and finally decided to settle down there on the

northern bank of the river Jira. In order to justify and legitimize their decision and for the concurrence of their ideas and opinions, probably the Kultas manufactured a myth which may be narrated in the following manner.

At night, the old *gauntia* had a strange dream. A female deity appeared and told him not to proceed further. She told the old *gauntia* to settle down there with the lands as far as his cows and bullocks were then taking rest. Consequently, a new human settlement started at that place. Since the limits of this settlement were determined by the presence of the cows it was popularly called *Gai-sima* - *Gai* means cow and *sima* refers to boundary. Later on, Gaisama came to be known as Gaisama (Senapati and Mahanti, 1971: 522-23). The place Gaisama was named either after the creation of the myth or the myth might have been created so after the name of this place Gaisima/Gaisama. Subsequently, other sections of Kultas probably migrated to Bargarh area. Thus, it is known from history that the Kultas have been living in large number in Bargarh areas. The myth, however, is most important one and throws significant light on the socio-economic and political history as well as culture of west Orissa during the eighteenth century AD.

As per the narrative, a year-long efforts and struggle of the Kultas brought in dramatic changes in Gaisama. They excavated some thirteen tanks round about their settlement. Digging of tanks was obviously meant for conservation of water for multiple purpose; but the Kultas utilized these tanks mainly for agricultural purpose during scanty rainfall and thereby cultivated the fertile lands of Gaisama successfully (Senapati and Mahanti, 1971:522-23). There is no denying that water is a far more important factor than soil to cultivators. Artificial irrigation is absolutely necessary and is a matter of vital importance when the amount of

rainfall is insufficient. The-then British Political Agent of the Feudetary states, Cobden Ramsay also writes that the Kultas are excellent cultivators, very industrious and are very skillful in irrigation (quoted in Senapati and Mahanti, 1971: 101). All these attest the fact that the Kultas had realized the importance of water. In this context, mention may be made of learned scholar P.K.Singh who has rightly observed that the rise and fall of various civilizations during the past days rested on the proper management and mis-management of the water resources. Those who had effective control on this precious natural resource, particularly in the agrarian societies did enjoy considerable social, economic and political power (Singh, 2004:50-51).

In view of the above analysis, we can say this much that the Kultas have assumed the reputation of very good cultivators (*chasi*) in west Orissa. In the past, irrigation was done mostly by tanks called *kata*, *munda*, *bandh* etc. It is not improper to say that the very existence of villages over a large portion of the area is dependent on the tanks, which have been constructed near them. There is no denying the fact that accumulated agricultural acumen of Kultas over the years appeared to have had significant contribution to the agricultural development of the region wherever they have settled down. Their contribution to the west Orissan society has to be recognized. Today, agriculture is the key sector of this region's economy and bulk of its population primarily depend on agriculture for occupation and livelihood.

As discussed above, Sambalpur suffered from misrule during the reign of Raja Ajit Singh (1725-1766) of Sambalpur royal house. He did not pay any heed to the welfare of the people. He was an inactive and weak ruler. The administration of his kingdom was completely

under the influence of Dewan Dakshin Ray who rose to power of dominance and prominence. The Dewan enjoyed full freedom in the internal administration and managed the administration according to his whims and acquired much wealth. Subsequently, Dewan Dakshin Ray was killed and one Piloo Ray was appointed as the new Dewan. Unfortunately, Raja Ajit Singh soon came under the notorious influence of Dewan Piloo Ray too; but Dewan Piloo Ray was also murdered by one Akbar Ray who thereafter became the new Dewan. His corruption surpassed people's expectations. In the midst of such internal disturbance and chaotic condition Raja Ajit Singh died in May 1766 (Senapati and Mahanti, 1971:65).

After the death of Raja Ajit Singh, his son Abhaya Singh (1766-1778 AD) became the king of Sambalpur when he was a young boy of only sixteen years old. Reciprocal suspicion and bitterness between the young Raja and Dewan Akbar Ray developed into open hostility and resentment. So, Raja Abhaya Singh appointed one Krishna Badmallick as his new Dewan with a clear intention to fight against injustice and wrong of Akbar Ray and also to suppress him by military force. Significantly, Akbar Ray was prepared to encounter such situation as he himself was also commanding some armed forces. Consequently, the whole town was divided into two hostile groups. There was complete absence of law and order in Sambalpur town. At the time of this civil war British agent T.Motte³ visited Sambalpur and was an eye witness to the chaotic condition of Sambalpur town. Motte was requested to help Raja Abhaya Singh in capturing and suppressing Akbar Ray and other miscreants; but Motte did not co-operate with the Raja as he was not interested to be involved in the civil war. For a short spell, confusion engulfed Sambalpur town where state administration vanished for few days.

Matters came to a crisis at night on the 17th June, 1766. Akbar Ray surpassed all in his cruelty. He collected and organised his group who were well equipped with crude implements. He led them march to the palace, secured the persons of the Raja and murdered every one who resisted him. A spree of massacre followed in Sambalpur town where about three hundred trusted and dependant persons of Krishna Badmallick were mercilessly put to death. Thereafter, Krishna Badmallick was confined in a dungeon and Akbar Ray was appointed Dewan who probably took possession of treasury, armoury and everything else. The whole structure of Chauhan administration collapsed from top to bottom and thereby Akbar Ray became the *de facto* ruler of Sambalpur; but he had to face rebellions inside and he suspected one of the widow queens of Ajit Singh to be involved in a plot against him. He murdered the old Rani and soon after that in 1778 Raja Abhaya Singh died in the prison (Mallick, 192: Senapati and Mahanti, 1971: 66). In view of this, it may be said that Raja Ajit Singh and Raja Abhaya Singh could not exercise their royal authority for the welfare of the people. Perhaps, Raja Ajit Singh indulged himself in luxurious way of life. Notably, he had eight queens. Taking the advantage of this situation, his Dewans squandered the treasury, which continued during the regime of Raja Abhaya Singh also. Though sometimes the Dewans had to face weak resistance from the rulers of Sambalpur, to their great astonishment the Dewans faced virtually no obstacles and hindrances while running the state. It is quite probable that applying socio-economic and political conditions prevailed in Sambalpur during the period of Raja Ajit Singh and his successor Raja Abhaya Singh.

Under such circumstances, it is not difficult to believe in the patronage given to various temples by the Dewan Akbar Ray to integrate the Sambalpur kingdom, to legitimise his new

status of Raja and thereby his authority over Sambalpur kingdom. In the erstwhile Sambalpur kingdom a large number of Siva temples were built during the Chauhan period. The most important among them were those of the Asta-Sambhus.⁴ The Bimaleswara Siva temple at Huma on the confluence of the river Mahanadi and the Jamli, the tributary of the Mahanadi, which is at present found in leaning position was built by Maharaja Baliar Singh (1660-1690 A.D.) The rest of the temples were constructed during the reign of Raja Ajit Singh (1725-1766) and his son Abhaya Singh (1766-1778) (Senapati and Mahanti, 1971 : 51). The temple at Gaisama was built by Dakshin Ray, the Dewan of Raja Ajit Singh, although the tradition assigns it to Raja Abhaya Singh (Senapati and Mahanti, 1971 : 522).

In view of the political circumstances of Sambalpur narrated earlier, it would not be unwise to suggest here that Dewan Dakshin Ray and Dewan Akbar Ray extended royal patronage and constructed or renovated the existing temples of the *Asta Sambhus* (Except Bimaleswara temple at Huma) situated in various parts of the Sambalpur kingdom in order to appease the local subjects to legitimise their authority over the Sambalpur kingdom. Most probably, these places were located strategically with forest background. These may be understood to be important seats of local power and acquired much economic significance also. For example, Ambabhona where Kedarnath Siva temple is situated was a fortified place in the days of Chauhan Rajas of Sambalpur and the remains of the old fort are still in existence. As per the tradition, the Kedarnath temple was built by Dewan Dakshin Ray (Senapati and Mahanti, 1971 : 508).

Nonetheless, from surface observation it appears that the site of Ambabhona has been a

seat of worship from hoary past and it has still greater remote antiquity. In the context, mention may be made of some interesting observations of the learned scholar S.S. Panda. He has discovered a round stone piece (*mastaka*) kept in the north-east side of the Kedarnath temple. Four single-hooded *Nagas* (serpents) in the theriomorphic form are carved in all four corners in the lower portion of this round *mastaka* of an early temple. This architectural fragment can be dated back to the 11th-12th century A.D. (Panda, 2004 : 19). In view of this, it may be suggested that Siva temples were built or existing Saiva shrines in dilapidated condition were repaired and renovated by the Dewans. Most probably, these temples were given numerous grants of villages and lands rent-free for regular worship and maintenance.

To sumup, when Kultas of Balangir-Patna fled to Gaisama sometimes in the first half of the 18th century, at that time Raja Raisingh Dev was the ruler of Balangir-Patna and Raja Ajit Singh was the ruler of Sambalpur. It was a period of political turmoil resulting into weak central authority in both the kingdoms. Taking the advantage of this chaotic situation Kultas settled down in Gaisama, an uncertain frontier area between the Balangir-Patna and Sambalpur kingdoms. They became settled agriculturists so that production would increase. Very soon, they emerged as a socio-economically prosperous and politically '*dominant caste*' group in the area. Due to weak central authority, Dewan Dakshin Ray tried to legitimise his new status and position of Raja. He appeased the local subjects in various parts of the kingdom by extending royal patronage to the temples so that he could establish himself. The Dewan or new Raja had to persuade and mobilise the people in different pockets of Sambalpur kingdom in order to maintain and sustain the integration of the Sambalpur kingdom.

Given also the need to legitimise his claim to his newly acquired position or status of Raja and to his share of the produce (*bhaga*) it would not be wrong to suggest that the granting of lands to Brahmins and temples during this period contributed to changing the agrarian situation. In such a scenario, the emergence of Kultas in Gaisama and Bargarh area as a '*dominant caste*' induced changes in the society and economy. Moreover, the agriculturist *jatis* like Agharias, Dumals, Kultas and Sudhs have played significant role and contributed substantially to changing the agrarian situation during the medieval period in west Orissa and thus contributed richly for state formation.

Notes :

1. In this context, it may be clarified here that when we come across the term *garh* or *pur*, earlier on, these terms were commonly used and referred all a fort or a stronghold and also an urban centre. Learned scholar P.K. Singh (2004 : 49-54) has elaborately discussed the meaning of these terms in his paper.

From the memorandum entitled "Notes on the Garjat states of Patna" by Major H.B. Impey, Deputy Commissioner, Sambalpur, dated the 29th May, 1863, the names of the eighteen garhs can be enumerated as follows: 1. Sambalpur, 2. Patnagarh, 3. Sonepur/Suvarnapur, 4. Khariar, 5. Boudh, 6. Athmallik, 7. Bamanda/Bamra, 8. Rairakhol / Redhakhol, 9. Bonai, 10 Gangpur, 11. Raigarh, 12. Sarangarh, 13. Chanderpore / Chandrapur, 14. Bindra-Nuagarh, 15. Sakti, 16. Phuljhar, 17. Borasambar (Padampur) and 18. Bargarh (Senapati and Mahanti, 1971 : 63). It may be noted that some of these *garhs* namely Raigarh, Sakti, Phuljhar etc. are at present in the State of Chhattisgarh.

2. Earlier, the river Ang/Ong was regarded as the boundary line between Patna *rajya* and Sambalpur *rajya*. As per the oral narrative, there was a quarrel between the two brothers Raja Narasingha Dev (king of Patnagarh) and Raja Balaram Dev (king of Sambalpur) regarding the extent of their respective territories. It was amicably and peacefully resolved by the intervention of the queen mother. The Dowager queen took her sons to the bed of the river Surangi and asked the elder and the younger to sit on her right and the left laps

respectively. Thereafter, she told them that the river Surangi should be considered as her own limbs (*Anga*), the elder brother should possess the territory to the right of the river and the younger one to the left of it. The decision of the mother was accepted by both the brothers without any hesitation. Thereafter, the river was known as the boundary line between Patna and Sambalpur kingdoms.

3. In 1766, T. Motte was sent by Lord Clive to Sambalpur for negotiating with him for trade in diamond. On the eve of the death of Raja Ajit Singh in 1766, Motte was probably present in Sambalpur town. His accounts reveals the chaotic condition of Sambalpur towards the end of the reign of Ajit Singh and beginning of the reign of Abhaya Singh. He was an eye-witness to the chaotic condition of the town (Senapati and Mahanti, 1971 : 66).

4. *Asta-Sambhus* refer to Bimaleswara of Huma, Kedarnath of Ambabhona, Maneswara of Maneswar, Biswanath of Deogaon, Balunkeswara of Gaisama, Swapneswara of Sorna, Bisweswara of Soranda and Nilakantheswara of Niljee. These Saiva shrines were in the erstwhile Sambalpur *rajya*.

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Economic Implications of Natural Disasters in Orissa : A Retrospective View

*Prasant Sarangi
Govinda Chandra Penthoi*

Over the years, India has witnessed a trend of decline in the incidence of poverty. However, the total number of poor is still high and regional imbalances persist. Years of development have not changed its economic condition uniformly throughout the country. The gap is very wide from one state to another. At the state level, among the major states, Madhya Pradesh, Orissa, Bihar and Sikkim had more than 45 percent of their population below the poverty line in 1983. In respect of the worst affected State of Orissa, Sahu (1997) estimated the ratio of people living below the poverty line to be more than 60 percent upto the period 1983-84. An earlier study by Mahendra Dev et al. (1992) had revealed that, around 65 percent of rural population in Orissa were living below the poverty line in between 1961-62 to 1986-87. The figures varied only in a negligible way. Yet another study of the Expert Group (1993) reveals the fact that there were 61.5 percent of people living below poverty line in the state during 1987-88, instead of the quoted figure of 48.3 as percent estimated by the Planning Commission during the same year. The figures of 2003-04 have also nothing to add to our jubilation in the fact that proportion of people under below poverty line during the year was found to be 47.2 percent during 2003-04.

There are many opinions about the deplorable state of economy in the state that have

directly or indirectly affected the developmental efforts. Some experts opine that Orissa was not poor in the past; rather its poverty is ascribed to the colonial rule in the state. However, some others explain its poverty in terms of the incidence of sporadic natural disasters like floods, droughts and cyclones (Pradhan, 1976). The availability of data giving cross tabulation of the sequence of events is of critical significance in any attempt at capturing rigorously the broader dimensions of well-being and deprivation of people. A few studies have so far been done in analysing the loss due to natural calamities in the state. In this respect, the present paper is an attempt to analyse on the various occurrences of natural calamities in the state and the loss of related economic values associated with these calamities from 1971 onwards in the state.

Orissa is one of the poorest states in the Indian Union. Like India, it is pre-eminently agricultural.¹ The most important economic unit is the village.² Over the years, Orissa has witnessed a trend decline in the incidence of poverty. Years of development have not changed its economic condition satisfactorily. Sahu (1997) estimated the ratio of people living below the poverty line in the state to be more than 60 percent during 1983-84. An earlier study by Mahendra Dev et al. (1952) had revealed that in between

1961-62 to 1986-87, around 65 percent of rural population in Orissa were living below poverty line in the state during 1987-88, instead of the quoted figure of 48.3 as estimated by the Planning Commission during the same year. The official figures of the rate of poverty at present is estimated to be 47.2 percent.

There are many opinions about the deplorable state of economy in the state that have directly or indirectly affected the developmental efforts. Some experts opine that Orissa was not poor in the past; rather its poverty is ascribed to the colonial rule in the state from 1803. Yet, some others explain its poverty in terms of the incidence of sporadic natural disasters like floods, droughts famines and cyclones³ that have naturally damaged crops and the human habitats and rural settlements situated in the far-flung low lying areas.

Objective and Methodology

The climate and the topography of a region have direct bearing on the economic and social life of people in that region. This is true in case of the state of Orissa. Natural calamities, of one description or the other have affected the state from time to time debilitating its economic mettle and thus contributing to its abysmal backwardness. However, studies based on these factors of economic precipitation are very scanty. Considering the above aspects, this paper attempts to analyse the chronology of notable natural disasters like the floods, droughts, famines that have rocked the state from time to time. An estimation on the loss of related economic values associated with the calamities from 1971 onwards in the State is also made in the second part of the study. The study is based on secondary source of information that have been compiled and collected from Government surveys, reports, doctoral theses, scribes and books relevant to the topic.

Section-I

Chronology of Natural Disasters

Climatically, Orissa falls under a tropical climatic zone. The south-west monsoons and the retreating north-east monsoons preponderantly determine the climatic conditions. It may be noted that the monsoon rain in Orissa is much lower than that of West Bengal. Besides, the delayed monsoons, which forecasts consolatory rain to northern Orissa are primarily cyclonic in character. These incidents of flood, drought and famine are pertinent mentioning in this portion of the study.

Flood

Before draining into the Bay of Bengal, all the major rivers of Orissa flow long distances; some of them having their sources originating beyond the state of Orissa. The intensity of floods inundating the rivers depend much on the topography of the State, the drainage system with low channel capacity, low flood slope, sand banked mouths, high concentration of rainfall in a small number of days in the catchments basin etc. The frequency of such floods during the last one and half century (1968-2004) is presented below.

Between 1868-1967, i.e. during a span of hundred years, there were 262 flood inundations in the state, of which 68 were high floods. 77 of them were medium floods and 117 low floods. Among the rivers Mahanadi experienced the highest number of floods i.e 99 times. In other mazor rivers of Orissa, Brahmani experienced such floods 77 times whereas Baitarani caused floods for the 86th time. However, the scale of grimness of the floods of 1881, 1894, 1896, 1907, 1920, 1926, 1927, 1934, 1940, 1941, 1943, 1955, 1960, 1961 surpassed the previous ones. To add to the plight of its people, in between 1967 to 2003, floods of periodic nature occurred

almost every year in between 1967-1975, 1977, each year between 1980-82, 1985, 1990, 1992, 1994, 1995, 2001 and 2003. The number of such destructive i.e. flood occurs equalled 20 times. Total of all such chronic, periodic and yearly occurrences of floods in Orissa during 1886-2003 i.e. during the last one hundred thirty-six years are as many as 282.

Drought

Like flood, drought is recurrent in Orissa. In most of the years, droughts and floods are experienced simultaneously because of excessive rainfall in some parts of the catchment basins and low rainfall in other regions.⁴ Records reveal that there were droughts in 1841-42, 1942-43, 1849-50, 1850-51, 1954-55, 1965, 1966, 1967, 1979, 1984, 2000, 2002 and 2003. In the annals of history, the great devastating Orissa famine, i.e. *Na Anka Durbhikhya* was mainly because of extensive drought in 1865.⁵ Just like floods, droughts wreak in a lot of suffering to the Orissa people - the damages being overwhelming by nature. Every alternate year, either a drought or flood has become a recurring phenomenon in the State.

Cyclone

Orissa belongs to a cyclonic zone. The late monsoon symptoms often cumulate to cyclonic developments in the Bay of Bengal. The wind becomes violent as it moves towards the north-west and lashes the whole of north-east coastal belt of the state.⁶ Cyclones in Orissa occurred in 1823, 1831, 1932, 1842, 1948, 1874, 1885, 1887, 1890, 1936, 1942, 1967, 1968, 1971 and 1999.⁷ Among the others, the severity of the Super Cyclone of 29 October, 1999 is more devastating. It had affected about 97 blocks, 12 districts, the State capital and Cuttack city, 28 NACs, besides affecting around 125.9 lakh

people, and causing devastation in about 1200 kms. The super cyclone claimed as much life and property as 1846 Grampanchayats in the state, 14000 villages/wards and 1650086 households were severely affected.

Famine

Orissa is also marred with the worst hit famines in the state's history. Famines are the inevitable consequences of flood, prolonged drought, cyclone and wars. The records evince about the occurrence of many famines in the 14th, the 15th and in the 16th centuries.⁸ The famines of 1770, 1774-75, 1780, 1792, 1836-37, 1837-38, 1865-66, 1940-41 and 1942-43 were the major ones.^{9,10} However, the horrors of famines of 1866 cannot be wiped out from the recorded annals of Orissan history. It is believed that nearly one fourth of Orissa's total population were wiped out.

The earlier section, gives an appalling view of the threats looming before the present and future of the State. This was also rightly pointed out that "the State of Orissa is a flood ravaged, drought prone, cyclone hit and famine stricken land."¹¹

Section - II

Economies of Natural Calamities

As a matter of fact, the economic history of Orissa is a story of ravages of the recurrent floods and droughts, that have created and still creating havoc in the economic and social life of the people of the State.¹² These natural calamities alongwith cyclones and famines are the crucial factors that have pushed back the progress of the economy. An estimation of the value of properties lost and damaged due to the natural calamities-flood, drought, cyclone, etc. in Orissa in different years between 1971-1999 is depicted in the table below.

The per capita value of property lost and damaged is analysed in the 3rd column of the table. The figures evince that a total amount of Rs.45.1 crore with an average per capita value of Rs.6.66 was lost in the state during 1971-1973, whereas the loss was 51.39 crore with an average per capita loss of Rs.6.81 between 1977-79; the amount was Rs.150.23 crore with per capita loss or Rs.18.82 between 1980-81; and during 1983-85 the loss was as much as Rs.302.76 crore with a per capita average loss of Rs.36.04. During 1989-1991, it was 465.84 crore with per capita loss of Rs.49.59; during 1992-1994 it was Rs.2508.55 crore with an average per capita loss of Rs.258.51 and the loss figured at Rs.478.25 crores with an average per capita value lost of Rs.67.21 during 1998-1999. Thus between these 28 years the total amount lost in the state is estimated to be Rs.4643.97 crore. The table also reveals the fact that, the incidence and intensity of natural calamities have increased from 1989 onwards causing a huge damage of properties in the State.

Preventing natural calamities from their occurrence may be beyond the powers of human beings. But the capacity of combating these disasters is somehow conceivable. There have been many lessons to the people and their governments in the successive years of occurrence of such natural disasters. Except for a gap of two to three years, there have been a series of natural calamities either in form of flood or drought or even as a duo of both the forces. 'Construction of Cyclone Relief Centres', for example, is a lesson from the instance of the Super-Cyclone of the 1999. Other such preventive measures against floods may lie in the working out of an action plan in the direction of effective drainage system in major rivers, effective storage and drainage system in the rivers to meet the requirement of water

during shortage and to protect the excess water when in excess and by constructing barrages and bandhas where the locality is situated at a low level to the flow of river. The second section of the study reveals a harassing figure of economic values lost during the last 28 years in the State. This section is taken as a model to prove the effect of the natural calamities on the economy. From this model, it is very clear that the state is losing a huge amount of capital in almost each year due to the natural calamities and thereby causing poverty in the State.

Even though the Government of Orissa have taken a major drastic step by formulating Orissa State Disaster Mitigation Authority (OSDMA) soon after the Super Cyclone, but this concept need more intensive research, skilled and experienced personnel, a deliberate debate and high level discussion to find out an effective solution in order to cater to the ill effects of natural calamities on the economy of the state.

Value of Properties Lost and Damaged due to National Calamities in Orissa since 1971

Year	Value of Properties lost and damaged (Rs. in cores)	Average per capita value of properties lost and damaged (in Rs.)
1971-73	45.11	6.66
1974-76	34.17	4.81
1977-79	51.39	6.81
1980-82	150.23	18.82
1983-85	302.76	36.04
1986-88	187.28	21.36
1989-91	465.84	49.59
1992-94	2508.55	258.51
1995-97	420.39	41.12
1998-99	478.25	67.21
Total	4643.97	510.93

Source : For column 2 (Yrs. 1971-1993), data collected from the Statistical Abstracts of Orissa, for 1979, 1981, 1985, 1991 and from 1994-1999, data collected from the Directorate of Economics and Statistics, Bhubaneswar. Column 3 is compiled on the basis of the population figures of the corresponding years based on the compound growth rate of population of 1971, 1981, 1991 and 2001 census.

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Value Added Tax : A Suitable Alternative

Dr. Kamal Kumar Pani

In the earlier days, the role of the government was limited to justice, police and arms. The classical economists had great faith on market mechanism and they were great believer of governmental non-interference or laissez-faire. Accordingly, they advocated a very limited role for the government. As a result, public expenditure was on the low side. But with the Progress of human civilization, people felt the need of different social goods and general services. It can be mentioned that the social goods are those goods, which are jointly consumed. No one can be excluded from the consumption of such goods if they are provided. Their consumption is non-rival. Hence the provision of such goods fell on the government, because these goods can only be provided by an authority with some power of coercion. People also need general services like education and health services, which are sine qua non of a civilized society since market mechanism fails to reflect the benefits in totality, such goods tend to be under produced and this adversely affect the human development that took the responsibility of providing such general services. Apart from the traditional functions, these new functions enhanced the duties and responsibilities of the government. Increase in human population was instrumental in forcing the government to make greater provisions of such services. This led to the growth of public expenditure.

The government collects its revenue from different sources and tax is by far the most important source of government revenue. Tax is a compulsory contribution made by the citizens to the government to defray the expenses incurred in the common interest of all without any direct quid-pro-quo. The government can impose a tax on the income or wealth of the citizens, productions, consumption or sale of different kinds of services. Apart from the tax on incomes, taxes on commodities are not new. Different kinds of commodity taxes are there in different parts of the world, which include sales Tax, Excise Duty or value-Added Tax that saturate government revenue. In India, the indirect taxes (taxes on commodities) are found to be the largest contributor to the state exchequer.

It is a well-known fact that the commodities that we consume pass through different marketing agents and these agents - wholesalers, retailers, small businessmen - along with the stockist and middlemen increase the price of these commodities to some extent at each stage of marketing.(Profit-margin). Under the prevailing system of Sales Tax, there is a provision of tax evasion; as a result, the process of revenue generation suffers a lot. The profit margins earned in all other marketing stages, out of the tax net, while the consumers are forced to pay much more than the producer's price.

In the ongoing Sales Tax system different rates of tax are in use in different states, thereby giving larger profits for the inter-state-traders. Again the number of taxable assesses are not only lower, but there is also a large scale tax avoidance. Besides the assesses have to renew their registration certificates for which they have to run from pillar to post. Here also the tax rate is high, cascading effect/double taxation is more, non-registered businessmen/traders are too high in number and so also the tax litigations. To do away with these inconsistencies, the government has embarked upon introducing the value-Added Tax (VAT) system from 1st April this year.

Value-Added Tax is commodity based tax in which, there is a provision for imposing taxes on the Profit-Margins earned by different category of traders involved at different stages of marketing. It is a multipoint tax imposed on the additions to the value of different commodities at different marketing/selling points. Hence the name Value Added Tax (VAT). It is known for its anti-cascading effect/double taxation. It only falls on

the added value/profit margins, not on the entire value of the commodities concerned. Hence there is no such fear of soaring market prices or consumer exploitation as a result of VAT.

Under VAT system, the rate remains low, the number of non-registered traders declines considerably, and there is less scope for tax evasion. It is a tax system known for clarity and progressiveness. It can remove the inconsistencies present in the current tax set-up. As inter-state trading is left tax-free, people of all regions could get good quality commodities at reasonable prices. As it is well appreciated in several European, Asian and Latin American countries, there is no reason, why it can't be useful way of raising government revenue in India !

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Shri Biswabhusan Harichandan, Minister, Rural Development, Industries and Law garlanding the portrait of Utkal Gourav Madhusudan Das on the occasion of state level jayanti at Jayadev Bhavan on 28.4.2005. Shri Digambar Mohanty, Commissioner-cum-Secretary and Shri Baishnab Prasad Mohanty, Director, Informaiton & Public Relations are present on the occasion.

Siridi Saibaba - An Apostle of Solace and Peace

Umakanta Mishra

Siridisai emerged in my life as the second *Guru* during 1991. My first *Guru* was Thakur Ramakrishna Paramahansa along with Maa Sarada Devi, the consort of Thakur otherwise known as vital force *Saktirupini*.

During my youth I was confronted with many burning problems which sensitized and traumatized me time and again. All of a sudden while having an evening walk I came across huge crowd converged near the constructed pandal at Ramakrishna Ashram, Bhubaneswar to listen the week long religious discourses from invited Swamijees of different ashrams of Rama Krushna Mission. I rushed to the podium and enquired over the divine arrangements, since the addresses were about to begin with. I occupied a seat meant for visitors and listened to the addresses delivered by the eminent speakers with rapt silence. I was almost thrilled to listen the philosophies and sacrificial lives of those great souls. From that moment I became a disciple of Ramakrishna Deva and started visiting Bhubaneswar Ramakrishna Mission ashram with devotion. Also I got a golden opportunity to go through *Kathamrita*, full of golden counsels emanated from the golden voice of Lord Ramakrishna. After studying these, I got rid of the shrouded temper and the darken clouds hovering on my life. My life style changed spectacularly with the pangs and pain passed off smoothly, of course slowly but steadily.

Then emerged Sri Sri Siridisai as my second *Guru* in the second span of my life. Initially I was totally unaware of Baba's greatness except coming across a few photographs displayed at binding shops and a temple dedicated to Saibaba at Cuttack constructed near the bank of Kathajodi river. This was possible while going to Cuttack to assume charges as a government officer on transfer from Secretariat to Collectorate, Cuttack. Of course three temples were constructed earlier at Bhubaneswar, and all those were thronged with devotees. But I was left behind because of my poor knowledge and lack of inquisitiveness over Siridi Sai Baba. No doubt I was aware of present living Satyasai because of *Bhajans* going around in government and private quarters of the devotees.

Since I was the devotee of Sri Sri Ramakrishna I was rather least interested in this great Saint's worship or the lofty ideals enshrined in the *Sai Satcarita* being sold or distributed from devotees side. But during the second span of my service career I was completely saddled with a serious crisis of my employed eldest son in health front which forced him to quit service putting me and my family members at dire state of poverty and pains. After prolonged medical treatment the disease did not run down. So I finalized to leave Bhubaneswar for Mumbai for further medical treatment where my younger son was serving.

I booked the train tickets and left Bhubaneswar for Mumbai with my family members during 2000. While in train, one of the co-passengers described about the greatness of Siridi Sai and the miraculous healing touch experienced by him and others. I was totally overtaken by his words and thoughts of visiting Siridi from Mumbai. My younger son made three attempts earlier to visit Siridi but failed. When he heard from me about the proposed visit he was elated and made necessary arrangements for my journey. So my cherished desire was almost fulfilled. Siridi is situated near Godavari River. The river is 9 km away from Siridi Taluk of Ahmed Nagar District. The delta region of Godavari produced strings of eminent saints who purified the nearby atmosphere by dint of their excellent deeds. They are notably Ramadas, Narasingha Meheta, Bhatta Danjee, Jnaneswar, Swami Eknath. Siridi Sai Baba possessed an unique character who used to maintained stoic silence through out his entire life milk of kindness was flowing from his heart for the grief strikings. Only he was taking the name of God (*Allaha*) sitting under a neem tree. Gouli Bhula an eminent saint of that time called him as Sai at the first sight. From that day he was known as Saibaba.

After reaching at Siridi I came across the Siridisaibaba's Temple with gorgeous light decorations and joined in the serpentine ques to have the glimpse of he *Samadhi* and a life size statue erected by the then eminent sculpter of that great departed soul. When I reached the main hall of the temple I looked upon the statue of the great soul from a little distance and was totally overwhelmed with joy.

It seemed to me as if the life less statue was full of blood and flesh and listening to my chocked voice with pathetic feelings emanating from the bottom of my heart. I was at my wits end standing with my ruffled feathers. After a

while, I could control myself although shedding tears were running down from my eyes. This very heavenly feeling reigned and triggered off my heart till I come down to Bhubaneswar.

No doubt the pilgrimage paid handsome dividends with peace and tranquillity in my mind. I started worshipping in my govt. quarter with the photograph brought from Siridi. In spite of all, I was thinking seriously to know something about the life history of my *Guru* but failed to avail any opportunity. But to my astonishment one day while talking with one of my friends in his office room I came across small photographs of Baba decorated over his table with a big glass covered over them. In course of my interaction I expressed my desire to know some thing about Baba's life. So he assured me to give a book (*Sai Satcharita*) where the miraculous deeds with life history has been vividly narrated. Exactly after two days he handed over the book to me. This presentation was as good as a Bucket of Nectars. I went through the contents of Book line by line. While going through the Book I felt as if I was taking a glass of nectars in each moment. My confronted agitating problems started wiping out gradually. Also I got *Bibhuti* of Baba from local *mandir* which I use to apply still now after *puja* being performed daily.

So far as the book is concerned the writer is Mr. Himand Panthe, a close associate of a true devotee of Baba, who wrote this *Sai Satcharita* in Marathi language, translated in English by Annashaheb in latter stage.

The seasoned but ripen sandal woods at forest creates marvellous fragrance during spring purifying the surrounding atmosphere and gives utmost pleasure to pedestrians. The sophisticated blossomed flower charms the heart of onlookers giving immense pleasure from time to time. The spring has got it's own charm and exuberance.

This book itself is a cuckoo in the spring with its ethical and religious value. It is nothing but ocean of nectars. Going through the book infuses immense but unbounded pleasure and satisfaction.

Let us discuss some of the immaculate but miraculous deeds exhibited by Sri Siridi Sai Baba. One day, in a fine morning one of the devotees went to Baba's room for *darsan* as a mark of respect and obeisance, but to his astonishment he came across certain un-believable frightening sights which traumatized him. He came across Baba's bodily organs scattered here and there, and the main limbless body was lying on ground. He was totally frightened and speechless under the impression that Baba was killed by some of the dictators. With shivering mood he came out of the room. He was spell bound. At first he wanted to register FIR in the police station but dropped the idea with the impression that since he came across as the first witness he might be caught as murderer. So he changed his mood and did not go to the police station. In the next day with curiosity he paid a visit to Musjeed along with his friends to have a glimpse of Baba. But to his surprise he saw Baba sitting in a chair safe and sound. He could not believe himself. Another exiting example is that a final year law student Mr. Sewade paid a visit to Siridi to have blessing from Baba to get through the Final Law examination scheduled to take place in near future. In course of conversation Mr. Sewade told Baba about the scheduled exam with the explanation that he had made poor preparation for which he did not want to appear the same. Baba told him that he should appear the exam regard less of his little preparation and he would emerge with flying colour. One day two of his friends met and sat down in a round table and tallied the preparatory notes for the ensuing examination. On the spot it was found that Mr. Sewed had no preparation. So two of his other friends laughed at Mr. Sewede

and told that his under preparation might cost him heavily. But Mr. Sewede told emphatically that he had Baba's blessings and he would certainly get through the examination seated to take place in near future. They all appeared the examination and got through including Sewde. But in the long run two of his co-examinees laughed at Baba paid heavy price in terms of their daily life. There are innumerable examples to describe which cannot be possible at this juncture in view of these narrations aming to voluminous in nature.

Baba's knowledge over Sanskrit was commendable. Even the masters of Sanskrit were dumb-founded before Baba's mastery over the Sanskrit knowledge. One of the devotees, well versed in Sanskrit was chanting a *sloka* from Gita in an un-audible voice before Baba. Baba could know the feeble voice and asked him to recite the *sloka* aloud. When the devotee recited, Baba asked him to explain the meaning of the *sloka* but he failed to give satisfactory answer. So Baba explained the essence of the *sloka* in a modest manner which made the pandit spell bound. His negative impression over Baba's Sanskrit knowledge proved wrong.

Baba could knew the hidden sad feelings of a person at the very sight and used to teach him about the modalities to be followed to rid over the problem being confronted with. Donations were accepted but not from all. Some times he used to ask for money from selected visitors to wipe out their past sins committed.

His healing touch over serious patients was wonderful. The application of *Uddi (Vasma)* brought from Baba's hand healed the acute diseases once for all. The *Uddi* still has a marvelous effect, although Baba is no more in this mundane world.

Baba's counsel to his devotees was to chant the name of God un-waveringly, regardless

of time, place and condition. The constant chanting purifies the heart and soul accomplishing success in every work. The wavering mind can be brought under control. Baba's eleven commandments enshrined in the last page of *guru Sat charita* is a valuable guidelines and counsels. Baba has categorically stated that for my devotees there would be no pinch of poverty nor dearth of fooding, clothing and money in his daily life. He can run steadfastly regardless of situations. Worship to Baba means worship to Lord Siva and Sakti. He has categorically said that total surrender before him with heart and soul brings new light in the midst of darkness. 'One who looks upon me I look upon him, taking the charge of self and family welfare'.

One can not visit Siridi unless and until Baba wants, Siridi itself is spectacular. It is the heaven of problem inflicted persons. Stepping in Siridi weeps out the problems. Baba takes a downtrodden at his lap wiping out the shedding tears for times to come. The charm and warmth enjoyed by visiting Siridi along with Baba's *samadhi* (tomb) can not be described by mere words. It is an intrusive feeling time to come. The visit purifies the heart and soul over riding the huddles being encountered in life.

Baba was not known during his early days. He was seen at Siridi when he was only 16 years of old. He remained at Siridi for a few years and went back to a secluded place, an unknown destination. After some years he appeared at Siridi in a marriage party of Chand Patil whose brother in-law was a bridegroom for Siridi bride and then remained at Siridi continuously for 60 years and took his last breath at Siridi in 1921.

Baba is omnipresent at all levels-in air, earth and in heart of million devotees. From cradle to grave he is with us. He rather bridged the gulf

between monism and dualism, between Hindu and Muslims and between haves and have nots. His present tomb encapsulates the greatness of the saint's love and unbound affection. He has left this memorable imprint for millions of present and future generations. His clarion call for people regardless of religion, caste and creed, to be one without having any hatred against each other and to memorise his name only to get peace, tranquility and solace. His *nama smaran* wipes out problems, ticklish issues being confronted with from time to time. He is for Muslims, Hindus and Christians and above all for all sects. Inextricably he is for all. Preposterous feelings against Baba ruins peace and tranquility and lefts in darkness a pall of gloom descends over an atheist's life. His great respect for Hindu gods and goddesses was unparalleled. He was the go between Hindus and Muslims and considered both as his right and left hands. He was the treasurer of blessings and solace, especially for those who are groping in darkness. He is the father and mother for the humanity as a whole. So from wholistic view he possessed the tallest, modest and biggest personality. Let us be one regardless of our religions and prostrate before thy golden feet as a mark of obeisance to give strength and to show light in the midst of darkness. Let Baba infuse our hearts with the spirit of generosity like earth, sun like bounty and river like hospitality. His unbounded love, compassion and equanimity to the devotees is unparalleled and would be inscribed in the letters of gold time to time.

May Baba pour his blessings to all to come over the hurdles being confronted with.

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The Cultural Synthesis of Prachi Valley

Debendranath Bhoi
Priyadarshini Baksi

Orissa has numerous geographical tracts endowed with monuments. Prachi river valley is such an important geographical tract. Numerous monuments of various religious sects have survived the vagaries of time and nature over centuries.

This valley roughly spreads over an area of 3600 kms. The river Prachi presently flows from a jora near Phulnakhara, flowing about a distance of 60 kms. it meets the Bay of Bengal through several mouths between Kalikanagara in north to Ramchandi in Puri district. The Prachi river valley came under the rules of several important dynasties of Orissa i.e. the Chedi, the Murunda, the Mana, the Vighraha, the Bhaumakara, the Somavamsi, the Ganga and the Suryavamsi. This valley through the ages seems to have carved out a unique position with regard to religion, art and architecture.

The references to Prachi river in *Markandeya Purana*,¹ *Kapilasamhita*,² the *Prachi Mahatmya*,³ the *Oriya Mahabharat*,⁴ the *Suryasamhita*,⁵ the *Gyanakosha*,⁶ the *Sambapurana*,⁷ the Hatigumpha inscription,⁸ the *Bramhapurana*,⁹ the *Skandapurana*¹⁰ etc. and local legends provide interesting clues. The local legends and the *Prachi Mahatmya*¹¹ as cited to uphold the view that the word Prachi is derived from "*Prachina*"¹² meaning ancient. Scholars also

cite reference to the river in Saraladasa's *Oriya Mahabharata*,¹³ a work of the 14th century A.D. The traditions suggest that at one time extensive trade and commerce was carried on in this valley. According to the local tradition the stone required for the Sun Temple at Konark were transported by big boats through river Prachi.

India through her long history witnessed emergence of various schools of religious thoughts like Jainism, Buddhism, Tantricism, Saivism, Saktis'm, Saura Cult and Vaisnavism etc. that evolved through the ages. Kalinga including the Prachi river valley witnessed the blending of different ideologies, rites and practices. The synthetic development of religion of Prachi Valley is reflected in the art and architecture.

In the Prachi river valley innumerable big size images of Jaina Tirthankaras have been found, of which most are enshrined as principal shrine deities. Many of these shrines are in dilapidated condition. An important Jaina center of this village is Adaspur in the Cuttack-Niali road. One beautiful image of Risabhanatha artistically chiselled out of black chlorite stone is found in the Swapneswara temple. Risabhanatha is depicted as *Mulanayaka* being surrounded by twentythree Tirthankaras.

An Astagrahacharita Tirthankara in *Kayotsarga Mudra* on a lotus pedestal is now

being worshipped in the Nilakanthesvara temple of Nilakanthesvara Kakatapur. Some believe it to be Mahavir.¹⁴ Others identify it to be Rsbhanatha.¹⁵ An image of Rsbhanath made of hard granite stone is found in the Nrasimhanath temple of Cadheibar near Balakati. Two Rsbhanatha images of sandstone are now being worshipped in the Lokesvara temple of Phulanakhara. An image of Lakshmi is now worshipped in the village Jihola, can also be taken as a Jaina divinity.¹⁶ S.S.Tripathy¹⁷ mentions that several Jaina images from Kakatpur area were shifted to the Orissa State Museum, Indian Museum, Kolkata and Asutosh Museum of Indian Art at Kolkata.

Prachi Valley also preserves a number of Buddhist sculptures. The most monumental and colossal Buddha image of this valley is preserved in a thatched house of Kuruma. Here he is sitting in *Vajrasana* on a double lotus pedestal with *bhumisparsamudra*. It can be placed sometime in the 9th century A.D.¹⁸ On the old brick mound of Astaranga a black chlorite stone image of Marici is being worshipped under an *asvatha* tree. It measures 14" x 18". There is an image of Chunda (Spiritual daughter of Vairochana)¹⁹ found in the southern niche of the Ramachandi temple. There is a standing Avalokitesvara, measuring 11" x 6" at Lataharana. The image contains the usual Buddhist Dharini "*Ye Dharmahetu*" which may be assigned to the tenth century A.D. Other Buddhist female deities are also noticed from Prachi Valley like Vajrayogini Tara, Hariti, Kurukulla etc. From all these description it is evident that Buddhism acted as a catalyst for varied and excellent imagery.

Prachi river valley is replete with numerous Siva lingas, saktis, Linga with Saktipithas and several other Saiva sculptures like Panchamukha, Trimukha Siva, Ugrarupa Siva, Umasahita Murti and Soumyarupas of Siva.

There is a beautiful image of Natraj or Nrityesvara Siva²¹ *in situ* on the front *rahapaga* of the *vimana* of the Akhandalesvara temple of Prataparudra Deva. In the Somanath temple of Vishnupur a chlorite stone tablet is now being worshipped. A beautiful relief work of Trimukha Siva (Trimurti)²² is noticed on the inner western wall of the *Vimana* of the Somesvara temple of Kakatapura. There is a beautiful Saumya rupa Sadasiva image in the Isanesvara temple of Citra. A beautiful image of Umamahesvara is found in the Siddhesvara temple of Mudugala.

Ardhanarisvara image of Lord Siva in which he is half male and half female form is found at Vilavesvara temple of Paidapatana, in which Siva and his divine consort "Sakti" are fused to form one androgynous diety.

An Ekapada Bhairava having one leg with all other qualities of Bhairava is being worshipped in the Sobhanesvara temple at Niali and the Ajaekapada Bhairava is also worshipped on temple walls of the Gangesvari temple of Bayalisbati.

Prachi valley also preserves various Brahmanical female deities like Durga, Parvati, Camunda, Varahi, Mangala, Manasi etc. Durga images are found at Bhiligrana, Astaranga, Bayalisbati, Kudapatana, Ambapada and Citra etc.

A good number of Parvati images are found in the Bhavanatha temple at Bhavanathapur, Siddhesvara temple at Vishnupur, Bhadresvara temple at Bisimaitri, Viswanatha temple at Krishna Prasadgarh, Grameswar temple at Mihivarana, which are noteworthy.

Camunda images are found in the Grameswar temple of Sauma, Angeswar temple of Pitapada, Chamunda of Kakatapura etc. which belongs to late 12th or 13th century A.D.²³ Varahi of Chaurasi, Garudipanchana Bhagalpur has

always drawn the attention of devotees. Mangala of Kakatapur is the most popular goddess of the Prachi river valley. Prachi valley also preserves various temples like Nilakantheswara temple at Nilakanthapur, Swapneswara Siva temple at Adaspur, Varahi temple at Chaurasi, Durga temple at Motia, Amareswara temple in Nimapara-Kakatapur road, Buddhanatha Siva temple at Garudiapanchana, Madhavananda temple at Madhava, Ganeswar temple at Bayalisabati, Somanath temple at Visnupur, Sobhaneswar temple at Niali etc.

The early temples of Prachi Valley include Nilakantheswar temple, Sovaneswar temple, Swapneswara temple and Varahi temple which are the product of Bhaumakara rulers. The second phase was marked by the temples of Siddheswara, Rameswara and Sovaneswar built during the Somavamsi rule.

The last phase is represented by the temples like Madhavananda, Bayalisabati and Visnupur temple, which of the Ganga period. The design evolved from *Triratha* to *Saptaratha*. The square temples developed into well proportionate *Rekha* temples.

The architectural remains of Prachi valley have survived from seventh century A.D. to the modern times. It seems to be a museum of our art heritage. It provides an unique opportunity to study and trace the gradual evolution of temple architecture and sculptural art that Orissa boast for. Prachi is an important field of study for a fuller and deeper understanding of Orissan history and culture. Thus it remains an unique example of religious synthesis and important tolerance.

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Nandankanan : Poetry in Invisible Scripts of Nature

Prabhukalyan Mohapatra

'If Konark is poetry in stone, then Nandankanan is poetry in natural script of Nature', observed Mr. R.K. Tripathy, Hon'ble Justice of Gujarat High Court. Similar is the opinion of Mata Prasad, a former member of Union Public Service Commission, who remarked that 'Nandankanan is a place which must be visited by anyone who visits Orissa'. These are very few commendations of large number of dignitaries who visited and spoke high of this world famous Zoological Park.

Nandankanan Zoological Park, one of the major tourist attractions of Orissa has the distinction of being the host zoo in the world for captive breeding of white tiger out of normal coloured parents of Rewa origin. Internationally acclaimed for its highest collection of white tigers, Nandankanan is also the first ever captive breeding centre of endangered species creating empathy towards wild-life. The unique natural ambience of Nandankanan with wide variety of animals also boasts of having rehabilitation of problematic wild animals. It also acts as a rescue centre for abandoned, injured and in-capacitated animals.

This zoo aims to conserve and breed different species particularly those endangered for conservation of bio-diversity. The effort includes animal exchange with other zoological park to maintain diversity, rehabilitation of suitable

endangered species in the wild such as Gharials. In its pursuit to achieve the above objectives the zoological park has been exchanging various wild creatures, rescued or bred under captivity to other registered zoos and institutions within India and abroad in exchange of similar endangered species. Above all Nandankanan has also the distinction of releasing Cheetal, Black Buck and crocodiles bred in protected areas of the state.

Lion safari, Tiger safari, Deer safari, Aerial Ropeway, Reptile Park, Nocturnal House, Aquarium, Toy Train, Boating, Elephant Ride, Library and Film Shows are some of the special features of Nandankanan which attracts about 10 to 12 lakh visitors every year. Three number of battery operated vehicles have been put to service for safaris. These pollutant free and noiseless vehicles, purchased from BHEL, Bhopal and formally operated on December 29, 2001, in its 41st foundation day, are immensely appreciated by visitors.

Situated along the Kolkata-Chennai railway line near Barang Railway Station Nandankanan Zoological park was established on December 27, 1960. It is only 2 km away from Barang Railway Station, 17 km from Cuttack and 20 km from capital city of Bhubaneswar by road. Krishnanagar and Jujhagarh protected forest blocks alongwith Kanjia lake, some government

waste land and private lands over 437 hectares were notified as Nandankanan sanctuary by the Government of Orissa in 1979. Within its perimeters the zoological park covers 362 hectares of undulating forest areas, natural waste-land and Kanjia lake which itself covers 66 hectares. Nandankanan Zoological Park, declared as polythene (plastic) free zone by State Pollution Control Board of Orissa from 01.01.2002, houses 46 species of mammals, 59 species of birds and 21 species of reptiles. While the first incidence of spotted bill hatching in captive condition took place at Nandankanan on 5.6.2001, the first successful captive breeding of sloth bear was observed on 23.10.2001 and the mouse-deer bred in captivity in August 2003. One may like the details of some special species like white tigers, gharial etc.

White Tiger

The first white tiger 'Diana' brought from National Zoological Park, Delhi to Nandankanan in the year 1978 was renamed as 'Subhra'. However, Nandankanan has its own lineage of white tiger which incidentally resulted in birth of three white tiger cubs in 1980, born to both normal coloured parents. The white tiger is a mutant form of normal coloured Royal Bengal Tiger. Because of its colour pattern aberrations, this white tiger was liked by one and all, furthermore the media hype ensured visitors satisfaction. Consequently a global demand for white tiger was generated in all the zoos of different countries of the world. Nandankanan Zoological Park had also sustained a planned breeding programme for white tigers. The captive breed of Nandankanan has been sent to many zoos inside the country and abroad. Due to adequate stock of white tigers, Nandankanan has operated a white

tiger safari which is one of its kind in the world. A visitor who has enjoyed the sight of a white tiger on its prawl will never forget the moment and cherish it lifelong. Now, Nandankanan has 13 white tigers out of which five are conditioned for releasing to its white tiger safari.

Gharial

The first ever successful captive breeding of Gharial in an artificially constructed water tank had occurred at Nandankanan in the year 1980. The captive male was brought from Frankfurt Zoo, Germany via Hyderabad for captive breeding with Indian crocodiles under UNDP programme. The lone male Gharial has successfully bred in captivity till 1999. He was named 'Bajrabahu' because of its huge size. But due to severe stress during super cyclone it died in 2000. It was only in the year 2002 one of the offsprings of 'Bajrabahu' was conspicuously developed secondary sexual characters of a male crocodile i.e. Gharial. And it was in April 2003, this male captive crocodile fathered youngs who came out from two clutches. This is the first instance of successful captive breeding by a captive bred male crocodile in the whole world. This has also helped in clarifying a viable population in perpetuity. Nearly 500 captive bred young Gharials were released to Mahanadi river system from Nandankanan Zoo over a period of 15 years.

Nandankanan enjoys a special place in the hearts of visitors and wild life lovers all over the world.

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Pani Panchayat and its Role in Irrigation Command of Orissa

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Introduction

After independence, the need for expansion of irrigation facilities was fully recognized for increasing food grains production to meet the growing requirement of the population. Irrigation sector is facing the problem of inadequate water management and maintenance. Involving the farmers in the irrigation system is one obvious remedy for addressing the management problems, thereby entrusting responsibility of irrigation to a village or group of villages if the farmers were willing to take up cooperative irrigation. Efficient use of available water has, therefore become extremely important and it is in this context that the Participatory Irrigation Management (PIM) has an important role to play.

Orissa stands out as an underdeveloped State within the Indian dominion even though it has been endowed with rich natural and mineral resources. The estimated water resource of the State is one of the highest in the country, being of the order of 11% with 4% geographical area. The State is mostly having small and marginal farmers, thus the strategy to be adopted in planning and managing water resources assumes greater importance. It is generally perceived that the capacity to cater to adequate operation and maintenance need involvement of farmers especially at the lowest level of the distribution

system. This requires organized farmers group activity to manage the system at these levels.

The first step made in this process of reformation was to hand over a part of the network of the canal system/irrigation system for its operation and maintenance (O&M) to the farmers or the beneficiaries through the "Pani Panchayats" (Water User Associations or WUAs). Four Pilot Projects in the first phase namely, Ghodahad Project, Rushikulya Distributary No.11 of Ganjam District and Aunli and Derjang Projects in Anugul District were identified for this work during 1996 and related activities of Pani Panchayat started simultaneously in the projects. The Pani Panchayats (WUAs) are registered as legal bodies to provide the required identity.

These Pani Panchayats have been successful in overcoming the poor O & M of their irrigation systems and have improved their agricultural productivity. The formal handover of the systems has taken place in 48 Pani Panchayats. All these Pani Panchayats have now become enthusiastic in taking up their respective canal systems for better control and management of irrigation water.

The Government of Orissa with a view to providing equitable, timely and assured irrigation has introduced the concept of Pani Panchayat for PIM. The concepts will finally lead to transfer of

tertiary irrigation networks (Minor/Sub-minors) to registered 'Pani Panchayats'. The responsibility of operation and maintenance (O & M) of the reservoir/diversion weir (as the case may be) Dam, Spillways, Sluices, Primary and Secondary Distribution Networks etc. rests with the Department of Water Resources, whereas the responsibility of O&M of the tertiary systems i.e. (Below minor/sub-minor) will be with Pani Panchayat. The geographical extent of the programme covers the entire State comprising of about 16.00 lakh hectares of Major, Medium & Minor Irrigation Command Areas in all the 30 districts of Orissa (Department of Water Resources, Government of Orissa, 2001)

Objectives

The Primary objectives of the PIM through Pani Panchayat are the following:

- To create awareness among farmers in the irrigated commands towards the benefits of formation of Pani Panchayat.
- To create a feeling of unity and brotherhood among fellow farmers.
- To create a feeling among the farmers to visualise the created irrigation potentials as their own rather than that of Government.
- To build up confidence among farmers regarding better returns once equitable, timely irrigation supplies are assured.
- To convince farmers to go for cash crops under crop diversification programme to get better returns on their investments.
- To arrange trainings and workshops at State, District, Block and Panchayat levels with the help of experienced resource persons on PIM.

Advantages

- Guarantee of getting full share of water through "Quota of Water".
- Right for suggesting (Apex Committee) improvements in the Main System Management, water delivery schedule etc. at the project level.
- Participation in operation, maintenance and management of the system.
- Freedom of deciding own cropping pattern within the allocated water.
- Thorough and timely maintenance for guarantee of drawing full allocated water.
- Concession in water fees for collective bulk water supply.
- Better service and amicable settlement of disputes in the use of water.
- Better assistance from Department of Agriculture in all aspects of crop husbandry.
- Own bank account for carrying out need-based maintenance.

Formulation and Working Procedure

- (a) Pani Panchayats are formed on a three-tier system with two informal associations and one formal association on minor/sub minor basis comprising an ayacut ranging between 300-600 ha.
- (b) *Chak* committee is formed taking farmers one each from high land, middle land and low land areas of an outlet. A representative from the *Chak* committee will be a member of the executive body of the Pani Panchayat.
- (c) Each beneficiary within the concerned minor/sub minor qualifies to be member of the concerned Pani Panchayat.
- (d) For registration of Pani Panchayat, a minimum of 51% of the beneficiaries or

beneficiaries possessing 60% of command are required to be members. To be eligible as a member in Pani Panchayat, a token money of Rs.10 or as is decided by the committee is collected as membership fee. Registration of the Pani Panchayat can be done along with necessary documents like bye-law, general body resolution etc. by depositing those with the registering authorities.

(e) A fund may be created in the form of share capital from the members of Pani Panchayat in order to take up maintenance work of canals or to attend any work of emergent nature with of course, the permission of the Panchayat. This will be spent by the authorized office bearers of the Pani Panchayat.

Functions and Responsibilities of Pani Panchayat

(a) The Pani Panchayat will assume full responsibility for operation and maintenance of the minor/sub-minor and all structures turned over to it. It will also ensure construction/maintenance and repair of all the water-courses, field channels, field drainage in the said area as covered under the agreement jurisdiction of the Water Users Association. For this purpose, the Pani Panchayat will establish its own operation and maintenance fund (O & M fund) to meet the operation and maintenance expenditure. The following items of work are included in repair and maintenance work, namely:-

- i) Removal of silt from minor/sub-minor/water courses/field channels and field drains and proper upkeep of the same.
- ii) Repair and maintenance of inspection path and service road to keep them in good condition.
- iii) Removal of grass, shrubs and bushes from the canal embankments and canal beds.

iv) Repairs and maintenance of all structures in the distribution system so handed over for operation and maintenance to keep them in good working condition.

v) Earth work to restore embankments to proper shape and profile.

vi) Repairs to lining, painting, plastering, replacing damaged portion, repairs to masonry and other structures, etc.

(b) The Pani Panchayat will ensure construction, maintenance and repair of all the water courses, field channels, field drains and other drain structures within the jurisdiction of the Water User's Association.

(c) The Pani Panchayat will protect the entire system covered under the said area within its jurisdiction from any damage whatsoever.

(d) The Pani Panchayat will undertake/suggest measures for improved water management at the level of minor/sub-minor.

(e) The Pani Panchayat will receive water from the Government and shall distribute it among the water users, whether members or non-members according to the requirement of their area under crop. It will observe economy and equitability in this regard. Wherever possible water shall be supplied for Water User's Association on volumetric basis. It will organize better and improved water management methods at the farm level. It will decide for internal distribution of water.

(f) The Pani Panchayat will have the right to decide its own cropping pattern within the allocated water.

(g) The Pani Panchayat may ask for and obtain from the Department of Water Resources information on planned operation and maintenance activities in the entire system. It may

also request and obtain assistance from the concerned Assistant Engineers of Department of Water Resources and the plant for operation and maintenance in the concerned distributaries/minors/sub-minors for proper asset management.

(h) The Pani Panchayat may obtain permission from Government in Water Resources Department through the concerned Executive Engineer to utilize any unutilized land acquired by the Government in Department of Water Resources. However, due care will be taken to protect environment and any damage or disadvantage to the irrigation system.

(i) The Pani Panchayat will notify to the project authorities promptly if there is any damage due to unforeseen natural calamities like earthquake, heavy rains etc.

(j) The Pani Panchayat will facilitate collection of water rates from the members/non-members of the Association as per the rate prescribed by the Government in accordance with provision of the Irrigation Act and Rules made thereunder. The rates charged shall vary from time to time as determined by the Government.

The prolonged prevalence of government-managed systems has restricted the initiative of the farmers and made them dependent on the government. Farmers are reluctant to adopt participatory approach. There are apprehensions in the minds of farmers that under the new system they might have to incur expenditure on operation and maintenance, in addition to increased water rates. There is often lack of homogeneity in the composition of farmers population and they are reluctant to come together, because of differences of castes and classes, to form an association. On the basis of the experience gained over past four decades, it is now the need of hour to undertake all required corrective measures for the management of irrigation systems with more emphasis on farmers' participation.

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State level celebration of Maharaja Krushnachandra Gajapati Narayan Deo Jayanti. Shri Surjya Narayan Patro, Minister, Energy, Tourism and Information Technology offering floral tribute to Maharaja Krushnachandra Gajapati Narayan Deo at Jayadev Bhavan on 26.4.2005. Shri Digambar Mohanty, Commissioner-cum-Secretary and Shri Baishnab Prasad Mohanty, Director, Information & Public Relations are present on the occasion.

Violence Against Women

Dr. Alhadini Dhir

Woman in the Vedic age was enjoying a higher status. She was the nerve center of the domestic work and was its empress. Domestic happiness and conjugal happiness are constant topics of allusion in the Rg Veda. The seers of the samhitas was never tired of speaking of the bond that binds a happy home governed by a contented wife. But women in our society has been the victims of humiliation, torture and exploitation irrespective of the fact that they were also worshipped.

Family is considered as the first agency, which provides not only emotional and material support to its members but also serves as a basic source of personal satisfaction, socialization and social control. It works as a link between continuity and change and as an important source of stability and support. On the other side, due to patriarchy in our family system, the family does not give equal importance to all members, as role, power and status are strictly determined by age and gender. Although the family is a source of love, sympathy and support, it is also the source of inequality, exploitation and violence. Gandhiji opines that violence includes exploitation economic, social, and political of individual by individual or of nation-by nation and so on. Domestic violence includes all actions or behaviour of family members which causes either physical injury or emotional trauma or both to a

woman. The expression of domestic violence can be seen in the form of wife battering, demand for more dowry, divorce, bride burning and conflicts in family life. The increased economic insecurity, unemployment and poverty in families may result in alcoholism, lack of status and sense of belongingness and fulfillment of basic needs etc. Many affect women directly in the form of increased domestic violence. While science and technology are advancing economic and social problems are worsening.

Women have to be alert always any where, may it be park, public transport, cinemahall, education institute or work place. Mahila Ashrams and orphanages are also not spared. Worst can be expected from people whom a woman trusts fully, especially in metropolitan cities, even the homes are not safe. Traditional socio cultural notion of ownership over women's body and sexuality by the male is another factor leading to women's sexual harassment.

Type of Violence Against Women

1. Drug Related Violence

An alcoholic beats his wife and children. There are incidences where under the influence of alcohol a father raped his own daughter. Alcoholism increases violence and consequently family interruption takes place.

2. Rape and Custodial Rape

In most of the cases the victim is branded as a woman of loose morals. Child and adolescents rape are on the rise, about 58% are below 16 years. In recent years girl children in the age group of 6.12 years have been more victimized. Custodial rape is extremely heinous since the offenders are supposed to be guardians of the law. Witnesses refuse to testify against offenders or men in power, which makes it impossible for the victim to get justice.

3. Harassment at Work Place and Eve Teasing

Whether out of choice or out of compulsion, most of the women who are involved in the work place in all vital sectors of country's economy may fall in the unorganized sectors. They are ill-paid but don't leave the job due to increasing unemployment. This need for survival drives to as rape situations. Harassment at work place is real and pervasive.

Example : Jokes with sexual undertone, obscene behaviour with sexual overtures and direct sexual harassment. It affects seriously women's psychological and physical well-being. Lack of action against the guilty persons has had an adverse effect on those women who have the courage to report and again it gives them further harassment, trauma and re-victimization. Eve-teasing is crime committed in crowded areas in the cities such as public transport, public parks, places of worship and tourists spots etc. which may be considered as legal problem as well as socio-psychological problem. It hampers the freedom of women and restricts her free movement.

4. Dowry Related Violence

The practice of demanding dowry has spread so much that death by burning is often punishment for the innocent young girls who is unable to satisfy the greed of her in-laws.

5. Domestic Violence

Subordination of women has led to violence under this head to rise. Incidence of domestic violence crosses all the barriers of class, income, rare, culture and religion and in a highly under reported crime. Domestic violence is one of the greatest obstacles to gender equality and securing for women their fundamental rights to equal protection under the law and the right to life and liberty.

Domestic Violence may be of many types like

- (a) Physical Violence : Which may lead to assault, serious injury or burns even if death of the victim.
- (b) Sexual Violence : Means robbing the dignity of women not only be indecent behavior but also an esteem form of rape or ravishing her by use of force by family members and outsiders.
- (c) Verbal Violence : Which means indecency or use of abusive and filthy language against a woman or her near and dear ones.
- (d) Social Violence : Which includes demeaning, disparaging and humiliating a woman or her parental relatives and friends.
- (e) Emotional violence : Leading to internal deprivation of love and affection, concern, sympathy and care and depriving her custody of children.
- (f) Financial Violence : Means depriving her of financial means and bare necessities of daily life and this also include taking away the assets which a woman possesses or earns.
- (g) Intellectual Violence : Means non-submission for confrontation or discussion for pressing issues, denial of rights to take part in decision making etc.
- (h) Other form of Violence : May include not letting her avail the educational opportunities,

denial of her reproductive rights, denial of access to health facilities or opportunities and to use her political rights etc.

(i) **State, Communal and Caste Instigated Violence :** Victims of state sponsored violence are mostly women. Caste and communal violence mostly target the women. "Dishonoring" women in the most accepted norm of taking revenge on specified castes and communities.

Reasons for Increase in Violence Against Woman :

The basic reason for violence against women in their inferior status in a male dominated society-educationally, economically, politically and socially. But there are also reasons too.

(i) **More Awareness in Women of their Rights :** Access to Mahila Courts, legal cells and crime cells for women has helped indirectly to encourage women to resister their complaints.

(ii) **Role of Media :** Indian society in quick is being influenced by the west. The condition of cinema is deteriorating day-by-day. It is common to have scene of sexual harassment or rape in Indian movies. It has become very embarrassing to watch T.V. with the family as the heroes and heroines are doing vulgar dances with that type of songs. Most of the movies portray heroines as sex objects.

(iii) **Low Rate of Punishment of Guilty :** Lack of evidence and lack of guidance, loop holes in existing laws are some of the reasons for the rise in crime against women.

Law Pertaining to the Problem of Violence :

International conventions, the constitution and various other legal provisions provide for certain rights for women. The Universal Declaration of Human Rights and Convention on Elimination of all forms of Discrimination Against

Women (CEDAW) do enforce certain special rights and privilege for women. Some of these have already been adopted by the framers of our constitution. Equality of sexes is enshrined in the Constitution of India as a fundamental right and any law which discriminates on the grounds of religion, race, caste, sex or place of birth is held to be contrary to the Constitution as held in Article-15.

The clause 3 of the aforesaid article specifically provides for the state to make special provisions for women and children. Article 39 directs state not to discriminate on the ground of sex and it should direct its policy towards securing equal pay for equal work irrespective of sex.

Several laws have been enacted to improve their social status, economic independence, political participation and professional growth. Various welfare schemes have been launched by the Government to raise the status of women. The law provides certain remedies to the victims of violence. We have provisions like section 498 (a) and subject of section 30A (b) of I.P.C. specially relating to subject of domestic violence.

Provision under IPC which aims at Protecting the Women :

1. Under Sec. 125, the wife can file a suit against her husband if the husband fails to maintain her.
2. Sec.375 and 376 specify the punishment for rape.
3. Under Sec.359-396, Kidnapping of women is punishable Sec.363 to 373 clarify as to what constitute kidnapping and abduction.
4. Sec.302/304 (b) Define the meaning and punishment relating to homicide for dowry, dowry death or their attempts. u/s 304 (b) death of a

woman within seven years of her marriage shall be deemed to have been caused by any demand for dowry.

5. Sec.306 says that any person who commits suicide, whosoever abet the commission of such suicide is punishable with imprisonment up to 10 years and also fine. The offence is cognizable, non-bailable, non-compoundable.

6. Under Sec.312 to 314, a person causing miscarriage be punished with imprisonment which may extend up to 3 years, or with fine or both.

7. Bigamy is an offence u/s 494. It is punishable with imprisonment for a term extending up to 7 years or with fine.

8. U/S 407, a person who commits adultery shall be punished with imprisonment for a term which may extend up to 5 years or with fine or both.

9. U/S 498 (a) FIR can be lodged at any Police Station or a Women Cell for torture, both mental and physical by the husband or a in-laws. The offence is cognizable, non-bailable, non-compoundable. The punishment is imprisonment; which may extend up to 7 years with fine.

10. Importation of girl up to 21 years of age from a foreign country shall be punishable U/s 366 of IPC. The punishment can extend up to a term of 10 years and also fine.

11. Section 354 deals with outraging modesty of women. Any act of molestation with intent to outrage the modesty of a woman is punishable.

12. Section 509 is related to the suit of modesty of a women (Sexual Harassment). Such an act shall be punishable with imprisonment which may extend up to 10 years and also fine. But there are so many factors that prevent women to seek justice through law are :

- (a) Individual fear and apprehensions relating to consequences of leaving her matrimonial home;
- (b) Lack of support from her parental family;
- (c) Inadequacy of social support;
- (d) Cultural forces;
- (e) Non-availability of alternatives in terms of physical, economic and social rehabilitation;
- (f) Care and custody of children, which prevent women to take a drastic step;
- (g) Inadequacy of legal provisions which takes long time to dispense justice and
- (h) Lack of political will to tackle the situation.

Social factors also play major role in reporting numbers of crime on a woman. Compromise is another word used so often by the family members, counsellors and friends. The Police often turns a blind eye saying that domestic violence is really a 'private affair'. Society uses symbolic emotional appeal to confine Indian Women into the various circle of subjugation and oppression.

Conclusions & Suggestions :

Violence against women exists in various forms in every day life in all societies. Women victims of violence should be given special attention and comprehensive assistance. To this end, legal measures should be formulated to prevent violence and to assist women victims.

Change is needed in the perception of society towards the dignity of women. Awareness against gender biases is necessary to minimize the problem. There is need to motivate the poor families to utilize the various schemes started by the Govt. for their welfare. Strict legal action should be taken against those who are involved in violence related activities against women. Strengthening and increasing of non-Govt.

organizations which could take up individual problems. Women in general must be educated about their rights, the agency to be approached.

Family counselling centers must be set up at lower levels, so that families at risk can be identified and helped.

Mahatma Gandhi says "As long as women of India do not take part in public life there can be no salvation for the country."

Violence against women does not end by merely bestowing of judicial rights or by making women literate. Most urban women are literate today but they are also victims of domestic violence. It is imperative that women must be morally strong and empowered.

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His Excellency the Governor of Orissa Shri Rameswar Thakur releasing a book on Baitarani Teertha on the occasion of 114th Birthday Anniversary of late Biswanath Das on 24.4.2005. Smt. Manorama Mohapatra, Editor of The Samaj and other dignitaries are also present.

Touch Screen Systems

*Er. Ashis Kumar Mahapatra
Sri Suresh Chandra Sarangi*

A touch screen is an input device that allows users to operate a PC by simply touching the display screen. Touch input is suitable for a wide variety of computing applications. A touch screen can be used with most PC systems as easily as other input devices such as track balls or touch pads. Browse the links below to learn more about touch input technology and how it can work for you.

How Does a Touch screen Work?

A basic touch screen has three main components: a touch sensor, a controller, and a software driver. The touch screen is an input device, so it needs to be combined with a display and a PC or other device to make a complete touch input system.

A Touch Screen looks like :



1. Touch Sensor

A touch screen sensor is a clear glass panel with a touch responsive surface. The touch sensor/panel is placed over a display screen so that the responsive area of the panel covers the

viewable area of the video screen. There are several different touch sensor technologies on the market today, each using a different method to detect touch input. The sensor generally has an electrical current or signal going through it and touching the screen causes a voltage or signal change. This voltage change is used to determine the location of the touch to the screen.

2. Controller

The controller is a small PC card that connects between the touch sensor and the PC. It takes information from the touch sensor and translates it into information that PC can understand. The controller is usually installed inside the monitor for integrated monitors or it is housed in a plastic case for external touch additions/overlays. The controller determines what type of interface/connection you will need on the PC. Integrated touch monitors will have an extra cable connection on the back for the touch screen. Controllers are available that can connect to a Serial/COM port (PC) or to a USB port (PC or Macintosh). Specialized controllers are also available that work with DVD players and other devices.

3. Software Driver

The driver is a software update for the PC system that allows the touch screen and computer

to work together. It tells the computer's operating system how to interpret the touch event information that is sent from the controller. Most touch screen drivers today are a mouse-emulation type driver. This makes touching the screen the same as clicking your mouse at the same location on the screen. This allows the touch screen to work with existing software and allows new applications to be developed without the need for touch screen specific programming. Some equipment such as thin client terminals, DVD players, and specialized computer systems either do not use software drivers or they have their own built-in touch screen driver.

What Are Touch screens Used For ?

The touch screen is one of the easiest PC interfaces to use, making it the interface of choice for a wide variety of applications. Here are a few examples of how touch input systems are being used today:

Public Information Displays

Information kiosks, tourism displays, trade show displays, and other electronic displays are used by many people that have little or no computing experience. The user-friendly touch screen interface can be less intimidating and easier to use than other input devices, especially for novice users. A touch screen can help make your information more easily accessible by allowing users to navigate your presentation by simply touching the display screen.

Retail and Restaurant Systems

Time is money, especially in a fast paced retail or restaurant environment. Touch screen systems are easy to use so employees can get work done faster, and training time can be reduced for new employees. And because input is done right on the screen, valuable counter space can be saved. Touch screens can be used in cash

registers, order entry stations, seating and reservation systems, and more.

Customer Self-Service

In today's fast pace world, waiting in line is one of the things that has yet to speed up. Self-service touch screen terminals can be used to improve customer service at busy stores, fast service restaurants, transportation hubs, and more. Customers can quickly place their own orders or check themselves in or out, saving them time, and decreasing wait times for other customers. Automated bank teller (ATM) and airline e-ticket terminals are examples of self-service stations that can benefit from touch screen input.

Control and Automation Systems

The touch screen interface is useful in systems ranging from industrial process control to home automation. By integrating the input device with the display, valuable workspace can be saved. And with a graphical interface, operators can monitor and control complex operations in real-time by simply touching the screen.

Computer Based Training

Because the touch screen interface is more user-friendly than other input devices, overall training time for computer novices, and therefore training expense, can be reduced. It can also help to make learning more fun and interactive, which can lead to a more beneficial training experience for both students and educators.

Assistive Technology

The touch screen interface can be beneficial to those that have difficulty using other input devices such as a mouse or keyboard. When used in conjunction with software such as on-screen keyboards, or other assistive technology, they can

help make computing resources more available to people that have difficulty using computers.

And many more uses

The touch screen interface is being used in a wide variety of applications to improve human-computer interaction. Other applications include digital jukeboxes, computerized gaming, student registration systems, multimedia software, financial and scientific applications, and more.

Comparing Touch screen and Display Technologies

There are two types of touch screen and display technologies :

- Comparing Touch Technologies
- Comparing Conventional CRT and Flat Panel LCD Monitors

Comparing Touch Technologies

4-Wire Resistive Touch screens

4-Wire Resistive touch technology consists of a glass or acrylic panel that is coated with electrically conductive and resistive layers. The thin layers are separated by invisible separator dots. When operating, an electrical current moves through the screen. When pressure is applied to the screen the layers are pressed together, causing a change in the electrical current and a touch event to be registered.

4-Wire Resistive type touch screens are generally the most affordable. Although clarity is less than with other touch screen types, resistive screens are very durable and can be used in a variety of environments. This type of screen is recommended for individual, home, school, or office use, or less demanding point-of-sale systems, restaurant systems, etc.

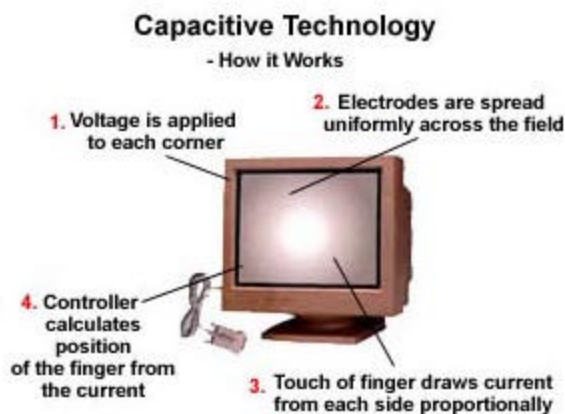
5-Wire Resistive Touch screens

5-Wire Resistive touch technology consists of a glass or acrylic panel that is coated with electrically conductive and resistive layers. The thin layers are separated by invisible separator dots. When operating, an electrical current moves through the screen. When pressure is applied to the screen the layers are pressed together, causing a change in the electrical current and a touch event to be registered.

5-Wire Resistive type touch screens are generally more durable than the similar 4-Wire Resistive type. Although clarity is less than with other touch screen types, resistive screens are very durable and can be used in a variety of environments. This type of screen is recommended for demanding point-of-sale systems, restaurant systems, industrial controls, and other workplace applications.

Capacitive Touch screens

A capacitive touch screen consists of a glass panel with a capacitive (charge storing) material coating its surface. Circuits located at corners of the screen measure the capacitance of a person touching the overlay. Frequency changes are measured to determine the X and Y coordinates of the touch event.



Capacitive type touch screens are very durable, and have a high clarity. They are used in a wide range of applications, from restaurant and POS use to industrial controls and information KIOSKS.

Pen Touch Capacitive Touch screens

The Pen Touch Capacitive screen is a durable Capacitive type touch screen with an attached pen stylus. The Pen Touch screen can be set to respond to finger input only, pen input only, or both. A capacitive touch screen consists of a glass panel with a capacitive (charge storing) material coating its surface. Circuits located at corners of the screen measure the capacitance of a person touching the overlay. Frequency changes are measured to determine the X and Y coordinates of the touch event.

Capacitive type touch screens are very durable, and have a high clarity. They are used in a wide range of applications, from restaurant and POS use to industrial controls and information kiosks.

Surface Acoustic Wave Touch screens

Surface Acoustic Wave technology is one of the most advanced touch screen types. It is based on sending acoustic waves across a clear glass panel with a series of transducers and reflectors. When a finger touches the screen, the waves are absorbed, causing a touch event to be detected at that point.

Because the panel is all glass there are no layers that can be worn, giving this technology the highest durability factor and also the highest clarity. This technology is recommended for public information kiosks, computer based training, or other high traffic indoor environments.

Near Field Imaging Touch screens

We offer Near Field Imaging touch screen technology as one of the custom LCD touch

monitor solutions that we can provide. It is an extremely durable screen that is suited for use in industrial control systems and other harsh environments. The NFI type screen is not affected by most surface contaminants or scratches. Responds to finger or gloved hand. Follow this link for more information.

Comparing Conventional CRT and Flat Panel LCD Monitors

Physical Size

One of the biggest advantages of LCD monitors is that they are compact and lightweight. An LCD monitor is based upon a very thin screen as opposed to the bulky tube of a CRT monitor. This means that not only do they take up less of your desktop space, they can also be used in many places where a larger CRT monitor can not fit. Shown here, a 12.1" LCD monitor with a stand takes up only about one-third of the desk space of a typical 14" CRT monitor.

Display Size

Thanks to advances in LCD technology, color flat panel LCD monitors are now available that are comparable in screen size to traditional CRT monitors. Shown here, a 12.1" LCD display (left) has only a slightly smaller viewing area than a typical 14" CRT monitor. Newer, larger LCD monitors are also appearing that have 15", 17", and even larger screen sizes that are comparable to the largest CRT monitors. One thing to note is that LCD monitors are typically sized by their actual viewable diagonal measurement, but CRTs typically are not. For example, the viewable area on a 17" LCD monitor will typically measure 17" diagonally, but the viewable area on a CRT monitor will typically only measure 16" diagonally.

Colors

Most CRT monitors are capable of displaying unlimited colors. Some LCD monitors

are only capable of hundreds or thousands of colors, but many of the newer LCD's are capable of unlimited colors.

Resolution

An important issue with LCD monitors is resolution. CRT monitors are usually capable of displaying multiple video resolutions, each with the same quality. LCD monitors, however, usually has what is called a Native resolution, or the resolution that it displays best. The native resolution is generally the highest resolution that the LCD can display and this is the display resolution that will appear the crispest/sharpest.

Brightness

Typically, brightness is not a concern with CRT monitors. LCD monitors are backlit and have different levels of brightness. The brightness rating for an LCD monitor is commonly referred to as 'nits', and commonly range from 70 to 250 nits. The higher the nits, the brighter the display.

Viewing Angle

Another issue with the LCD monitor is the viewing angle. A CRT screen can be looked at from a very wide angle, practically from the side, but an LCD monitor typically has a smaller viewing angle, needing to be viewed more directly from the front. From the side, the image on an LCD screen can seem to disappear, or invert colors. Newer displays that are coming out have wider viewing angles so this is not as much of an issue as it has been in the past.

Power Consumption and Radiation Emission

Besides being compact and space saving, LCD displays offer several other benefits. For one, LCD monitors consume much less energy than CRT monitors. This makes the LCD great for laptop and portable computers. Secondly, CRT monitors are known to emit harmful radiation, whereas LCD monitors do not.

Price

CRT monitors are generally more affordable than LCD monitors. In the past LCD monitors have been very expensive but their costs have come down quite a bit in the last 1-2 years. One thing to consider is the up-front cost versus the long-term cost. A CRT monitor will cost less up front but will use more energy than a flat panel monitor. An LCD monitor will cost more up front but will conserve energy in the long run. The energy savings may not be much for an individual user, but if you are looking at a corporate office where 50 displays are in use, the energy savings might be more of an issue.

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The Lyrics of Gopal Krushna

Indrajeet Mohanty

Gopal Krushna was a poet in the first half of the nineteenth century. His lyrics invoked the spirit of Bhakti and love in the minds of the Oriyas, and have contributed greatly to the development of Oriya literature. Like the poets of his age he wrote only on religious themes, mainly the love of Radha and Krishna - a passive age in which religion and philosophy were considered as important aspect of human life. Like the contemporary poets, Gopala Krushna wrote in "Chand" literary form, using four rhyming couplets. His lyrics are simple, frank (at times erotic) and sweet (to the extent of being melodious). He uses very few words to express a fact, but has great depth in his writings. The flavour, sentiment and meaning of his lyrics are singular for their passion, metaphysical and divine aspects, touched with aesthetic beauty. No doubt, Gopala Krushna like all other poets of his age followed the Gita Govindam of Jayadev, while writing about the amorous play of Radha and Krishna, his allegory and creations are different and unique. A few examples of his uniqueness are given below, in English translation - through five poems, depicting the various moods and situations in the love play of Radha and Krishna.

The pining of a love lorn Radha, refusing to submit first, to a male, is depicted in her feelings when she hears the flute being played by Krishna, from the Kadamba grove.

What Melody, dearest friend,
From the Kadamba grove; is being heard ?
Nectar showers in my ear cavity;
Ruffling my engrossed life's tranquility.

Disseminating to the distant quarter
It renders dumb, birds and deer
The "light of the Family" is becoming bare,
Unknotting, the navel knot without any care.

Why don't you come near
Why have I this fate to bear ?
Like the Kadamba floret,
My whole body is blooming with fur erect.

The effect of Radha's beauty on Krishna,
His yearnings are depicted in the following poem,
to Radha through a friend (a Gopi), who is also
describing Sri Krishna's Charisma.

The cupid, the fascinator of the mind,
The rain - cloud hued beauty, dearest friend !
Is in your love, Oh ! Golden complexioned ?
Is always delirious, Oh friend !

Like a champak shrub, in full boom
From afar, He looked
Oh ! On getting up, the whole body of the groom,
Began to shiver, Oh friend !

In the Nagakeshara bower,
On your sleeping mattress,
Sitting, He was slowly singing the song, the lovers,
Of Radha, his mistress.

When the cry of the swan, was heard,
From the Yamuna bed,
The "Slayer of Kamsa" does bound,
Thinking it to be your anklet sound.

In the third poem, Radha is telling Lalita about her condition after falling in love with Krishna and her subsequent anger for Krishna on hearing of His dalliance with other Gopis, which melts away on hearing the sound of the flute from the Kadamba grove and her pining to unite mentally and physically with him.

The flute is being played in the kadamba grove,
dear friend !
And Radha's climaxing vanity simmers to an end
Without you, my saviour, I have nothing
I am, the Jewel of my consinee, losing.

Find the path for me, dearest friend !
Or else my life will come to an end.

Seeing the face of 'Brij Lotus',
I will wipe away my sorrow.
The memory of whom is keeping my mind is a harrow.

My soul has gone to the lord of the flute, so charming
And is in the ocean of nectar dissolving.

Here again Radha's false shame and anger towards an unfaithful Krishna is depicted, when she talks of the immoral dalliance of Krishna with the other Gopis, to a companion (to Gopala Krushna himself).

Salutation to shyam, to his love salutation !
Oh mother ! Let her indulge in that love
whose body is like iron.

I have heard in His connection, of His
friendship with Chandrabali.
Oh mother ! The drums about which are
being beaten in the Braj alley.

To Mathura He went to sell curd
behind the milkmaids,
Oh mother ! Whom he is seducing to
sleep in the Govardhan caves.

If I am found by some one in that position,
I will be drowned in disgrace.
Oh mother ! For my dear life, whom can I face.

Gopala Krushna says, Oh Goddess !
he is for you, in this earth,
Oh mother ! The "moon of Braj" is a
cowherd, by birth.

The last poem is highly rhythmic and depicts Krishna's coaxing and cajoling of Radha, asking her to forgive him and love him, which ultimately ends in the famous "Dehi pada palava mudaram" of Jayadev's Gita Govindam (Krishna touching the feet of Radha). Here Gopala Krushna depicts the scene in his own unique way.

Oh Love ! The amorous ballet,
so colourful is being danced !
Oh soul mate ! Do not sulk, forgive me if I have erred.

My palms are your, lotus feet's, servant,
Oh ! Precious Gem,
your body is like the moon, radiant.

"Shankar's Enemy" has me, fearlessly, inflamed,
Will you not come and rest, on the cot of my lap,
your head ?

Clasping my palms, I am imploring you,
Oh ! Beautiful Jewel,
Not to draw lines on the earth with your nail.

My being is, from last birth, your's purchased.
Pick up, from the dust, your beautiful braid.

Bowing down, her feet, you encase
Desiring Radha's Grace.

Satisfied, the women of Brij return to their houses.
this is what Gopala Krushna muses.

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Gender Bias - A Sociological Approach

Prafulla Chandra Mohanty

Human beings, the supreme creations of God have formed the society for an easy living. Among them men, who work outside and take the responsibility of earning the livelihood show somehow the supremacy over their female counterparts. Women, being soft skinned and the most beautiful creation of the World, work inside the house taking care of family and children and start depending on men for her totality. This has given birth to a difference centuries back and continues to this day. In this background, a paper is made to study the different stages and causes of discriminating a girl child by the society and so the mindset of running after a male child in the form of strong gender bias.

A male dominating society was born and is continuing even today. Men started exploiting women, mishandled them and used them for increasing their earnings in the way they wanted, sold them, marketed and advertised them like a commodity. Thus, the status of women deteriorated day-by-day. The worse thing is a male child is taken as an asset of the family whereas the girl child is a considered liability for the parents. As per our custom, the girl child is given in marriage and she has to work for the betterment of her husband after it. She stays at her in-law for the rest of her life and works for them. Generally, she was no voice in her in-law's

house and grows passive in family maintenance. After marriage she no more remained a member of her parent's house. She is considered an outsider for all practical purposes. To make the condition worse she is not treated as a true member of the husband's family also. She is nowhere. This deteriorates her position, prestige and status in the society. Thus the parents of a girl child feel that the girl child is no way helpful to them, so they are in need of a son who will stay with them forever and will take all the responsibilities of managing, feeding and looking after them in their oldage. This creates a carze for a male child, along with this, there are other vedic customs, rituals and beliefs which dictate that only a son can light the funeral pyre of the parents after death and will have to perform all funeral related rites (Sanskar, Sudhikriya, Sradha, Pinda daan etc. to the parents and his paternal and maternal ancestors. There is a belief that only a son can show the way to salvation (Mukti). Further, he is to release the soul of his forefathers from the sufferings after death.

Accordingly, in sanskrit, the son is called a 'Putra', the man who releases all the ancestors upto the seventh generation (Sapta Purusha Udhar) from hell i.e. 'Putra Naraka'. The parents who have no son, are called as 'Aputrikas' and given a low status in the society and feel cursed.

The other attraction for a male child is that the son is the real inheritor, successor, manager or Karta of his father's property as well as the dynasty. But in case of a girl child it is not. Son, the male child is counted as one's own and so termed as 'Swogotri' and can lead the light of continuity of his line (Bansa Rakshya) whereas the daughter becomes 'Para gotri' on marriage and is no way useful ritually for her parents in almost all activities. Thus, each and every parent has a special inclination towards a male child and so continue delivering as many as female children till they have at least one male one. This increases our population in the country blindly. Many parents do not stop their reproduction with a hope of getting a bumper of male children who can increase their muscle power in the future and can control / administer the locality. So that, the family can occupy a domineering role in the area and people will fear to go against it. In contrast a girl child is not useful for family strength; she is for outsiders (Parayodhan). The parents are to nourish her, educate her, and search a right man for her to give her in marriage. Out of affection, the parents are used to give something as gift to their beloved daughter voluntarily at the parting on her marriage in the name of 'Stree Dhan'. But the system now-a-days has degenerated into a pure business due to the greed of many people having sons. Now the amounts rise to lakhs and millions in the name of dowry under competitive compulsion which reduces the status of a women to nothing better than a commodity in the marriage market.

The unending system of increased competitive dowry creates a lot of difficulties and sufferings to the parents of female child and brings a lot of torture to women in general. Some of the parents who are not able to arrange the required dowry and are also not able to give their

daughter's in marriage pass their days with a lot of mental agony. Some of them even commit suicide. Suicide cases are also reported among our grown up girls who have lost the hope of marriage due to inability of their parents to arrange the dowry money they donot want to become a cause of embarassment to their parents. God has created man and woman to beautify his creation without any discrimination. But we, the best creatures of the earth, are going to destroy God's beautiful creation due to our inhuman attitude creation discrimination and dishonour to our female counterparts. To relieve, themselves from the burden of a girl child, many people are seen neglecting the female child and if at all a girl child has come to the earth, they do not hesitate to finish her forever. Now government wants to curb the increase in population by legalising abortion. This facilitates parents to put an end to a girl child even before she sees the light. Sex-determination, aborted tests help them in this. To attract parents to such acts clinics of Sonography, Foetoscopy and Amniocentosis give advertisements like 'Better' to spend Rupees five hundred to-day rather Rs.5 lakhs at the time of girl's marriage." This sort of activities shows the extent of inhumanity and gender-bias towards a girl child. It is revealed from a report that 8000 foetes were aborted under the clue of M.T.P. Act in Maharastra out of which 7,999 were females. The foetus when it is in the form of an embryo is destroyed, evenin the womb without giving them a chance of seeing the lights of the outer World. The other ways of destroying and harassing the women folk after birth are many. Some of the self esteemed parents in the fear of loosing their self respect and esteem, not to bow down their heads in front of the daughter's in-law's family, prefer killing their female children after birth. They become as cruel as Putana and give female infants

poisonous milk from oleander burries, pasting opium on the mother's nipple, and even bury them alive. In some states, the female child's nose and throats are choked by cottons and gauzes and administered death. There are also some infanticides carried on by putting the infant inside the bucket of water or injecting poison into the baby. To save themselves from defamation of a unmarried motherhood, the said mothers generally destroy the foetus or desert the baby after giving birth and allow it to die suo-motto. Fearing the social stigma attached to a girl child a very few persons are coming forward to give shelter and adopt a girl child in comparison to a male one. These are the cases where the girl child faces a lot of discriminations and questions of her survival.

There are other ways of discrimination. The girl child is not allowed sufficient food to eat and medicines to cure, if she suffers from some disease. There is also a social stigma and beliefs still prevailing in the higher castes that the girl is to be given in marriage before attaining poverty, because attaining poverty in the father's house is a sin and curse for the parents family. This encourages child marriage. Though it is prohibited in law, many are taking place. Some of the parents, fearing the early puberty of their girl child, stop giving her required amount of food and drink to survive where as the male child is free from these stigmas. The other pathetic stories of women-hood are after the marriage, as described earlier. The daughter-in-law is tortured for dowry and other so many reasons. In early days, the husbands used to insure their wives for a heavy policy amount under any of the Life Insurance Schemes and later on, murdered them to get the compensation from insurance bodies. The lady, if at all widowed, is nowhere. In ancient times she considered it worthy to sacrifice herself in the funeral Pyres of her husband instead of living a very painful life without

food. Most of the widows of the then times, were forcibly put in the funeral Pyres (of their husbands) by the relatives of their husbands with the evil intention of annexing and grabbing the properties. Now also, similar sorrowful practices are going on in the life of widows-asceticism- (Samyasa), in the name of renunciation (Tyaga), she is stopped from taking all vitaminous food, and deprived of bearing Haldi, Sindura, Bengals, ornaments and coloured dresses. Society expels her for Brundavan or to other places to deserve different fastings (brats and upabases) in the name of religion where lot of nuisance and exploitations are taking place. Whereas the widower is not sacrificing a little of this kind and mostly becomes a free bird and marries to a second lady without grief. The society does not accord much liberty and looks in contempt for widow marriage. Thus, the widows are deprived of nourishing a new hopes and aspirations to restart their life after a period of agony and anguish.

In our society, a female has no real independence of her own. She has no voice, no decision to be counted. She is to be guided and guarded by three different persons and so called as 'abala'. During the 1st phase of life upto the age of marriage she is to obey her parents, after that husband becomes the master and towards the last part she is under the custody of her children mostly the son and daughter-in-law. But no such situations occur for the other sex in general.

Concluding Comments

Till to-day, the ladies who constitute the 50 percent of our human resources have no voice in the society. Our constitution, our government has provided different articles and acts but have not been not able to eradicate the gender-bias which is in us. The existing discrimination, the gender bias affects not only our male-female mentality

but also our century long decreasing male-female ratio. The percentage of our women folk in the sphere of education, status, creativity, policies is quite discouraging. United Nations and similar national and international bodies have framed different laws for women development and to reduce and eliminate the gender bias in us, but no such perceptible improvement has been achieved so far. The foregoing analysis clearly signals a catastrophe. If the gender bias is not eliminated it will have grave socio-economic consequences resulting in anti-social activities in the form of rapes, murders and different other social crimes. So, we would think of framing a new societal order of woman development leaving our social stigmas, and in honour of the laws of God that women are equal to men. It is high time we change our social attitude towards a girl - a girl can do anything that a boy does.

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Shri Surendra Nath Naik, Minister, Agriculture offering floral tribute to Dharanidhar Nayak (Bhuya) on the occasion of state level celebration at Jayadev Bhavan on 5.5.2005. Shri Digambar Mohanty, Commissioner-cum-Secretary and Shri Baishnab Prasad Mohanty, Director, Informaiton & Public Relations are seen in the picture.

India and UN

Siddhartha Dash

India has been one of the original 51 members of the United Nations who signed the U.N. Charter. It participated in the San Francisco Conference and became the member of the United Nations Organization on 30 October 1945. After attaining Independence, India came out more forcefully to participate in the activities of the United Nations. The constitution of India reaffirmed, under Article 51, India's commitment to "promote international peace and security; to maintain just and honorable relations among nations; to foster respect for International Law and treaty obligations in the dealings of organised peoples with one another; and to encourage settlement of international disputes by arbitration and other peaceful means (Art.51)". In carrying out this commitment, India regards the UN as an invaluable platform for global deliberations, negotiations and diplomacy.

India has used the General Assembly platform for voicing strongest opposition to imperialism, colonialism and apartheid. In 1954, India took a leading part in securing political sanctions against the recialist regime of South Africa. In 1965, it supported fully the UN sponsored economic boycott of Rhodesia. It gave full support to the Angolan liberation movement and to the cause of Independence of Namibia. India also played an active role in setting up of the United Nations Conference on Trade and

Development (UNCTAD) and calling for the creation of a New International Economic Order (NIEO). India led a group of developing countries whose support proved valuable in getting 16 countries admitted in 1955. India forcefully pleaded for representation of Communist China in the United Nations.

India has served as non-permanent member of the Security Council for six terms (each of two years duration) from 1950-52, 1965-67, 1970-72, 1976-78, 1983-85 and 1990-92. India has played a consistently positive and energetic role in UN efforts for disarmament and arms control. India stands committed to total nuclear disarmament. India pleaded for the cause of disarmament and arms control in Eighteen Nations Disarmament Committee, special sessions of the UN General Assembly and finally in Conference on Disarmament (CD). India had signed the Partial Test Ban Treaty (1963) and Chemical Weapons Convention (1993), but firmly resisted all pressures to sign the Non Proliferation Treaty and blocked the Comprehensive Test Ban Treaty in 1996. India is a member of almost all international agencies like UNESCO, WHO, FAO, UNICEF etc.

India has also provided large number of personnels who rendered valuable services to the various agencies of the United Nations in different

capacities. Some of the prominent personalities who rendered great service to the international organisation include Mrs. Vijay Lakshmi Pandit as President of the UN General Assembly; Maulana Abul Kalam Azad and Dr. Radhakrishnan as Chairman of UNESCO; Mrs. Rajkumari Amrit Kaur as Chairperson of WHO; Sri V.R. Sen as President of FAO; H.J. Bhaba as Chairman of Atoms for peace Commission; B.N. Rau and Nagendra Singh as Judges of International Court of Justice. Over 55,000 Indian Military and Police personnel have served under the UN flag in 35 UN peace keeping operations in all the continents of the globe. General Thimmaya, Prem Chand, Rikliye and Satish Nambiar being chosen by the UN Secretary Generals to Command UN peace-keeping forces at different points of time. Recently an Indian, Major General Randhir Kumar Mehta has been appointed as the world body's Military Adviser for peace keeping. This is the first time that a nominee from a developing country has occupied this highly prestigious post.

India has strongly pleaded for the expansion of the Security Council to give representation to African and Latin American countries. India has demanded that in the changed international system with 191 states (as against 51 members at the time of founding of UN), more states should be made permanent member of the Security Council. India has favoured the inclusion of countries like Germany, India, Japan, Egypt, Brazil and Nigeria as permanent members of the Security Council.

Why Should India Be a Permanent Member?

* India constitutes 16% of the world's population and has emerged as a major power of South Asia.

* India has played a proactive role in restoration of peace in the world. It has been a great exponent in the non-alignment concept.

Out of 112 NAM countries none has the permanent seat. Therefore, a major section of the world is deprived of being represented in the SC as its permanent member.

* Now India is a nuclear power, and it has committed itself towards making Indian Ocean as Zone of Peace by adhering to the doctrine of 'no first use'.

* India is among the founding nations of the UN and has been very instrumental in helping the UN in the process of peace keeping in the world.

* India is the biggest democracy in the world and cherishes the values enshrined in the UN Charter more than any other nation of the world.

* In the economic arena, within fifty-seven years of independence, India has displayed substantial dynamism. In the 1990s, our rate of growth averaged 6% per annum. India is likely to become one of the largest markets in the world, with a middle class estimated to be in the region of 500 million by the year of 2025. The emergence of India as a major player in the software and IT enabled services sectors has raised India's economic profile, and it is now being seen as an economic superpower in the making.

Merits of India's Getting the Permanent Seat in the UNSC

* To maintain international peace and security in accordance with the principles and purposes of the UN.

* To investigate any dispute or situation which might lead to international friction.

* To recommend methods of adjusting such disputes or the terms of settlement.

- * To formulate plans for establishing a system to regulate armaments.
- * To determine the existence of a threat to the peace or act of aggression and to recommend what action should be taken.
- * To call on members to apply economic sanctions and other measures not involving the use of force to prevent or stop aggression.
- * To take military action against an aggressor.
- * To exercise the admission of new members.
- * To recommend the General Assembly for the appointment of the Secretary General and, together with the Assembly, to elect the judges of the international court of justice.

In November 2003 Kofi Annan announced the setting up of a high level panel, comprising 16 eminent members for the task of examining the major threats and challenges the world faces in the broad field of peace and security and make recommendations for the elements of a collective response. Expansion of the Security Council is the most important and most politically difficult subject that the panel has to make recommendations on. The panel in its final report in December 2004 gave two options : (1) Providing for increasing the numbers of permanent seats without veto powers by 6 and non-permanent seats by (3), and (2) The number of permanent members would be kept at five but there would be a new category of eight semi-permanent members without veto with renewable four-year terms, with 11 non-permanent members making up the balance.

For India, the chances of getting into the permanent membership of the UN Security Council are very high. But the chances of getting

veto power are highly doubtful. Ideally one loves to have such a power, but a permanent position in the Security Council even without a veto is not a bad idea. A Security Council seat even without a veto can definitely change the course of India's destiny drastically. India, in the first instance, should accept a berth on the Security Council and then lobby hard to achieve equal status in the Council with the permanent five veto-wielding nations.

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Birth Anniversary of Maharaja Krushnachandra Gajapati Narayan Deo. Hon'ble Chief Minister Shri Naveen Patnaik, Hon'ble Speaker, Shri Maheswar Mohanty, Shri Surendra Nath Naik, Minister, Agriculture, Shri Manmohan Samal, Revenue, Food Supplies and Consumer Welfare, and Shri Nagendra Kumar Pradhan, Minister, School and Mass Education seen in the picture.

Biju Patnaik Medicinal Plants Garden Research Centre, Jeypore

The World Health Organisation (WHO) has been promoting a movement for "Saving Plants for Saving Lives". This is because of the growing understanding of the pivotal role medicinal plants play in providing herbal remedies to health maladies. India is the home of several important traditional systems of health care like Ayurveda, Siddha and Unani. All these systems depend heavily on herbal products. In addition, allopathic drugs are also derived from a wide range of plant products. Biotechnology has further helped to accelerate progress in bioprospecting for molecules of value in the preparation of life-sustaining drugs.

Several millions of Indian households have been using through the ages nearly 8000 species of medicinal plants for their health care needs. Over one and half million traditional healers use a wide range of medicinal plants for treating ailments of both humans and livestock across the length and breadth of the country. Over 800 medicinal plant species are currently in use by the Indian herbal industry. However, except for about 120 species, all others are collected from the wild. This collection often involves destructive harvesting when parts like roots, bark, wood, stem and the whole plant (herbs) are used. Unregulated

wild harvest, alongside habitat loss and degradation, is leading to resource depletion and which in turn is endangering the very survival of these species. No wonder, many of the species listed in the Red Data Books of IUCN and the Botanical Survey of India are valued for their medicinal properties.

Traditional and folklore medicine bequeathed from generation to generation is rich in domestic recipes for common ailments.

Conservation, Enhancement and Sustainable and Equitable use of Medicinal Plants

Traditional medicine encompasses protection and restoration of health over millennia. The best known examples of traditional medicine,

differing in concept and protocol, are well-developed systems such as acupuncture and ayurvedic treatments that have been widely used to conserve human health in China and India.

Developed countries, in recent times, are turning to the use of traditional medicinal systems that involve the use of herbal drugs and remedies. About 1400 herbal preparations are used widely, according to a recent survey in Member States of the European Union. Herbal preparations are popular and are of significance in primary healthcare in Belgium, France, Germany and the Netherlands. Such popularity of plant-derived products has been traced to their increasing

acceptance and use in the cosmetic industry as well as to increase public costs in the daily maintenance of personal health and well-being. Examples of such beauty-oriented therapeutics are skin tissue regenerators, anti-wrinkling agents and anti-age creams. Most dermaceuticals are derived from algal extracts that are rich in minerals and the vitamin B group. Skincare products such as skin creams, skin tonics, etc. derived from medicinal plants are grouped together as dermaceuticals. Also, amongst the poor, cures and drugs derived from plants constitute the main source of healthcare products.

Despite the increasing use of medicinal plants, their future is being threatened by complacency concerning their conservation. Reserves of herbs and stocks of medicinal plants in developing countries are diminishing, several important species are in danger of extinction as a result of growing trade demands for safer and cheaper healthcare products and new plant-based therapeutic markets in preference to more expensive target-specific drugs and biopharmaceuticals. Such concerns have stimulated action in chronicling and conserving medicinal plants.

Issues concerning intellectual property rights, compensation for loss of economically valuable biodiversity resources, and the acquisition and safeguarding of traditional healthcare knowledge are attracting increasing attention. Bioprospecting of new drugs from medicinal plants and the exploitation of unprotected traditional knowledge in starting up potentially new bioindustries are the focus of new health enterprises. Such concerns that call for adherence to and observation of cultural and intellectual property rights have been addressed and enshrined in the Biodiversity Act (2002). The first countries to seriously tackle these issues are

China and India. Indeed, programmes dealing with medicinal plant conservation, cultivation, community involvement and sustainable development being initiated elsewhere, could benefit immensely from the Chinese and Indian experiences.

Orissa - a Paradise of Medicinal Plants

The Koraput region of Orissa is globally famous for its rich Biodiversity and local land races. More than 1780 varieties of local land races of rice were here in past. More than 1200 medicinal plant species are available in this region. Some of the endemic medicinal plant species in this region are used for curing different diseases like gastrointestinal disorders, malarial fever, bone-fracture, anti-helminthic, anti-inflammatory, anti-fertility, asthma, pyorrhea and rheumatoid arthritis. This healing system is part of the Indian traditional medicinal system. Bioprospecting of such precious germplasm is likely to lead to development of new drugs.

The tribal people of Orissa have been in the practice of preserving a rich heritage of information on medicinal plants and their usage. These people have faith in their traditional system of healthcare and generally (if not always) practise it. They have their own traditional physicians who use these plants as their material medica. They have rich and outstanding traditional knowledge and wisdom regarding material for healing of commonly occurring ailments. They have both the know-how and do-how for preparing the medicine and its administration. Unfortunately, this information is yet to be collected systematically and comprehensively and maintained in databases in a manner they would help in protecting their IPR.

The Koraput region is rich in genetic resources of medicinal rices and other medicinal plants. The tribal population are poor but their

bioresources endowment is rich. Very little research has been done so far in the area of conservation, sustainable and value-added use, and equitable sharing of benefits with reference to the medicinal plant heritage of Koraput. Only scientific work can help to convert bioresources into economic wealth on an ecologically sustainable basis, thereby leading to an era of biohappiness. M.S. Swaminathan Research Foundation proposed to set up a Research and Development Centre in Koraput to undertake intensive and integrated study on medicinal rices and other medicinal and aromatic plants. It is hoped that such an initiative will help to overcome the prevailing dichotomy of the poverty of the people and the prosperity of Nature.

M.S. Swaminathan Research Foundation has been working in the Jeypore region of Orissa since last 12 years. Activities in the area include conservation of biodiversity, promotion of sustainable livelihoods through micro-level interventions, establishment of community managed gene, seed, grain and water banks, promotion of genetic literacy and documentation of local conservation traditions. The initiatives taken up by the MSSRF have enabled the local tribal communities of Jeypore region of Orissa to receive the prestigious Equator Initiative Award for conservation of local genetic resources and traditions. More so, MSSRF's interventions have raised the level of confidence in the local communities by way of interaction and cooperation. Establishment of SHGs involved in water resources management, wasteland reclamation and marketing of speciality rices (eg. Kalajeera) and products of minor millets are some of the initiatives exemplifying the success of the work of tribal families, with support from MSSRF designed to create an economic stake in conservation.

The vast medicinal plant resources in the region, have so far been neglected. The MSSRF's proposal to work in this area has received excellent support from the State Govt. The State Govt. has provided 6 hectares (i.e. 15 acres) of land to MSSRF for the establishment of the "Biju Patnaik Medicinal Plants Garden and Conservation Centre" at Jeypore. The Hon'ble Chief Minister of Orissa, Shri Naveen Patnaik, performed the *bhumipuja* on the 16th November 2004. The major aim is to establish an *ex-situ* genetic conservation centre of medicinal plants of major tribes of the region. The predominant tribes are Paroja, Bonda, Kandha, Kutia Kandha, Dongaria Kandha, Koya, Saura, Langia Saura, Gadaba, Bhumia, Bhatra. It is proposed to assign 1 acre land for each major tribe for cultivating the plants they use for their health care needs. This in turn will serve as a repository of various genetic stocks of the region and can be of immense utility for the present and future generations. Such a conservation centre will serve as a living gene bank for the tribal families.

The centre will be developed in such a manner that the tribal families develop a sense of ownership of the living gene bank and participate actively in all aspects of the work of the center, namely conservation, enhancement through participatory breeding, cultivation and chronicling of dying wisdom and vanishing crops. The centre will help tribal women and men to protect their intellectual property rights under the provisions of the Protection of Plant Varieties and Farmers' Rights Act and Biodiversity Act (2002). A participatory Knowledge Management System will be developed to foster genetic, trade and legal literacy.

Such an initiative would require the involvement and dedicated support and cooperation of a large number of partners.

Though the programme is a joint initiative of the MSSRF and the Govt. of Orissa, the immediate partnership will be with the local farming and resource poor tribal communities of the Jeypore region. The support from the Central Govt. Departments such as the National Bioresource Development Board, National Medicinal Plant Board, Ministry of Science and Technology, Department of Biotechnology and Min. of Environment and Forests would be solicited in fulfilling the objectives of the center.

Major Areas of Research, Education and Development

- * Establish a Research, Training and Capacity Building Centre at Koraput for strengthening in situ and ex situ conservation and for undertaking validation and identification of active biomolecules, as well as for safeguarding the IPR of tribal families.
- * Initiate a Herbal Literacy Movement in Western Orissa and organise for this purpose "Health Clubs" among school and college students.
- * Foster conservation of genetic resources of medicinal plants and also promote genetic

enhancement through participatory breeding.

- * Establish linkages with markets, so that the cultivation of medicinal plants including medicinal rices becomes market driven, with assured income security for tribal families.
- * Develop propagation methods in order to ensure that high quality and pure seed and planting materials are available to the cultivators.
- * Foster a community Gene, Seed, Grain and Water Bank Movement.
- * Establish Village Knowledge Centres with specific focus on the medicinal plants.
- * Promote participatory research and breeding and participatory knowledge management involving scientists and tribal families.
- * Establish a Herbal Biovalley in the Koraput District for providing opportunities for the cultivation and processing of medicinal plants and medicinal rices by Self-help Groups (SHGs) of women and men.

Source : M S Swaminathan Research Foundation, Chennai.



Hon'ble Chief Minister Shri Naveen Patnaik, Chairman National Commission for Farmer Dr. M.S. Swaminathan and President NASSCOM Mr. Kiran Karnik at the launching ceremony of NASSCOM Foundation - UNDP Projects in Orissa at Secretariat on 6.5.2005. Shri Surjya Narayan Patro, Minister, Energy, Tourism, Information Technology is also present.

Right to Information Bill - 2005

Tarakanta Mohanty

The much awaited right to information bill-2004 which was passed by the Parliament during the ongoing budget session 2005 will give the general public a right to secure any kind of information other than those relating to national security from the Government.

The bill, after its enactment will replace the existing freedom of Information Act which was enacted by the NDA Government. The new law, as stated in the objects and reasons of the bill, will ensure greater and more effective access to information as compared to the existing law. Availing the new right, the general public will be free to access any material in any form, including records, documents, E-Mails, opinion, advices, press releases, circular, orders, log books, reports, papers, samples, models, data held in any electronic form from public authorities.

In general, an individual can request information from any public authority on payment of a fee and without having to state reasons. Subject to some limitation, the information must be provided within 30 days.

However, any information which would pre-judiciously affect the sovereignty and integrity of India, security, strategy, scientific and economic interest of the state and relation with foreign states will be exempted from disclosure.

Under the new law the centre will set up a Commission to make sure that the Govt.

Departments do not stone wall request for information.

The main points of the new draft legislation is the Central Commission. An information commission will head a commission which could have upto 10 Deputy Information Commissioners, based at different locations information wide.

They would be picked by a Committee consisting the Prime Minister and the Leader of the Opposition in the Lok Sabha.

The Commission will examine complaints from any person who faces problems in getting information from a public authority- the main objective of the new Law.

18 intelligents and security organisations established by the Centre are beyond the reach of the proposed law, and the Centre can add more to this list any time.

The list includes intelligence bureau, research and analysis wing, Directorate of Revenue Intelligence, Central Economic Bureau, Directorate of Enforcement, Narcotics Control Bureau and Aviation Research Centre.

The public can not seek information from military organisation like Central Industrial Security Force, border security force, Assam Rifles, Indo Tibetan Border Police, Lakshyadeep Police Special Branch and similar units in Andaman and Nicobar island and Dadra and Nagar Haveli too are in the exclusion list.

Prime Minister, Dr. Manmohan Singh has stated that " Right to information bill would usher in a new era in the process of governance purpose and efficiency.

The bill, with 146 amendments, was adopted by voice vote. Prime Minister, Shri Singh has also stated "that the legislation would ensure that the panel of the growth would flow to all sections of the people, eliminate corruption and bring the concerns of the common man to the heart of all process governance. The bill lays down the architecture for accessing information, which is simple, easy, time-bound and in-expensive. There will be penalty for failing to provide information or affecting its flows. In fact it imposes obligation on agencies to disclose information suo motu, thus, reducing the cost of excess."

The Prime Minister wanted civil servants to view the bill in a positive manner. They should not see it as "draconian Law" for paralysing

government, but as an instrument for improving Govt. citizen inter act, resulting in a friendly and effective functioning.

Dr. Singh emphasises that the bill was more far reaching and effective than the existing freedom of information act. He urges the State Governments to take the initiative and establish State Information Commission.

Information Commission would be selected by a panel comprising the Prime Minister, Leader of opposition in the Lok Sabha and a Minister nominated by the Prime Minister. Under the provisions of the bill, there will be no fees for people below the poverty line.

Tarakanta Mohanty is the Deputy Director and Deputy Secretary in the Information & Public Relations Department, Bhubaneswar.



Hon'ble Chief Minister, Naveen Patnaik inaugurating Prativa Bhawan at Mahanga on 6.5.2005. Shri Kalindi Behera, Minister, Scheduled Tribes & Scheduled Castes Development (Scheduled Castes Development) Minorities and Backward Classes Welfare, Excise and Shri Nagendra Kumar Pradhan, Minister, School & Mass Education are also present.

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EDITORIAL



Governmental actions often targeting to improve the standard of life yield unsatisfactory result if there is no appropriate planning. Conceptualising of developmental programmes requires proper assessment of needs of the target groups. There have been many efforts to undertake KAP studies to exactly access the types of developmental programmes sought for. The methodology of Research, Design and Development applies the same principle in related fields. The public perception about the performance of the present government during 2004-2005 reveals the fact that there has been perceptible improvement in many socio-economic sectors. Initiatives to create congenial atmosphere to attract investment, attempts to ensure financial discipline and steps to fully implement developmental programmes have already earned public applause and the impact of good governance is becoming stronger day by day. With confidence of the people, Government is pursuing hard to accelerate the process of socio-economic development. These impressions have been highlighted in articles of June issue of Orissa Review which we hope will be of interest to readers.

Navankar Sekhar Pande