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Sri Biju Patnaik was sworn in as the Chief Minister of Orissa on March 5, 1990.

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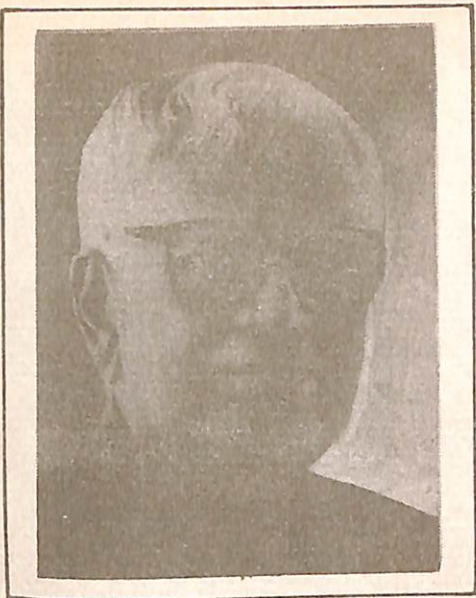
**ELECTIONS TO THE TENTH ORISSA LEGISLATIVE
ASSEMBLY**

"My Government have assumed office backed by a massive mandate from the people. To reciprocate this trust I assure you that my Government will take all possible steps towards building a prosperous State."

"My Government welcome the several initiatives taken by the Union Government. A few of the most laudable of those are : the policy of debt relief to farmers, artisans, and landless labour up to Rs. 10,000/-, right to work, expansion of railways, additional steel plants, constitutional status for the Planning Commission, autonomy for the electronic media and formation of the Inter-State Council."

"The potential for development of the State has not been fully realised despite abundant natural resources at its disposal. For that end hard work is necessary at different levels. But transformation of Orissa into a vibrant and well developed State can only be achieved by the will, courage, determination and discipline of the people. My Government is determined to instil this will in the people of Orissa for revival of its past glory. My Government will also provide a clear sense of direction in developing the full potential of the State."

(Excerpts from the Address of the Governor of Orissa to the First Session of the Tenth Orissa Assembly, March 19, 1990)



राष्ट्रपति
भारत गणतंत्र

**PRESIDENT
REPUBLIC OF INDIA**

MESSAGE

The anniversary of the creation of a separate province of Oriya speaking people brings to our mind the immortal memory of Utkalmani Pandit Gopabandhu Das who was a veritable legend of our time. We are also reminded on this occasion of other great sons of Orissa such as Madhusudan Das, Biswanath Das, Nabakrushna Choudhury, Monomohan Choudhury and Harekrushna Mahtab. Mention must also be made of Orissa's women leaders such as the late Ramadevi Choudhury and Shrimati Malatidevi Choudhury.

In recent times Orissa's mineral and marine resources have been put to productive use. It has now more than two hundred large and medium industries and over thirty thousand small scale industries. The steel plant at Rourkela, the heavy water project at Talcher, the fertilizer plant at Paradeep and the aluminium complex at Koraput are national landmarks. The Hirakud Dam on the river Mahanadi is the largest multipurpose river valley project in the world. And so Orissa bids fair to emerge as one of the forward and progressive State of the Union.

I extend my felicitations to the people of Orissa on Orissa Day and wish the State every happiness and well-being.

R. Venkataraman

New Delhi,
March 26, 1990

(R. VENKATARAMAN)



**MESSAGE OF
SRI YAGYA DATT SHARMA
GOVERNOR OF ORISSA
ON THE OCCASION OF
THE ORISSA DAY : APRIL 1, 1990.**

First April, 1936 is a day of great historic significance for Orissa as on this day it attained its long cherished aim. The movement for a separate Statehood had occupied 33 long years of dedication of thousands of worthy sons of the soil whose burning patriotism and sacrifice shall always be our perennial source of inspiration. I pay my respectful homage to those leaders of Orissa.

Orissa has a rich cultural heritage. The glorious past of this land and its spiritual and intellectual values contributed significantly to the development of Indian civilisation. Emperor Ashok took his first lesson in non-violence here. He preached and practised DHARMA, the eternal value of life which has had its impact on the mankind and the world peace. Its commerce, literature, dance, music and art are also rich. The past had encouraged our people to rise to the occasion as and when necessary and to face new challenges as a dynamic and adventurous race. I call upon the people of Orissa to come together and work with whole hearted determination and devotion for the progress and prosperity of the State. Hard and sincere work alone will refurbish the glory of Orissa.

I convey my greetings and good wishes to the people of Orissa on this memorable occasion.

YAGYA DATT SHARMA

**MESSAGE OF
SRI BIJU PATNAIK
CHIEF MINISTER OF
ORISSA
ON THE OCCASION OF
THE ORISSA DAY :
APRIL 1, 1990.**



On the occasion of the Orissa Day on 1st April 1990, I convey to the people of Orissa my good wishes and greetings.

On this occasion, let us resolve to transform our state into the best state of the country by exploiting Orissa's abundant natural resources, and to revive the pride and glory of Orissa.

Bande Utkal Janani

BIJU PATNAIK



Situated on the eastern coast of India, Orissa is bounded by West Bengal on the north-east, Bihar on the north, Madhya Pradesh on the west, Andhra Pradesh on the south and the Bay of Bengal on the east. The geographical area of the state is about 1,55,707 square kilometres.

Famous in mythology and ancient history as Kalinga and in medieval history as Utkal, Orissa obtained the status of a separate province of India on the 1st April 1936, and emerged as a full-fledged state of the republic of India with the amalgamation of twentyfour princely states completed in August 1949.

Thus Orissa attained its distinct geo-political identity on the 1st of April 1936, after a long struggle that began from the mid-nineteenth century. The struggle for a separate province of Orissa was characterised not only by political movements led by Utkal Gourab Madhusudan Das, Raja Krishna Chandra Gajapati Dev, Utkalamani Pandit Popabandhu Das, Raja Baikuntha Nath De and others, but also by literary and cultural movements led by Fakir Mohan Senapati, Radhanath Ray, Gangadhar Meher and others. Through the relentless efforts of these leaders, Orissa was able to achieve the distinction of being the first state in India to be formed on linguistic basis.

Orissa's twentytwo million people live in its fiftyone thousand villages and 108 towns

spread across its thirteen districts.

Orissa displays an extensive diversity of morphological features, with its hills and valleys, forests and rivers, the sea and the lakes, the waterfalls and the hot springs.

Over the largest river of Orissa, the Mahanadi, stands the world's largest earth dam, the Hirakud, India's first major multipurpose River Valley Project. This Dam today is a boon to Orissa. It has not only controlled the recurring floods, but has also helped in providing irrigation to thousands of acres of land and in generating electricity which is vital to the industrial growth of Orissa.

In the largest district, Koraput, stands the highest hill of the state, Deomali, which rises to a height of about 1600 metres.

Orissa possesses some of the magnificent beaches of the country. The shallow beach of Chandipur in the Balasore district offers a unique spectacle as the sea recedes 3 to 4 kilometres into the Bay twice everyday. The blue beach of Gopalpur is an ideal resort for those who love a quiet holiday. The sloppy beach of Konark is bewitchingly picturesque.

The golden beach of Puri, one of the world's most delightful beaches, draws thousands of tourists from India and abroad round the year.

Celebrated by the Oriya poets as an abode of gorgeous beauty, the Chilika is the biggest salt water lake of Asia and the largest brackish water lake of India. Extending over an area of 1100 square kilometres, the Chilika lake, with its bounties of fish, prawn and crabs, is the home of the flamingoes and other migratory birds who come flying in thousands from the far-away Siberian regions. Cruising on the Chilika lake is of course an exciting experience.

Orissa has plenty of charming waterfalls like the Sana Ghagra, the Khandadhar, the Harishankar and the Barheipani.

Orissa has the rare privilege of possessing a number of hot springs, the most famous among them being Taptapani, situated in splendid idyllic surroundings, 50 kilometres away from the city of Berhampur. The warm sulphur water of Taptapani is said to have valuable medicinal properties.

Orissa is a rich reservoir of wild animals who live in dense jungles around numerous streams and waterfalls. The Similipal National Park is a natural habitat of tigers, leopards, elephants and a variety of other tropical animals. Then there is the Chandaka Elephant Sanctuary and there is the Tikarpara Sanctuary where a rare species of crocodiles, the Gharials, are being preserved.

The Nandan Kanan Biological Park, situated close to the capital city of Bhubaneswar, offers the rare sight of a number of exotic animals like the Chimpanzee and the rednecked wallaby.

The Nandan Kanan has the largest Lions' Safari of India, where African lions move about freely over an undulated scenic area of about twenty hectares.

The family of *white tigers* in the Nandan Kanan Zoo is one of its finest attractions. With the success in the captive breeding of white tigers, the Nandan Kanan has the largest number of this rare species in the world.



Orissa is the storehouse of rich, varied and abundant mineral resources. One-third of the country's iron-ore and manganese ore, 95 per cent of the nation's chromite resources and sixty per cent of India's bauxite ore are in the state of Orissa.

The Talcher and the Ib Valley coalfields

of Orissa contain India's largest reserves of powergrade coal.

The great monuments and sculptures of Orissa are a glorious part of India's art history. The history of Orissan art and architecture is coeval with her recorded history which commences with the Kalinga War in 261 B.C.

The Kalinga War, fought on the ramparts of the Dhauli hills along the river Daya, is a major turning point in the history of India.

It is in the wake of the Kalinga War that the Mauryan King Ashoka was transformed from the cruel to the pious, from Chandasoka to Dharmasoka.

The Dhauli, a silent witness to this great event, still retains the rock edicts of emperor Ashoka, which proclaim that love and not hatred, peace and not war, are the basis of human life.

A peace pagoda constructed in 1972 commemorates emperor Ashoka's great spiritual transformation into the path of the Buddha.

Orissa was responsible in not only initiating emperor Ashoka into Buddhism, but also in shaping this religion into a widespread movement. Legends say that the first two lay disciples of the Buddha were the two Oriya merchants, Tapasu and Ballika. According to the Tibetan traditions, it was in the land of Orissa that the Mahayana cult was first fostered.

The earliest specimen of Orissan architecture is found on the Dhauli hills : a colossal figure of the forepart of an elephant carved on the top of a boulder containing Ashoka's edicts.

The caves of Khandagiri-Udayagiri, situated on the outskirts of Bhubaneswar, are believed to have been built in the first century A.D. by the great emperor Kharavela to provide shelter to the Jaina ascetics.

Indeed, Kalinga was a famous centre of Jainism. The inscriptions in the Hatigumpha caves suggest that Mahavira himself had visited Kalinga and preached his religion on the peaks of the Udayagiri hills.

The most interesting of the Khandagiri-Udayagiri caves is the Ranigumpha - a double-storeyed monastery with the depiction of a king gazing at a dance performance in the company of his two queens.

From the 7th century to the 13th century A.D. innumerable Hindu temples were built in Orissa, and many of them which still survive, demonstrate great artistic skill and imagination of the Oriya artisans.

Most of these temples are found in and around Bhubaneswar, the modern capital of Orissa, and aptly called India's Temple City.

The Mukteswar temple of the 10th century and the Rajarani temple of the 11th century are among the earliest achievements of the Orissan style of architecture.

The Mukteswar temple is indeed a dream realised in sandstone. Its intricately decorated archway and the beautiful sculptures on its walls with female figures in graceful postures are indeed magnificent.

The Rajarani temple is another example of superb craftsmanship, elegance and grace. The figure of a young damsel in the posture of writing is among the masterpieces of this magnificent edifice.

Built around 11th century A.D. the Lingaraj Temple of Bhubaneswar is one of the best archeological monuments of the East. Rising to an imposing height of about one hundred and eighty feet, this great temple represents the quintessence of the Kalinga type of architecture. A famous place of pilgrimage as a Saivita shrine, the Lingaraj temple is thronged by thousands of visitors every day.

Built around the middle of the 12th century by the Ganga Monarch Anantavarman Chodagangadev, the Jagannath Temple, which is about 214 feet high, is famous both as a major centre of Hindu pilgrimage and a repository of splendid architectural beauty.

Believed by many historians as originally a tribal deity, Jagannath is worshipped as a God of the people, and as a symbol of unity, brotherhood and equality.

Jagannath is an integral part of the Oriya consciousness. In fact, a substantial part of Orissa's culture and social life has been shaped and influenced by the cult of Jagannath.

Considered to be one of the holiest of the holy places of the Hindus, thousands of pilgrims come to Puri round the year for a darshan of Lord Jagannath, a deity who has neither hands nor legs, whose appearance is the most unusual in the pantheon of Hindu gods.



The *Ratha Yatra*, the Car Festival of Lord Jagannath, is held every year in the month of June or July, when lakhs of people from all over the country come to Puri. This is an occasion when the Lord of the Universe comes out of the temple and rides on a chariot that rolls stridently on the Bada Danda, the grand road, through the ecstatic crowd of His devotees.

Standing majestically on the sandy beach, the Sun Temple

of *Konark*, sometimes called the Black Pagoda, is believed to have been built around 13th century A.D. This superb structure is not only the finest articulation of the creative genius of the Oriya race, but also a priceless heritage of ail mankind. The Konark temple and the Konark wheel are held as powerful symbols of Orissa's cultural identity. Conceived as a giant chariot with twenty four wheels drawn by seven spirited horses, the Konark is indeed eloquent



poetry in stone. The liberal representation of amorous couples of the walls of Konark makes the visitors spell-bound. There is an amazing variety of female figures with beautiful costumes and ornaments and in a diverse variety of postures.

The graceful postures of dance, based on the classical Odissi style, provide the rhythms of harmony to the architectural grandeur of Konark.

According to a popular legend, Samba, the son of Lord Krishna, suffered from leprosy due to a curse. He was advised to worship the Sun-God at Konark where flowed the river Chandrabhaga. Samba took his bath in this river and got cured.

Today, only the mouth of the river Chandrabhaga exists in the shape of a pond where a large number of pilgrims assemble to take a holy dip on the Magha Saptami day which falls generally in February every year.

The innumerable ancient temples dispersed over the entire land of Orissa reflect the skill and elegance of Orissan art and architecture, as well as the enthusiasm of the Orissan kings to build temples and shrines. For instance, there is a place called Ranipur-Jhari in the district of Bolangir where there once existed one hundred and twenty temples. The temple of the Sixty Four Yoginis is a rare monument of this place, the like of which is found in only three other places of India.

The Khichingeswari temple at Khiching in the Mayurbhanj district is another example of the antiquity of temple art in Orissa. This temple is believed to have been built in tenth or eleventh century. Its architecture with all its arches, amorous poses, scrolls and arabesques suggests that it is a close contemporary of the Lingaraj temple of Bhubaneswar.

Among the many great ancient poets born in Orissa, the name of Jayadeva strikes as the foremost. Gita Govinda, the magnum opus of this poet, had a pervasive influence on the art, sculpture and literature of Orissa. Jayadeva's lyrics are superbly enchanting with its alliterative diction, ravishing music, romantic milieu and sensuous imagery. The marvellous depictions of human passion on the walls of the Kohark temple are said to have been inspired by the charming verses of the Gita Govinda. Jayadeva's Gita Govinda is recited every day in the Jagannath temple of Puri as a part of the holy rituals of Lord Jagannath. Gita Govinda was the moving spirit of the entire corpus of medieval Oriya literature.

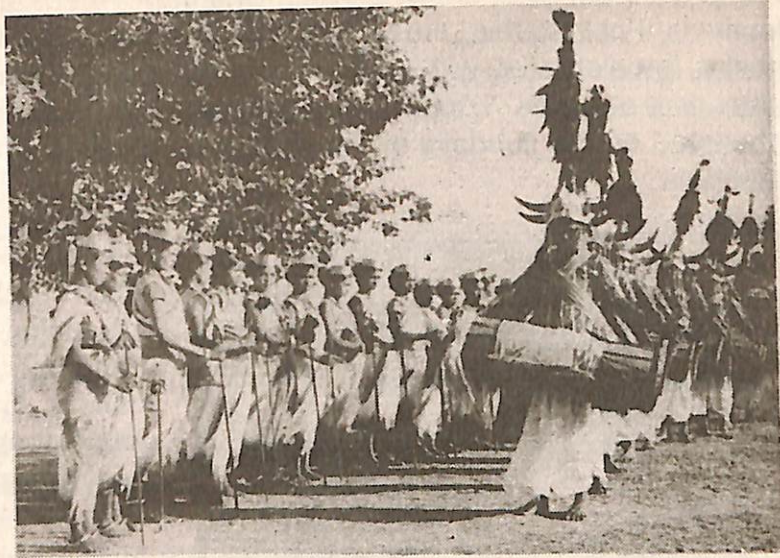


Odissi dance is one of Orissa's greatest contributions to the world of art. A form of elaborate grace and charm, the history of Odissi goes back to the antique past. The origin of this dance-form is generally traced back to the Devadasis who performed dances in the Temple of Lord Jagannath at Puri. This was later popularised by the Gopis, young boys dressed as girls.

Odissi is full of sculptural poses based on the Tribhanga concept of Hindu iconography. The Abhinaya part of the Odissi dance is accompanied by the songs composed by such classical poets as Jayadeva, Upendra Bhanja, Kavisurya Baladev and Banamali. The Odissi music has a distinct flavour of its own.

Orissa has a rich variety *tribal dances* and

music, which are an integral part of the social life of the 62 tribal communities who constitute about 23 per cent of Orissa's total population. Among the major forms of tribal dance are the Koya, the Gadaba, the Paraja and the Kandha. The tribal dancers wear a colourful variety of costumes and sing to the accompaniment of many indigenous types of musical instruments. For instance, the Koyas wear bison horns on their head while dancing. The Paraja tribes use stringed Dung Dunga while the Sauras use Dhenka.



Orissa has a splendid tradition of indigenous theatre forms. The Chou of Mayurbhanj is a very popular form of theatre art performed through dances and physical postures.

Orissa has a rich heritage of art and crafts. The Patta paintings done on strips of cotton cloth have had a sustained existence for centuries. The applique art of Pipili has received great applause and popularity.

The textiles of Orissa are famous for their rich variety of designs, bold patterns, vibrant blending of colours and the luxuriant feeling of texture. The most popular textile item of Orissa is the Sambalpuri Sari which is in great demand today both in India and abroad.



The spider-web fineness of the silver *filigree* work of Cuttack has been a major item of attraction for Indian and foreign tourists.

There are of course the stone carvings, the horn work and a wide range of other handicrafts which show artistic skill and delicate workmanship of the Oriya craftsmen.

Numerous festivals and fairs are celebrated in Orissa round the year. While many of them are celebrated as elsewhere in India such as the Durga

Puja, the Deepavali or the Ganesh Chaturthi, there are a few which are typically Oriya festivals. For instance, the Manabasa, observed on all the Thursdays of the month of Margasira, is celebrated with great devotion by Oriya women who worship Goddess Laxmi and decorate the house with beautiful Chita drawings. Or the Khudurukuni Osa observed on the sundays of the month of Bhadrav when young girls worship Goddess Mangala.



The *Raja* is a festival of the young girls celebrated generally in the month of Asadh which heralds the advent of the rainy season. It is a four-day festival during which young unmarried girls engage themselves in merry-making. They dance, sing, play and swing during these four days. Interestingly, the girls during the Raja Festival do not walk on earth with bare feet.

The Nuakhai or the Nabanna is the most important festival of Western Orissa. Observed in the month of September, this festival marks the first consumption of the newly harvested crop.

Orissa's contribution to the shaping of modern Indian history is indeed very significant. Orissa was the last territory in India to be conquered by the British in 1803. Long before India's first War of Independence in 1857, Orissa's Paika Rebellion of 1817 and the Ghumsur Rebellion of 1835 had given serious jolts to the British administration. The brain behind the great Paika Rebellion of 1817 was Buxi Jagabandhu. In the 1835 Ghumsur Rebellion, leadership was provided by such tribal leaders as Kamal Lochan Dora Bissoi and Chakra Bissoi.

Orissa plunged into the mainstream of national politics with the formation of the Utkal Pradesh Congress Committee in 1920 under the leadership of Utkalmani Pandit Gopabandhu Das.

There was widespread response in Orissa to Gandhiji's call for Non-cooperation in 1921. From this Non-cooperation Movement emerged such illustrious leaders as Gopabandhu Choudhury, Biswanath Das, Pandit Nilakantha Das and Harekrushna Mahtab.

Orissa saw a momentous upsurge of mass participation in the Salt Satyagraha with Acharya Harihar Das leading the Satyagraha at Inchudi in April 1930. Women took very active part in the Salt Satyagraha Movement in Orissa. Of them, Rama Devi and Malati Choudhury deserve special mention.

The Quit India Movement of 1942 was launched in Orissa with great determination and fury. The firing at Eram in the Balasore district of Orissa is aptly viewed as the second Jallianawalabag massacre. The Quit India Movement in Orissa saw the martyrdom of the tribal leader Laxman Nayak who was hanged to death in March 1943 in the Berhampur Central Jail.

India's first Steel Plant in the public sector was established at Rourkela during the Second Five Year Plan.

The Paradeep Port, which was declared a major port in 1962, is today an important gateway to the export of iron ore and other commodities.

Orissa is linked through the railways with almost all the major cities of the country. There is also the facility of daily flight between Delhi and Bhubaneswar.

Orissa accounts for 4.7 per cent of the total area of the country. Though small in size, Orissa has a large heart. The Oriyas are a lovable and peace-loving people who are legitimately proud of a glorious past and deeply committed to the goal of a prosperous future.



THE ORIGINS OF ORIYA LANGUAGE AND LITERATURE

Late Dr. Krushna Chandra Panigrahi.

Origin and Development of Oriya Language

The date of the origin of the Oriya language cannot be determined. It is also not known when and how a language of Sanskrit origin which is now the prevailing language of the land, originated. It may, however, be presumed that the spread of a language of Sanskrit origin in Orissa might have taken the same form as it did in the neighbouring Bengal. In Bengal a language of Sanskrit origin prevailed over the languages of non-Aryan origin in the wake of the Magadhan occupation of this country. Officers, soldiers, merchants, monks and mendicants must have poured into Bengal from the neighbouring Magadha and would have imposed on the people of the land a form of a language known to scholars as *Prachya Prakrita* which was derived from Sanskrit. The official language of Bengal would have also in *Prachya Prakrita*. The course of the spread of

Prachya Prakrita in Bengal has been explained by modern scholars in this way, though this explanation might not represent the whole truth (*History of Bengal*, Vol. I, Hindu Period, reprinted 1971, pp.375-376).

In Orissa, known as Kalinga in ancient time, the spread of *Prachya Prakrita* might have taken the same course. The conquest of Kalinga by Asoka in 261 B.C. is an important and well-known event in the history of India. It is difficult to ascertain the forms of languages prevalent in this land before this epoch-making event. It is not however unlikely that the languages of Dravidian and tribal origin were prevailing in different parts of this country when the invaders, speaking a language of Sanskrit origin, invaded this country and occupied it for a considerable long time. There is little evidence to show that Asoka employed the inhabitants of Kalinga in his services or preserved the old system of their

administration or the official language. After the conquest of Kalinga officers, soldiers, merchants, Buddhist monks and others must have entered into this country in large numbers from Magadha and imposed their language on the Kalingan people. Asoka's inscriptions in Orissa, like those of other parts of India, are in Pali which is a language of Sanskrit origin, but in the beginning portions of his inscriptions in Kalinga there are a few words which differ from the same words to be found in the beginning portions of his inscriptions in other parts of India. Therefore, it has been supposed by scholars that this small change probably represented an allowance to the local language of the country. Pali and Prakrita thus seem to have entered into Kalinga from the time of its conquest by Magadha and from this time a language of Sanskrit origin started to be spread in this land. Asoka's invasion of Kalinga not only influenced its language, but also its culture. We have seen earlier that the objects discovered from the Sisupalagarh and Dhauli excavations testify to the prevalence of a mixed form of culture from the fourth century B.C. which was partly Aryan and partly Dravidian. Gradually however the Aryan influence predominated and the Drav-

idian influence receded to the background.

This is evident from the next course of the political history of Kalinga. The Chedis who ruled over Kalinga after the extinction of the Magadhan dominance, and of whom Kharavela was the third member, were a people of northern origin and were a branch of a dynasty not known when and how a branch of the northern Chedi dynasty established itself in Kalinga but the fact that they were a people of the Aryan origin admits of no doubt. In the Hatigumpha Inscription Kharavela has been styled as Aira which has been taken to be a corruption of the word Arya or Aryan. The titles given to him in this epigraph are purely of Sanskrit origin. The language in which the Hatigumpha Prasasti has been composed, is also of Sanskrit origin. The name of his father-in-law and some of his officers found from the short inscriptions on the Udayagiri caves, are of Sanskrit origin. Jainism which Kharavela professed, was a religion of northern origin with a sacred language of Sanskrit origin. The names of Kharavela and of his probable successors Vadukha and Kudepasiri or Kamdapasiri are taken by some scholars as of Dravidian origin, but this interpretation has not been accepted by all scholars. The names of the probable suc-

cessors of Kharavela have also been interpreted as of Sanskrit origin with their original Sanskrit forms as Vakradeva and Kandarpasri. The name Kharavela too has been interpreted as of Sanskrit origin meaning the ocean. The facts analysed above, will show that the Chedis of Kalinga were of the northern origin and they spoke and patronized a language of Sanskrit origin.

The Bhadrak Inscription of Gana, assigned to the third century A.D. is in Prakrit, but it contains certain words and verbs which do not follow the Prakrit language and grammar. The word medha used in this epigraph seems to be a word of the local language then prevailing in this country. The inscription shows that Prakrit was the language of all documents in Orissa up to the beginning of the Gupta age in India in the fourth century A.D. No inscription belonging to the early Gupta age has been discovered in Orissa, but all the epigraphs of the later Gupta period, found in Orissa, are in Sanskrit. The ruling dynasties of Orissa like the Vighrahs and the Matharas have all used Sanskrit in their charters. All later dynasties like the Sailodbhavas, Bhaumas and the Somavamsis used Sanskrit in their copper-plate records. A change in

the official language from Prakrit to Sanskrit seems to have taken place from the fourth-fifth century A.D. Scholars are still uncertain whether the direct administration of the Imperial Guptas was ever introduced in Orissa, but there is no doubt that Orissa felt the influence of the mighty change that took place in northern India in the fields of culture and religion during their rule. The revival of Hinduism and of Sanskrit in the Gupta empire had its repercussion on Orissa also. The use of Sanskrit as the official language and also as the language of books must have influenced the local language or languages which gradually became more Sanskritic in their origin and vocabulary.

We have said earlier that a great work like the Panchatantra was composed in Orissa during the rule of the Matharas who were the contemporaries of the Guptas. This great work must have influenced the local language of this country.

Sanskrit, Prakrit and Pali were never the spoken languages of Orissa nor of any part of India, but the Orissan people ultimately adopted a language derived from all of them. Orissa must have taken centuries to evolve a language of its own which became Sanskritic in origin.

No example of the earliest form of the Oriya language has come down to us in any document so far discovered, but here and there we find in the Orissan Inscriptions certain words which, though of Sanskrit origin, were different from it. In the Bhauma copperplate records we find the words like Thira, Pruva, Paduma and Tambra, the Sanskrit equivalents of which are sthira, Purva, Padma and Tamra, respectively. In the names like Bhimata and Nannata and in the titles like Unmata Simha and Lona Bhara the influence of a local language is clearly discernible. If the Oriya language existed during the periods of the Sailobdhavas, the Bhaumas and the Somavamsis, it must have existed in a formative stage.

Yuan Chwang says that the people of the Odra country spoke a language different from the language of Central India. This statement does not mean that the language of Orissa in Yuan Chwang's time had no family affinities with the languages of Northern and Central India. Even though all the Northern, Eastern and Western languages belong to one family group, they differed in the past as they do at present. This seems to be the meaning of Yuan Chwang's observation that the language of the Odra

country differed from that of Central and Northern India. The Chinese pilgrim further says that the people of the Kongoda country (the Ganjam and Puri districts) spoke a language which is similar to that of Central India. This observation seems contrary to the real state of things. Kongoda being adjacent to the Andhra country has all along been influenced by it in its language. The fact is that Yuan Chwang did not learn all the languages of India, nor did he carry on researches in them. During his short sojourn in Odra and Kongoda he formed an impression about the languages of these countries and has left an account of them, to which too much importance should not be attached.

Up to the ninth-tenth century A.D. what is now known as Orissa consisted of three political and cultural units known as Kosala, Utkala and Kongoda and these three units were united under one rule by the Somavamsis. We have seen that Yayati I occupied Orissa about 931 A.D. and Yayati II was requested by the people and ministers of the state to be the king of all these three distinct territories. From the reign of Yayati II the capital of the Somavamsi kingdom was shifted from Kosala to the coastal region of Orissa. These political changes

fostered the growth of a common language in Orissa. The people of the Kosala tract originally spoke a language which was akin to the Bhojapuri Prakrit, while the language of the coastal strip had family affinity with Magadhi. These two branches of Prachya Prakrit met and mingled in Orissa and formed a new language which came to be known as Oriya. The nomenclature seems to have derived from the fact that the elements of the language of the coastal strip, the land of the Odras, predominated in it. Another reason seems to be that the Kosala tract at no time could produce a literature of its own. The Oriya language seems to have been born under these circumstances, but no specimen of the Oriya language of the Somavamsi period has come down to us.

The next political period i.e., the Ganga period, provides us with a number of specimens of the Oriya language that we get from the stone and copperplate inscriptions. These specimens are found from a bilingual inscription (Oriya and Tamil) of the reign of Vira Narasimhadeva discovered at Bhubaneswar, from an inscription on the temple of Laksmi Narasimha at Simhachalam belonging to the reign of Narasimhadeva (the language is Oriya but the script is Telgu).

from another inscription of Vira Narasimhadeva on the temple of Srikurmesvara dated A.D. 1330 (the language is Oriya but the script is Telgu), from the Sonopore Stone Inscription of Bhanudeva I and from the Trimali Matha Copperplate Grant of Narasimhadeva IV, dated A.D. 1384. Dr. K.B. Tripathi in his book *The Evolution of Oriya Language and Script* has published the texts of the above inscriptions except the Sonopore Stone Inscription of Bhanudeva I. Besides he has also published a number of other inscriptions in this book, which are written in the Oriya language and script. These records in their totality furnish us with indubitable evidences that the Oriya language had considerably developed during the Ganga period.

But the specimens of the Oriya language provided by these records show the examples of a stereotyped language generally used in documents and they do not produce any evidence that there was a literary language in Orissa. Some Oriya scholars think that the Oriya literature had already made its appearance in the Ganga period. They take their stand by the Madalapanji and maintain that this chronicle had started to be written from the reign of Chodaganadeva, the founder of the

Ganga dynasty in Orissa. They thus trace back the origin of the Oriya literature to the first part of the twelfth century A.D. We have discussed at some length elsewhere the unreliable character of the Madalapanji and have maintained that it could not have been composed before the closing part of the sixteenth century A.D. Prof. S.K. Chatterji in his *Artavabha Mahanti Memorial Lectures, 1964*, seems to have been led by the popular view and therefore he has assigned the beginning of the Madalapanji to the reign of Chodaganadeva. He has also taken as a very good specimen of the Oriya prose the long proclamation purported to have been issued by the Ganga king Anangabhimadeva III, which has been incorporated in the Madalapanji. He has not however noticed several anachronisms in this so-called proclamation, which prove that it could not have been composed in the Ganga period.

In the Ganga period and even earlier folk songs existed in Orissa and they were being handed down orally from generation to generation. These songs, when studied, give us some indications about the early form of the Oriya language and literature. The earliest Oriya folk songs have been

recast, and, in the process, much of their originality has been lost, but, though the verbs have been completely changed, some of the words used in them still retain their original forms and these forms provide us with indubitable evidences that the early Oriya language was much closer to the early Bengali and Assamese languages than it is to-day. A particular class of folk songs, known as Khanavachana or the sayings of Khana, pertaining to agriculture and astrology, is still current in Orissa and they contain a very large number of words which will now be dubbed as Bengali. The date of their origin cannot be determined, but they seem to be very ancient and current in Orissa from remote times. They have been recently printed in the book form. Some of the folk songs, though not all, are no doubt the earliest literature of Orissa.

Origin and Development of the Oriya Literature

As shown above, the Oriya literature existed in oral form from a very early date which cannot be precisely fixed. We can, however, trace the regular written literature from the first part of the fifteenth century A.D. Some Oriya scholars however push back the origin of the Oriya literature even to the ninth-tenth

century A.D. They claim as the specimens of the proto-Oriya literature the esoteric songs of Buddhist origin, variously known as Baudha Gana, Dohas and Charyapadas assigned to the ninth-tenth century A.D. The Bengalis, the Maithilis, the Assamese, the Magadhis and the Bhojapuris also claim these songs as the specimens of their proto-literatures. These claims are based more on regional sentiment than on reason. They have lost sight of the most important fact that not a single manuscript copy of these religious songs has yet been discovered in any part of North and South India, not even in the territories of the claimants. Had they been at any time the prevailing literature of any region or regions, their total disappearance from the lands of their origin would have been hardly possible. It seldom happens that a literature born in a particular territory completely disappears from the land of its origin and its manuscript copies are traced in a distant land like Nepal.

From these esoteric songs it is apparent that they belonged to a particular sect, known as the Sahajiyas, who advocated free indulgence in sexual act and who favoured the type of a love known as Parakiya i.e., the love with the women be-

longing to other people, particularly of the lower castes. In these songs we find the mention of the Dombi and the Savari who belonged to the lower order of the society. Evidently the Sahajiyas used these songs for their esoteric rites and only the initiated seem to have had access to them. The language of the songs was the sacred language of the Sahajiyas and was analogous to Sanskrit and Pali which were never spoken languages. The Sahajiyas had their centres at places like Nalanda and Udantapura (Bihar Sherif) in Magadha, which were originally the great centres of Buddhism, but which later became the centres of Tantrism, of which the Sahajiyana was a sect. The Sahajiyas of Eastern India residing in these centres, thus seem to have formed a sacred language of their own, to which they would have contributed the elements of their regional languages. The language of these songs do not exclusively represent the language of any part of East India, but it was a composite language like modern Hindi. In their attempt to push back the origin of their literatures to remote antiquity the claimants of these songs are merely taking recourse to linguistic discussions, but they are not considering the historical circumstances

connected with their origin and discovery.

The historical fact as to why the manuscript copies of these songs were discovered only from Nepal and from no other part of India, has not been considered by any of the claimants. In the closing part of twelfth century A.D. Bakhtyar Khalji destroyed the Buddhist monasteries of Nalanda and Udantapuri and killed many of the Buddhist monks. Those who survived fled in panic with their manuscripts to Nepal and Tibet. The manuscripts of these songs of debatable origin thus made their way to Nepal where they were discovered first by the Bengali scholars in recent times. Their discovery in Nepal cannot otherwise be explained.

Another fact which is to be taken into consideration is that the claimants have failed to trace the progressive evolution their literatures from these religious songs. Vadu Chandi Dasa, the first famous Bengali poet, and Sarala Dasa, the first famous Oriya poet, wrote their works in the fifteenth century A.D. and if we take back the origin of these literatures to the ninth-tenth century A.D. when the Charyapadas were composed, there will be an immense gap of five to six

hundred years, when the intermediate links in both literatures cannot be traced. It seldom happens that a literature which has made a serious beginning, completely dies out and reappears after centuries. We are not therefore tempted to regard the Charyapadas as the specimens of the proto-Oriya literature.

Sarala Dasa, a poet of the fifteenth century, was the real originator of the Oriya literature. The date of his birth cannot be accurately determined, but he can safely be placed in the second half of the fifteenth century A.D. The *Adi Parva* or the first book of his *Mahabharata* opens with a long invocation addressed to the lord Jagannatha of Puri who enjoyed then and is still enjoying the unquestioned supremacy among the Hindu gods and goddesses of Orissa and even of India. In course of this invocation which describes the manifold powers and qualities of the lord Jagannatha, the poet tells us that Maharaja Kapilesvara with innumerable offerings and many a salute was serving this great deity and thereby destroying the sins of the Kali Age. The reference leaves no doubt that Sarala Dasa started writing his *Mahabharata* in the reign of Kapilesvara, otherwise known as Kapilendra, the

famous Gajapati king of Orissa who ruled from A.D. 1435 to 1467. Kapilesvara has been described by the poet as the servant of the lord Jagannatha on account of the fact that this great deity had been conceived and regarded as the real king of Orissa since the reign of the Ganga king Anangabhimadeva III (A.D. 1211-1238), who formally dedicated his kingdom to Jagannatha and declared himself to be his deputy and first servant. This custom was followed, as we have already seen, by the subsequent Orissan kings who too conceived their position in the state as the deputy and the first servant of this deity. Even now the Raja of Puri, the traditional representative of the Gajapati kings of Orissa, is the custodian and the first servant of the Jagannatha temple. In view of these facts Maharaja Kapilesvara represented as the first servant of the lord Jagannatha in the opening part of the *Sarala Mahabharata*, can be no other than the Suryavamsi king of the same name. The contemporaneity of Sarala Dasa and Kapilesvara (Kapilendra) has been accepted by all historians. Beside, this contemporaneity is also proved by innumerable internal evidences of his *Mahabharata*.

Three of his books, the

Vilanka Ramayana, the *Mahabharata* and the *Chandi Purana* are so far known and of them the *Mahabharata*, his magnum opus, contains according to a rough estimate more than one hundred thousand verses, each consisting of two lines and covering eighteen volumes of printed pages. The *Vilanka Ramayana* and the *Chandi Purana* respectively contain about twenty-eight hundred and fifty-five hundred verses and respectively cover eighty and one hundred and fifty-five printed pages. In a clear statement the poet declares the *Vilanka Ramayana*, the *Mahabharata* and the *Chandi Purana* to be respectively the first, second and third of his compositions.

There are reasons for the rise of the Oriya literature in the reign of Kapilesvara or Kapilendra, both the forms of which appear in the inscriptions. In the *Gopinathapura Stone Inscription* there is a very (translated by Mr. M.M.Chakravarty into English), which conclusively proves that Kapilendra was a native of Orissa. After centuries a native of *Odradesa* or Orissa ruled its own people, giving them a sense of pride and self-respect, hopes and aspirations, leading them to battle fields for his extensive conquests and opening to them a new geographical horizon. A love for the Oriya language, lit-

erature and culture was therefore an inevitable consequence of the new ferment created by the strong and vigorous rule of Kapileswara. Since the topmost of castes, particularly the Brahmins, were still the devotees of the Sanskrit literature and had perhaps an aversion to the spoken language and its literature, a man from the lower rung of the social ladder came forward to accept the challenge of the time. Times without number Sarala Dasa tells us that he was an uneducated Sudra cultivator and a man of no importance, but the posterity will not accept his low self-estimation and will no doubt take him to be a man of vision, who responded to the call of the time and brought about a revolutionary change in the Oriya literature by becoming its originator and maker. After Sarala Dasa all castes shook off their prejudice against the Oriya literature and conjointly contributed to its growth. Among the poets who immediately followed him, was Jagannatha Dasa, the writer of the Oriya Bhagavata, who was a learned Brahmin Sankritist and who is universally regarded as one of the luminaries of the Oriya literature.

A few poems, notably Vatsa Dasa's Kalasa Chauatisa and Markanda Dasa's

Kesava Koili, have been assigned to the pre-Sarala period, though the arguments advanced in favour of their date have yet been far from conclusive. The main characteristic of these small poems is that each verse in them begins with a consonant of the Oriya alphabet serially covering thirty-four letters. Consequently these works consist of only thirty-four verses or stanzas. This metrical characteristic cannot be traced in any part of Sarala Dasa's vast literature, nor can it be conceived that these very small works were ever utilised by him as his models. A large prose work known as Rudra Sudhanidhi by Narayananda Avadhuta Svami is assigned to the pre-Sarala period by some scholars, but its editor, Dr. K.K.Kar, after a discussion of its internal evidences, has assigned it to the post-Sarala period. The word Mogala (Moghul) which was not in use in Orissa in the pre-Sarala period, has been used in this work. Besides, there are distinct influences of the Sarala Mahabharata to be found on it. The metrical characteristic of the Chautisa literature, explained above, is also to be traced in this work. Evidently the Rudra Sudhanidhi was composed in the seventeenth century. Another very small work known as Sisurveda is also sometimes taken to be a

pre-Sarala composition, but Dr. Natabara Samantaray has conclusively shown that it is a later Oriya translation of a Hindi work. Considering all these facts a conclusion becomes unavoidable that Sarala Dasa was the originator of the Oriya literature.

We have stated earlier that the Oriya folk songs were orally current in this land from a very remote time and they were used and are still being used in various folk dances such as Ghodanacha (Horse dance), Danda-nacha and Sakhi-nacha (Puppet-dance). One metrical peculiarity of these songs is that both the lines of a verse do not contain an equal number of letters, though the last letters of both the lines produce the same sound. All the works of Sarala Dasa are found to have been composed with this metrical peculiarity and, therefore, the metre used by him can be regarded as a direct descendant of the metre used in the folk songs. The metre used by Sarala Dasa has been termed as Dandi-vritta by some scholars, but without any evidence or justification. The poet has nowhere given such a name to the metre used by him. By the fifteenth century the Oriya language had assumed almost its modern form and had become ripe for lit-

erary compositions. The cultivator Sarala Dasa utilised this language to bring into existence the first Oriya literature worth the name. Herein lies his chief credit.

Poetry was in the blood of Sarala Dasa and it flowed from his iron stylus as words flowed from his mouth. While writing his verses, he does not appear to have paused for re-thinking or correction. What he wrote once was final. Rehetoric and pun on words so common in the Oriya literature of the eighteenth century, are completely absent in his writings. His verses are simple, forceful and musical with no trace of artificiality in them. His diction has sometimes risen to great heights, but generally it is commonplace. The poet was no chooser of words, all words being equally good for him for his poetical purpose. His writing is mostly free from Sanskritization.

In writing the Mahabharata, his magnum opus, the poet has followed the main outline of the story of the Sanskrit Mahabharata, well known to all students of Indian literatures, but has made numerous deviation and has added to it copiously the stories of his own creation and various other matters known to him. In the final form Sarala Dasa's Mahabharata is a new

creation analogous to Kalidasa's Raghuvamsa which is distinctly a original work, even though it is based on the Ramayana. The Chandi Purana is based on the well-known story of Durga killing Mahisasura (the buffalo-headed demon) given in Sanskrit literature but here also the Oriya poet has chosen to deviate from the original at several points. His earliest work Vilanka Ramayana is a story of the fight between Rama and Sahasrasira Ravana (thousand-headed Ravana).

It is apparent from numerous biographical sketches given in his works that Sarala Dasa had no systematic education in his early age. What he achieved through self-education and untiring efforts has all been attributed to the grace of the goddess Sarala, the deity of his devotion and inspiration, and he has nowhere taken any credit for what he wrote. Very often he has wanted us to believe that what he produced in his books, was dictated to him by Sarala at night and he merely committed her dictates to writing in the day time. A spirit of humility and intense religiousness pervaded the personality of the poet to such an extent that it is difficult to reconstruct a real picture of his own personality from his writings. Scattered throughout all his

works his odes, invocations and prayers to different deities in general and to Sarala in particular are so numerous that, when collected together, they will form a book of respectable size. While writing them the poet appears to have been in his best element, his fancy soaring high and his diction assuming the best form.

Complete surrender to a personal deity conceiving him or her as the source of all knowledge and inspiration was a common practice which Sarala Dasa has shared with other poets of his age. All Oriya poets writing before the middle of the sixteenth century are found in their works to have designated themselves as 'Dasa' meaning a slave or a servant, no doubt of a particular god or goddess. We have thus a long list of poets preceding and succeeding Sarala Dasa, whose names end with 'Dasa' e.g. Vatsa Dasa, Markanda Dasa, Sarala Dasa, Jagannatha Dasa, Balarama Dasa, Yasovanta Dasa, etc. None of them has borne the surname of his caste. These poets have also shown an intense spirit of humility and have declared themselves in their writings as uneducated, unwise, poor and the like. They have also said in no uncertain words that they composed their works for the benefit of the

"entire world", "all people" and "all creatures". In the fields of religion and literature the spirit of humility was the order of the age, which Sarala Dasa has shared in a greater degree.

The predominant sentiment in Sarala Dasa's poems is not love, but war. He was also actuated by a strong religious zeal to compose religious books in a language intelligible to all and to make them available to the general public in Orissa. He tells in no uncertain words that he composed his poems for the benefit of all "human beings". In pursuance of this declared object he made composition of poems his life work. There are several indications in his Mahabharata that he served as a soldier in the army of the Gajapati king of Orissa and his association with the army brought to him a variety of experiences. The stories he heard, the battle scenes which he witnessed, the places that he visited in the company of the army, the historical incidents and names that he could know, all remained stored up in his splendid memory to be utilised in his writings. The manifold experiences which he gained through his associations, widened his mental horizon or else the knowledge of a variety of subjects, particularly of history and geography, that he has

exhibited in his Mahabharata, can hardly be expected from a man living in an obscure village. It may be mentioned that medieval Indian armies included not only soldiers and commanders, but also statesmen, learned and wise men, ambassadors, entertainers, astrologers, physicians, historians, geographers and the like. Sarala Dasa with his remarkable memory and understanding appears to have fully utilised his sojourn with the army and nothing seems to have been lost of what he saw and heard during this period.

A great poet like Sarala Dasa had not attracted the notice of the Indian scholars till the present writer published a monograph entitled Sarala Dasa (Makers of Indian Literature Series, Sahitya Akademi New Delhi, 1975). In the Delhi Sultanate, Bharatiya Vidya Bhavana, 1967, p.520, Dr. S.K.Chatterjee makes the following observation about Sarala Dasa :

"Another important poet of the fourteenth century is Saraladasa, who may be described as the first great poet of Orissa. He wrote the Chandi Purana and the Vilanka Ramayana, both extolling the Goddess Durga, and gave a brief version of the Mahabharata in 700 verses, in which he omitted certain portions of the story

and brought in a number of new stories and modifications. The language appears modern, but Oriya has not changed much in the course of the last seven or eight centuries."

The observation does no justice to Sarala Dasa nor to the ancient Oriya literature. Containing as it does over one hundred thousand verses Sarala Dasa's Mahabharata is greater in bulk than even the Sanskrit Mahabharata. The poet was a contemporary of Kapilendra and therefore, as we have shown above, he lived in the first part of fifteenth century and not in the fourteenth century. In his Vilanka Ramayana he has extolled Sita and not Durga. Every fact given in this short observation, is untrue and misleading.

Sarala Dasa's work formed a perennial source of inspiration to the succeeding generations of writers and also, so to speak, a perennial spring from which the later Oriya literature flowed like a stream without a break.

Jagannatha Dasa : Among the great writers who immediately followed Sarala Dasa in the fifteenth-sixteenth century A.D. Jagannatha Dasa stands pre-eminent. He has been represented to have written several works

such as Bhagavata, Gupta Bhagavata, Darubrahmagita, Gaja-stuti, Dhruva-stuti, Tulabhina, Itihasa Purana, Pasanda-dalana, Manasi-kosa and Rasakreedā. He was a contemporary of Prataparudradeva and Sri Chaitanya, and therefore, must have lived in the first part of the sixteenth century. His magnum opus, the Bhagavata, is based on Srimadbhagavata Purana, but is not a translation of it. The poet has deviated from the Sanskrit original at several points and has also omitted certain episodes and has added some episodes of his own. The book has been written in such a simple and charming language that it is under stood and admired by all classes of readers. Certain verses of this work have become proverbial and are cited on all occasions by the people throughout Orissa. Every village in Orissa had originally a room or a small house, known as Bhagavata Tungi, where Jagannatha Dasa's Bhagavata was being recited and listened to by a gathering of the villagers. This Bhagavata is almost a Bible to the Orissan people and it still enjoys the same popularity in Orissa as the Rama Charita Manasa of Tulasi Dasa does in North India. Jagannatha Dasa was a learned Brahmin Sanskritist and by a judicious combination of Sanskrit and local words he created the first standard language of Orissa, which is being followed even now. This was another great

achievement of this great poet.

Balarama Dasa : He was the celebrated author of the first Oriya Ramayana. Like Jagannatha Dasa, Balarama was also a contemporary of Prataparudradeva and Sri Chaitanya. As a poet he displays a considerable poetical genius and in his time his Ramayana was a great popular work which was recited in the public and listened to by all classes of people. The Brahmins, however, did not quite welcome either the Bhagavata of Jagannatha Dasa or the Ramayana of Balarama Dasa. Balarama Dasa's other works are Arjunagita, Gajanistaragita, Bedhaparikrama and Mriguni-stuti.

Apart from these two great poets of the age the other three luminaries are Yasovanta Dasa, Ananta Dasa and Achyutananda Dasa whose philosophical writings have been embodied in the works still current in Orissa. Of late there has been a controversy as to whether Achyutananda Dasa actually belonged to this group of the five poets commonly known as Panchasakhas. It seems that there were several poets bearing the name Achyutananda, and the later traditions associated one of them with Jagannatha Dasa and others. Arjuna Dasa who wrote Rama-vibha is also assigned to this period.

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[Late Professor Krishna Chandra Panigrahi, Padmasree, was an eminent historian whose monumental studies on Orissa's archeological remains and temple are still considered most authoritative. The above article is an excerpt from his book *History of Orissa.*]

Orissa Police : A Modern Law & Order Force.

Sri Sahadev Sahoo

People form a State, the supreme association, to ensure peace within and without. State manifests itself through government which provides security from external aggression and safety from internal disorder. Police as an arm of Government are concerned with the latter. They maintain order and enforce law. Optimum utilisation of any resource for the common good presupposes well-maintained law and order. The society has within itself a lot of people who would benefit from lawless and disorderly conditions and it is they who commit crime. Crime need not only be described in words of law but inferred from the spirit thereof. Sometimes democratic right of dissent gives rise to what they would call civil disobedience which, interpreted against existing

law, is unlawful. People want a change either in some law or a change in the Government. Police as the agency to preserve the society as constituted are required to deal with these dissenters or protesters.

Thus the police has to deal with two modern law-violators. Crowd has to be dispersed with the least use of force. The criminals who are becoming adept in wiping out evidence of their crime have to be nabbed with the latest scientific aids to investigations. This calls for a modern police force and that is what the Orissa Police is.

Whether it is pinching a rupee or killing a person the expert criminal leaves no trace of his crime and sees to it that nobody comes forward to give evidence even if some have seen the crime. Detection calls for scientific aids. The Orissa Police has set up the State Forensic Science Laboratory at Bhubaneswar and regional Forensic Science Laboratories at Berhampur and Sambalpur which undertake examination of exhibits recovered from the site of crime or the body of the criminal. About a hundred police officers have been trained on scientific aids to criminal investigation. The laboratories now provide scientific examination to 20,000 exhibits annually.

A Finger Print Bureau has been set up at Bhubaneswar and it has collected 1,50,000 finger print slips so far. The Bureau has established identity and past antecedents of about 400 ex-convicts and tendered expert advice in about 300 cases. It has formatted about 85,000 finger prints for the state computer centre which will ultimately coordinate with other state governments in identifying criminals of inter-state mobility.

The Orissa Police has a Hand-writing Bureau. As handwriting on documents provides a sure proof of complicity in cases of murder, dacoity, fraud, dowry torture and death, embezzlement, cheating and the like, this Bureau's scrutiny and expert opinion are sought after in judicial courts. So far, since its establishment, 600 cases have been well documented for evidence in the courts.

There is a Photo Bureau which attends to finger prints and foot prints both at the scenes of the crime and elsewhere, and thereby provides identifiable comparisons in case matters. Besides imparting training to about 300 police personnel, it has attended about 600 cases and provided more than 3000 photographs for comparison.

Sometimes the criminal leaves his or her bodily scent or the scent of the articles used. Trained dogs come handy to follow the trail. The Orissa Police has a Dog Squad and they are distributed among the districts to be of help at very short notice. The efficacy of the police dog lies in the immediacy of its use. An unusual delay or a windy atmosphere erases the scent left behind by the criminal. It is necessary that we follow the grammatical sentence "No sooner had the crime been committed than the dog arrived". During the last two years the Orissa Police have employed the dog squad in about 780 cases every year and got successful clues in 472 and 509 cases respectively, a success rate of 65%. The highest percentage of success was in Cuttack and Bari-pada, because the informers did not waste time in contacting the local police stations.

The Criminal Intelligence Bureau keeps all records of photographs, personal files, history sheets and index cards of inter-state and inter-national criminals to exercise surveillance on their activities

and movements. This Bureau also maintains liaison with its counterparts in other states and, if required, in other countries.

In a crowded world, the children become susceptible to population stress and develop criminal propensities which are aided and abetted by crime-prone adults. It has become necessary more than ever that the Police exercise greater vigilance in not only detecting crimes in which children are used but prevent juvenile delinquency. Hard cases are sent to the courts and softer ones let off on probation. There is a visible growth in the number of minor boys and girls missing, though adults do wander away on their own. The Missing Persons Bureau is designed to trace out the missing ones in a bid to reunite the family and foil the designs of the criminals who seek any such opportunity for trafficking in unattached persons.

As a good number of persons wish to get rich quickly the incidence of embezzlement is on the rise. The Orissa Police has set up an Embezzlement Squad specially trained to handle all such cases. Number of

cases registered, investigated and charge-sheeted have now reached two digit figures.

Contrasted with criminal detection and prevention activities the Orissa Police's record of keeping order is no less enviable. There has been no communal tension of the scale noticed elsewhere in the country. Nor has there been any large scale crowd violence in the state. The peaceful atmosphere of Orissa is rather the envy of the neighbouring states.

All this has been possible because of the steps the Government has taken in modernising the police force and upgrading the standards of the police administration. The needs of the Police communication and transport have been adequately looked after and the police welfare and housing needs are being given special attention.

It is hoped that in the days to come the Orissa Police would further strengthen itself and become a source of inspiration to its neighbours in dedication to duty and sincerity of purpose.

*Commissioner & Secretary,
Home
Government of Orissa
Bhubaneswar.*

TRIBAL LANGUAGES OF ORISSA

Professor K. Mahapatra

The tribes of Orissa have their distinct ethnic identity which is overtly marked in their languages besides many other cultural traits and traditions. The tribal ethnography can never be complete without reference to their verbal behaviour. It is remarkable that even though different tribal communities have their own independent languages, yet they share at the inter-group level certain basic linguistic features regardless of their own linguistic ethnicity. The most fundamental characteristics of human verbal behaviour are preserved in their languages which are distinctively observed in vocabulary, sound symbolism, grammatical structures or such other aspects. Thus, Santali and Sora of the same Munda family and Remo, Parji and Bhatri of Munda, Dravidian and Indo-Aryan families respectively show certain common features of the nature and structure of the tribal languages. For example, absence of sets of separate honorific terms

of pronouns, formation of echo-words with change of vowels of the basewords, construction of morphologically variant verb-forms to indicate motion towards or away from the speaker, formation of self-benefactive imperatives, use of classifiers in respect of human and other animate and non-animate nouns, two-way contrast in tense as past and non-past, different sets of directional demonstratives, monomorphemic exclamatory verb phrases, etc. are some of the universals in the nature of tribal languages. Such common typical features characterise the tribal languages as a part of their unique culture and ethnicity.

Some people define tribal languages as 'dialects' simply because the languages have no script and literature. This is not even common-sense about the distinction between the concepts of 'language' and 'dialect'. Most of the tribal speeches belonging to Munda or Dravidian stock are structurally and genetically definable as autonomous languages. However, the tribal speeches having basic affinities with Indo-Aryan literary languages may be treated as dialects.

Ethno-linguistic Classification

The tribes of Orissa are

ethno-linguistically classifiable into three groups. Munda (Austroasiatic), Dravidian and Indo-Aryan. A group-wise tentative inventory of the tribal languages and dialects may be drawn up as follows:

Munda Group

Gata (Didayi)
Gutob (Gadaba)
Juang
Koda
Birhor (Mankidia)
Mundari (Mundari/Munda)
Santali
Sora (Saora, Lanjia, Juray, Arsi)
Gorum (Parenga)
Remo (Bonda)
Kharia (Kharia/Mirdha)
Korwa
Bhumija
Ho (Ho/Kolha)
Mahili (Mahali)

Dravidian Group

Parji (Dharua)
Koya
Kui (Kondh-Kutia/Dongria)
Konda/Kubi (Konda dora)
Ollari (Gadaba)
Kurukh/Oraon (Oraon)
Gondi (Gond)
Madia
Kuvi (Kondh, Jatapu)
Pengu (Pengo Kondh)
Kisan

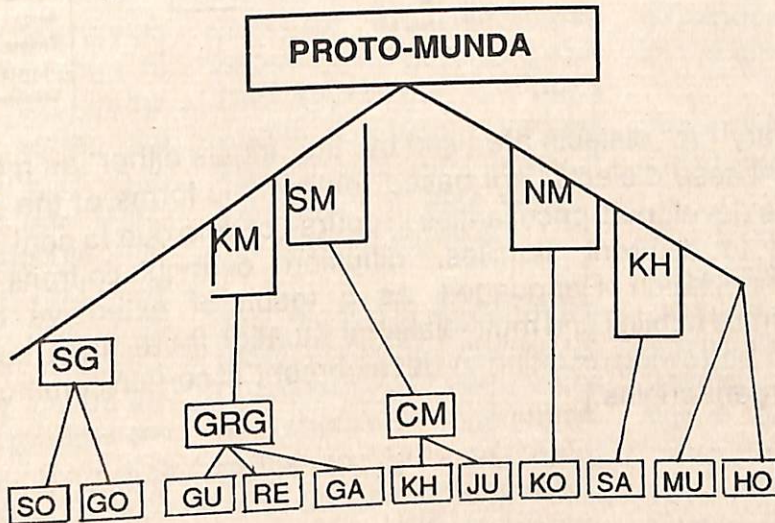
Indo-Aryan Group

DIALECTS	LANGUAGE AFFINITY
Desia	Southern Oriya
Bhuyan	Southern Oriya
Bhatri	Southern Oriya

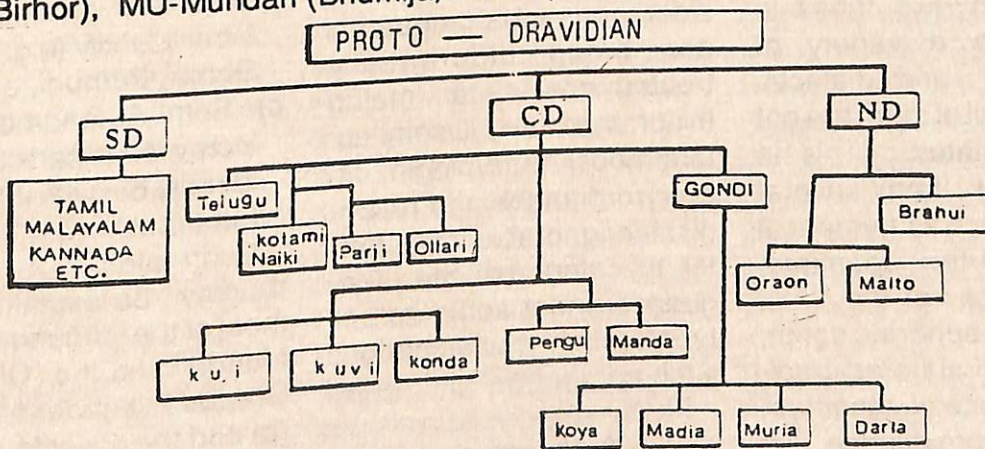
Jharia	Southern Oriya	Aghria	Western Oriya (Sambalpur)	Sadri	Hindi - Oriya
Matia	Southern Oriya			Binjhia	Chhatisgarhi - Hindi
Kondhan	Western Oriya (Sambalpur)	Kurmi	Northern Oriya-S.W. Bengali	Banjara	Hindi Dialect
Laria	Western Oriya (Sambalpur)	Sounti	Northern Oriya-S.W. Bengali	Baiga	Chhatisgarhi
Bhulia	Western Oriya (Sambalpur)	Bathudi	Northern Oriya-S.W. Bengali	Bhunjia	Marathi
				Halbi	Oriya-Marathi-Chhatisgarhi

Genetic Relation

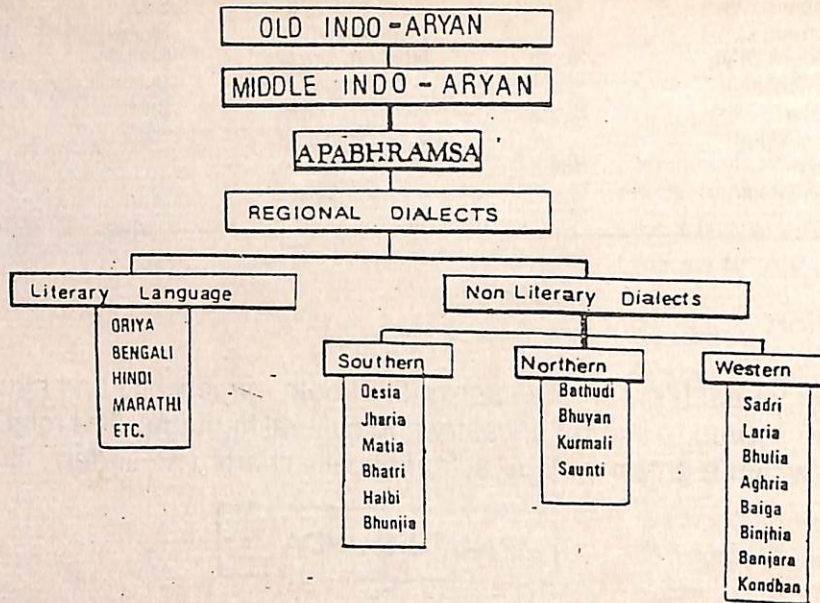
The languages of each group are inter-related both genetically and structurally. They have a common source, common ancestry and cultural heritage. The relationship among the languages within a group may be schematically charted as under.



[SM-South Munda, NM-North Munda, KM-Koraput, CM-Central Munda, SG-Sora : Groum GRG-Gutob : Remo : Gta., KH-Kharia, JU-Juang, KO-Korku, KH-Kherwari, SA-Santali (Mahili, Birhor), MU-Mundari (Bhumija, Munda), HO-Korwa]



[SD-South Dravidian, CD-Central Dravidian, ND-North Dravidian]



[All these non-literary I.A. dialects are used by the tribals either as mother tongue or second language. These dialects are based on archaic forms of the modern literary languages and have developed peculiarities in course of time due to convergence of languages belonging to different families, diffusion of linguistic traits across genetic boundaries and hybridization of languages as a result of extensive bilingualism or multilingualism. In multi familial and multi-dialectal situation there have been lot of inter-mixture and mutual borrowing resulting in development of certain common traits among the dialects of divergent origins.]

Typological Categorisation

It appears from the above statements and statistics that the sixty-two tribes in Orissa use a variety of languages and dialects. However, all of them are not of equal status. This is conceivable from several aspects, such as, numerical strength of the speakers, primitiveness of the tribe, use of own separate script, richness of oral literary tradition, influence of other languages, prevalence of bilingualism, tendency

towards Oriyanization, adaptation of regional Oriya dialects at inter-tribal level, etc. As a result of such considerations tribal languages are being differentially treated now as a major/minor, autonomous/semi-autonomous, pure/pidgin, literary/ordinary and recognisable/ignorable. It is better to categorise the languages under some sort of typological classification, such as,

a) Autonomous languages with definite

tribal identity (e.g. Santali, Remo, Kurukh, etc.)

b) Semi-Autonomous dialects with an established tribal identity (e.g. Bhuyan, Bhatri, Bathudi, etc.)

c) Semi-Autonomous dialects with no particular tribal identity but with inter-tribal functions (e.g. Desia, Sadri, etc.)

It may be explained that most of the languages of the Munda and the Dravidian Groups fall under typology-(a) and the dialects of Indo-Aryan groups came under typology-(b) and (c).

In this context, other notable facts are as follows:

- i) Some of the tribes, such as Lodha, Mirdha Bhumia, Jatapu, Bagata, Pentia, sections of Gond etc. do not have distinctive linguistic identity and tribes like Mahali, Kondh, Kisan etc. have only dialectal distinction from autonomous languages like Santali, Kui-Kuvi, Kurukh etc.
- ii) Some of the tribes having scattered settlements in different regions, under the same tribe-name use different languages (e.g. Kondh, Saora etc. living elsewhere outside Koraput, Ganjam and Phulbani districts use Oriya dialects) and on the other hand in some cases the name of the tribe and the name of their language are different (e.g. Dharua speak Parji, Kolha speak Ho, Gadaba speak Gutob or Ollari, Kondh speak Kui or Kuvi or Konda).
- iii) Larger tribes like Kondh, saora etc. have several subgroups as there are Kutia/Dongria/Pengo/Jatapu Kondhs and Lanjia/Juray/Arsi/Sudha Saoras and each of these subgroups speak a distinct dialect of the language.

Problems of orthography

In general the tribal lan-

guages are non-literary. The languages began to appear in written form only in the last century. Initially the Christian missionaries produced written and printed texts in Roman script. Subsequently attempts were made for using the scripts of the regional literary languages (Oriya, Telugu, Bengali, Hindi, etc.). However, in the recent past, between 1935-85, at least four scripts have been devised for the languages Santali, Ho, Sora and Kui. The exponents of these scripts are taking various steps to promote literacy in the scripts at their respective community levels.

It is, of course, true that the tribal languages have such phonetically peculiar sounds as checked consonants, glottal stop, low tone, stress, long or geminate vowels, positionally different articulation of palatal and velar nasals, different qualities of vowels etc. It is also true that no language has perfect one to one equation of its phonemes to graphemes. Hence, instead of developing separate writing systems for each and every spoken language, a more practical solution could be to employ the existing Oriya graphemes with necessary diacritic marks for standardising the orthography of peculiar phonemes of the tribal languages. Experi-

mentations in this direction are gradually getting more popular and academic support because of the simple fact that the tribals being bilinguals by necessity, they can use a single script for writing their own languages as well as the State language. It is noteworthy that publication of more and more books in many tribal languages during the last few years by adapting Oriya writing system has greatly expanded literary activities in the tribal languages.

Necessity of Tribal Language Survey

The tribal Orissa is in fact represents a micro-linguistic area as we find here three different ethnic and linguistic communities divided into sixty-two separate tribes live together and use one language at intra-tribe level and another at inter-tribe level, or mix up one with the other at both the levels. Hence, for having a very clear picture of the linguistic situation, first of all, a survey of the tribal dialects of Orissa is indispensable. It is a pity that as yet no studies of dialectology as such have been done in tribal dialect areas. The scope and objects of such a survey may be as follows:

- (a) Reconnaissance of dialectal variations typological and areal.

(b) Identification and classification of speech varieties.

(c) Grouping of different forms of speech on the basis of structural and genealogical affinities, mutual intelligibility and geo-physical distribution.

(d) collection of lexical, grammatical and textual materials.

(e) Evaluation of bilingualism its nature and extent.

(f) Evaluation of tribal scripts vis-a-vis adaptation of a standardised writing system in Oriya script.

(g) Evaluation of the process of Oriyanization/Tribalization in operation in the tribal language speaking communities and tribal dominated areas.

The results of this survey is likely to minimise the confusion over the status of a language and reduce the demo-linguistic complexities and the long array of languages to a manageable sub-groups. Once the languages are clearly identified and properly classified into cognate groups, due attention can be given for their study, preservation and promotion at administrative, academic and sociocultural spheres.

We may recall in this context a pertinent statement of Pandit Nehru that says "The language problem is almost always exceedingly impor-

tant from the psychological point of view. The best solutions one might offer would break down if it produced wrong reaction on the other side. One must therefore make it perfectly and absolutely clear that Government would encourage the tribal languages. It is not a question of merely allowing them to continue. They must be encouraged and helped and made to flourish."

(Conference on Tribes and Scheduled Areas, New Delhi, June 1st, 1960).

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APPENDIX-I
POPULATION OF SCHEDULED TRIBES

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Sl. No.	Scheduled Tribes	Population (1981)	Place of Concentration
1.	Bagata	2,616	Cuttack, Balasore
2.	Baiga	188	Kalahandi
3.	Banjara	10,925	Koraput, Mayurbhanj
4.	Bathudi	1,47,970	Mayurbhanj, Keonjhar
5.	Bhottada	2,47,709	Koraput, Kalahandi
6.	Bhuiya, Bhuyan	2,07,793	Sundargarh, Keonjhar
7.	Bhumia	75,221	Koraput, Sundargarh
8.	Bhumij	1,57,613	Mayurbhanj, Balasore
9.	Bhunja	98,631	Kalahandi, Koraput
10.	Binjhal	98,631	Sambalpur, Bolangi
11.	Binjhai, Binjhoa	8,041	Sundargarh
12.	Birhor	142	Sundargarh
13.	Bondo Paraja	5,895	Koraput
14.	Chenchu	39	Kalahandi, Sundargarh
15.	Dal	18,163	
	Bohangir, Kalahandi	8,611	Koraput, Mayurbhanj
16.	Desua Bhumij	8,611	Koraput, Mayurbhanj
17.	Dharua	1,978	Koraput
18.	Didayi	56,913	Koraput
19.	Gadaba	2,263	Koraput, Dhenkanal
20.	Gandia	618	Kalahandi, Sambalpur
21.	Ghara	6,02,749	Kalahandi, Sambalpur
22.	Gond, Gondo	44,496	Mayurbhanj
23.	Ho	8,883	Koraput, Kalahandi
24.	Holva	18,457	Koraput, Ganjam
25.	Jatapu	30,876	Keonjhar, Dhenkanal
26.	Juang	15,189	Phulbani, Puri
27.	Kandha Gauda	8,549	Sundargarh, Sambalpur
28.	Kawar	1,44,178	Sundargarh, Sambalpur
29.	Kharia, Kharian	1,434	Keonjhar, Mayurbhanj
30.	Kharwar	9,89,342	Koraput, Phulbani
31.	Khond, Kond, Kandha Nanguli Kandha, Sitha Kandha	2,27,992	Sambalpur, Sundargarh
32.	Kisan	4,235	Keonjhar, Phulbani
33.	Kol	7,562	Sundargarh
34.	Kolahoharas, Kol Loharas	3,26,523	Mayurbhanj, Keonjhar
35.	Kolha	4,711	Dhenkanal, Keonjhar
36.	Koli, Malhar	17,442	Koraput, Ganjam
37.	Kondadora	5,823	Dhenkanal, Keonjhar
38.	Kora	986	Sambalpur, Koraput
39.	Korua	19,136	Koraput, Phulbani
40.	Kotia	87,260	Koraput
41.	Koya	1,498	Sambalpur, Bolangir
42.	Kulis	5,100	Mayurbhanj
43.	Lodha	1,066	Koraput, Dhenkanal
44.	Madia	11,767	Mayurbhanj, Sundargarh
45.	Mahali	205	Kalahandi, Sundargarh
46.	Mankidi	1,005	Mayurbhanj, Sambalpur
47.	Mankirdia	12,123	Dhenkanal, Koraput
48.	Matya	28,177	Sambalpur, Bolangir
49.	Mirdhas	3,38,935	Sundargarh, Sambalpur
50.	Munda, Munda Lohra, Munda Mahalis	24,667	Sundargarh, Mayurbhanj
51.	Mundari	19,465	Koraput, Ganjam
52.	Omantya	2,15,337	Sundargarh, Sambalpur
53.	Oraon	9,622	Koraput
54.	Paranga	2,67,184	Koraput
55.	Paroja	7,908	Kalahandi, Sambalpur
56.	Pentia	2,313	Mayurbhanj, Keonjhar
57.	Rajuar	5,30,776	Mayurbhanj, Balasore
58.	Santal	3,70,060	Ganjam, Sambalpur
59.	Saora, Savar, Saura, Sahara	3,29,209	Mayurbhanj
60.	Shabar, Lodha	67,872	Keonjhar, Mayurbhanj
61.	Sounti	1,034	Mayurbhanj, Balasore
62.	Tharu		
ORISSA		5,915,067	

MASS SEA-TURTLE NESTING IN ORISSA COAST

As the caption indicates, this biological phenomenon has been occurring on the eastern coast of Orissa for the last several decades, if not more. This interesting phenomenon has occurred on 4/5th March 1990 night and hence this general information for the interested readers, naturalists and others.

The Pacific Ridley of Olive Ridley Sea Turtles (*Lepidochelys olivacea*) are one of the seven species of marine turtles and mysterious visitors to the above place only for mating in November and nesting in January/March. Once this biological phenomenon happens, they vanish into the deep sea and nothing at all is known about them. Many things are fondly believed by naturalists, but those are yet to be established by reliable scientific data.

But in any case the phenomenon is breath-taking

and worth observing by anyone interested in Nature.

The place:

Gahirmatha is a narrow strip of beach extending over 10 Kilometres on the eastern coast of Orissa. It is situated on the estuary of Bramhani and Baitarani known as confluence of MAHIPURA. The place can be reached from Bhadrak (on main South Eastern Railway line) to Chandbali and then to Gahirmatha by river in creeks. By any standard, the place still remains calm, quiet and forlorn in spite of numerous trawlers, legal and illegal indulging in fishing.

Perhaps that is the single factor responsible for thousands of Sea-turtles to throng to the beach to lay millions of eggs. And they are all in a mad rush jostling with each other to lay eggs, even by scouring other nests.

There is a break of this phenomenon intermittantly

(in 1982 and 1988) which may be again a biological factor peculiar to the species. But as usual, many reasons were attributed to it more by conjecture than by any sound scientific reasoning. For example, even the small extent of casuarina plantation raised nearby, or presence of few dead turtles in the beach netted by fisherman and killed are offered as possible reasons for the above. But the records and local enquiry reveal that they are coming from decades and ages and our conjectures are rather recent.

The phenomenon :

The sea-turtles come in hundreds and thousands (last year the biggest number was 96000 in one night) when it is the 8th or 9th day after the Full moon or New moon. The temperature, texture and slope of the beach, direction of the wind should be all ideal. It may be because, they are filled with 100 to 150 eggs, with great biological urge to deliver during the night only. They come well after midnight and vanish before the sun rises. The beach is again calm and forlorn only bearing the mark of their crawl. The nests are well rammed and concealed so that the predators are deceived.

The entire operation lasts for about 7 to 10 days, the peak being anywhere in the middle. Only the female turtle comes with the wave, gently crawls to find a suitable place, digs the nest with hind flipper and deposits one after one egg (37 mm diameter) with mucous within 45 minutes. Then the sand is well rammed and neatly camouflaged so that predators like feral dogs, kites and jackals don't devour the nests. After laying the eggs, the mother again is lost in the sea. Whether each and every mother again returns is a mystery but two drops of lacrymal fluid is again interpreted by human analogy as mother's departing tears.

As pointed earlier, the above phenomenon has been going on for decades. For example, long before the present conservation measures started the eggs were officially sold in boat loads (Rs.15/-per boat load) finding its way to Metropolitan cities like Calcutta, to be adulterated with omlettes. So also the turtle meat used to be sold in broad daylight.

Now of course the public and Governmental consciousness is laudable. The coast guards watch over the entire coast to prevent major poaching of the turtles by trawlers. The beach is guarded by the forest staff

till the babies emerge and go to the sea. The law is stringent for the poachers.

Why conserve :

Sometimes questions are asked as to why conserve and protect this species about which nothing is known. Is its population status really threatend ? What is the economic gains for a state like Orissa ?

The answer is very simple, and that is, we must know all about the species to utilise it to the best possible use. Even if there is no direct benefit to the economy, it is a contribution to the propagation of a species belonging to the oldest Reptilian group.

With the above objective in view, all efforts have been made during the last one and a half decades by government agencies and naturalists. Many insights have emerged about the biology of this species. Some of them are the following :

1. Previously its migration was believed to be from far away coast like Mexico. But now some biologists believe that it may not be that far and rather very near like the coast of Srilanka. But this is again a preliminary hypothesis rather than a conclusion.

2. A small percentage of the population visit the Gahirmatha coast year after year.

3. By safeguarding the nests, the baby turtles could survive much beyond the casualty by predators.

4. The eggs usually spoiled by the turtles themselves under the urge to lay eggs over existing nests, may number to millions. It holds the same protein value of chicken egg and could be a big source of protein.

5. Its rearing in captivity has shown an ovulating trend in the 3rd and 4th year. However this is an unconfirmed preliminary observation.

6. The baby turtle immediately travels to the sea irrespective of the direction of emergence from nests hatched after 50 to 60 days. The meat and blood possess great medicinal value.

Some factual information:

Gahirmatha is perhaps World's largest rookery for the Olive Ridley turtles. The maximum number coming to nest so far assessed is more than 6.00 lakhs in one season, during two nestings. The number of average visitors is 4 lakhs. They lay 100

to 200 eggs. So, on an average more than 40 million eggs are laid and zealously guarded by the forest staff with very meagre resource.

Each turtle weighs about 40 to 50 grams and measures about one metre in length. Each egg is about 30 grams and contains protein of same food value of chicken egg. Roughly about one crores of eggs are destroyed due to several biotic and abiotic factors. By weight, its equivalence could be about 30 tons of protein and other food values including water content. A judicious management of this resource may be a source of protein. But the present knowledge of this

species is so scarce that nothing beyond only conservation could be thought of. By such conservation during last one and a half decade atleast 200 crores of baby turtle have been added to the population. It is presumed that in a very modest assessment of the rate of survival at 0.1 per cent of the population added by such conservation measures the population comes to about two crores. From a study of the dead turtles coming to the shore it is believed that 1/3 population could be male and 2/3 females. Under the usual formula of estimation it is believed that the total population could be anything round about 168 lakhs of which the sub-population of Gahir-

matha works out to only 1.7%. But this knowledge is based on rudimentary experiments and more extensive study is necessary.

For the present, the government agencies only protect the turtle, its nests, eggs and hatching as zealously as possible against all predators and the turtle comes and goes away to the deep and unfathomable sea. It may come back or may not. So the necessity to acquire as much knowledge as possible from the short visits of this ancient reptalian order and utilise it to the best advantage of man.

(Courtesy :
Chief Wildlife Warden, Orissa)



THE APPLIQUE WORK OF PIPLI

Bibhuti Mishra

Applique literally means a decoration or ornament made by cutting pieces of one material and applying them to the surface of another. Usually the material is of lace-type fabric; but there are mainly two techniques of applique work. In one, bits and pieces of fabric or diverse designs are stitched together to produce a pattern. But in the other strips of fabric with some design are applied to a background textile material and stitched from below. The latter technique has been adopted by the applique workers of Pipli in the district of Puri in Orissa.

The origin of applique work of Pipli is lost in antiquity; but it can be safely assumed that it is as old as, if not older than, the famous Lord Jagannath temple of Puri (circa 12c A.D.). Lord Jagannath, the focus of piety and religious beliefs in Orissa, is also the nerve centre of Oriya life and society and thus was the prime source

of inspiration behind Orissa's rich heritage of arts and crafts. The applique work of Pipli was no exception and the artists drew motifs for their work from the Lord. In the beginning applied clothing was supplied to the Lord's temple and they were primarily used as canopies over the deities; hence the name-Pipili *chandua* (canopies).

Like all ancient art, applique art was also the specialised domain of a distinct sect of people called *darjee* (tailor). A cluster of about sixty families of *darjees* was based in Pipli, some forty kilometres away from Puri and twenty kilometres from the state capital Bhubaneswar. They regularly supplied applied materials to the temple and to the royal courts. It was also a common practice in Oriya households to hang awnings over the family deities and so many common people were the customers of such applique work. Besides in festivals, most notably during the famous *Rathayatra* (car festival) of Lord Jagannath, there was extensive use of ceremonial items of applique like *chhatra* (sacred umbrella), *alata* (royal fans), *dhwaja* (royal finial), *prasa* (spears) etc. apart from the much-used canopies. In marriages and other such festive occasions too, there was use

of these ceremonial items.

But with the advent of modern times there came a swerve away from tradition and culture which resulted in a tapering off in the demand for applique work. Sixty families had swollen to three hundred and fifty. Because of the hard work and poor returns many left this familial profession and went in search of greener pastures. Those who stayed back continued to languish in poverty.

Modern times brought in its wake many changes in the design, motifs and uses of the applique work. From the sanctum of the Lord it came to the drawing rooms of art buffs and lounges of star hotels. Gone were its ceremonial uses; it became a style, a thing in fashion. It was adopted to suit modern tastes and accent was now on household items. Canopies and big fans gave way to table-cloth, wall-hangings, door curtains, garden umbrella, parasol, shamiana, bed-sheets, pillow-covers, valise et al. Even some ladies got their dress designed in applique. Customers' preference also brought about a change in themes and there came to be a heavy accent on flora and fauna motifs. Thus we find a lot of applique designs with lotus, jasmine, sunflower, elephant, parrot and peacock

etc. Sometimes the aesthetic ideas of the Oriya housewife as she shows in the *alpana* (floor decoration) of her home, are also absorbed into the applique designs. To add to the overall beauty of the material, craftsmen of Pipli, often, resort to the use of glass beads, mirror and plastic pieces too.

Previously the cloth used for applique work used to be hand-spun, coarse material and the cloth was also dyed manually by means of a mixture prepared out of some local herbs, roots and mud. But today all that is a thing of the past. Mill-made fabric has replaced the hand-spun cloth and the texture of the work has improved with the increasing use of poplin, velvet and mercerised cotton etc. The background fabric is selected out of the five primary colours of black, blue, green, red and yellow. Hand stitching has given way to machine stitching and thus the work is completed much faster today.

The applique technique requires absolute concentration and complicated stitching. For a work that exerts tremendous strain on the eyes, the workers are poorly paid. The price of applique articles are very low and on an average a family earns about seven hundred rupees a month with which

they just about manage to make both ends meet. But with the spiralling prices the craftsmen are progressively getting poorer. The major problem that they face is the absence of any systematic marketing strategy. One Applique Workers Co-operative Society is valiantly trying to improve the lot of the workers. Infrequently they are commissioned by the government for some work; but the returns is just pittance. Like most of the co-operatives in our country it is in a bad shape today. Another society, set up some years back, has already closed down due to administrative mismanagement. So the only sales outlet for applique articles, apart of shop sales, is Orissa Co-operative Handicrafts Corporation whose sales emporium *Utkalika* has branches at Delhi and Calcutta besides its headquarters at Bhubaneswar. The proceeds from shop sales is meagre as some twenty odd roadside shops vie with each other for the buyers' attention. "Bargaining is the bane of our trade. Somehow there is a feeling that we fix high rates; so after haggling our fixed price is brought down so low that it hardly covers the expenses. We helplessly toe the line as we have to dispose of the material," laments one master craftsman of Pipli. Tourists in general and

foreigners in particular are the main patrons. There is a steep demand for applique articles inside and outside the country; but here the agents or middlemen come in to reap a fat profit by procuring articles at a very low price from the workers and selling them at exorbitant rates.

Though applique work began as ceremonial items for the use of the Lord, today both Hindus and Muslims are engaged in this art. Applique art requires meticulous training from the childhood. But there is hardly any training programme worth the name; the skill in this ancestral art is imparted in the family from generation to generation. Women also pitch in with some help by attending to the primary works like cutting stylised motifs, twisting ringlets etc, that do not require a high degree of expertise. The art of applique is practised by few families of Puri and at some places in western Orissa too. But the works of Pipli have a vibrance and simplicity that remain unequalled.

The growth in hotel industry and tourism has resulted in a situation where there is a lot of potential for supply of applique articles. This demand in the domestic market as well as the export sector need to be

exploited by a proper channelising and selling agency so as to make the fruits of it reach the craftsmen. The state Handicrafts Corporation which is virtually defunct today, needs to be revitalised to give a boost to not only applique work but also to other ancient art and crafts of Orissa. More

exhibitions should be arranged inside the country as also abroad to give necessary exposure to applique work. Unless the economic lot of the workers improve, their artistic excellence would suffer and there would come in a stagnation where the craftsmen would be afraid of experimenting constantly

with new designs. The way is there; it is for the government to come up with a will, if we are to preserve this exquisite art form that has, for centuries, been an eloquent testimony to the rich art-culture of Orissa.

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THE UNIQUE MANGROVE FOREST OF BHITARKANIKA IN THE STATE OF ORISSA

Dr. B. P. Choudhury

INTRODUCTION:

One of the conspicuous vegetational types occurring in Orissa is littoral and Tidal Swamp forests. These are mostly concentrated in the estuaries of rivers like Mahanadi, Brahmani, Baitarani, Jambu etc.. However, in recent time there has been a considerable amount of destruction and shrinkage of this plant community. This is largely due to, as the case with the mangroves of other state, reclamation of forest land for human settlement, paddy cultivation, prawn culture, construction of port and factories and due to over exploitation of plant resources for fuel timber and other essential forest products. Hence the rich heritage of mangroves of Orissa has been considerably affected. This is evidenced from the fact that, the mangrove taxa occurring in the

Barkuda island of Chilka lake as enumerated by Narayanswami and Carter (1922) are no longer present. Similarly, mangroves at Paradeep, Kujanga, Ersama etc. are also on the verge of disappearance while they are in highly degraded state at Hukitola, Jambu and other places.

Remote sensing survey report conducted in 1984 indicates the existence of 214.58 sq.kms. of mangrove forest in the state of Orissa. However, Mahanadi mangroves are said to cover 120 sq.kms. as per an estimate given in "mangroves in India"-status report (Anonymous, 1987).

Paradoxically, inspite of richness of past mangrove vegetation due attention was neither paid for thorough exploration and study of this plant community by the pioneer plant explorers like

Haines (1921-1925) and Mooney (1950) nor in the recent time appreciable amount of study has been undertaken for their proper mangement and conservation. Haines has enumerated as many as 45 mangrove species and their associates which were mostly collected from the tidal forests of Mahanadi delta and a few from Chilka lake (in Puri and Ganjam district) and Chandipur (in Balasore district). Hence, it appears that the estuaries of the Brahmani, Baitarani, Devi, Jambu, Budhabalanga etc. harbouring mangrove elements remain unbotanised. Mooney, the later conservator of forests collected about 12 mangrove taxa through a short botanical trip to the Mahanadi delta in the regions of falsepoint during the first week of June 1949. He made some new reports and provided additional distributional data for some taxa.

Interestingly, Bhitarkanika in Cuttack district harbouring a high concentration of mangrove taxa and their associates could not be botanized by these plant explorers probably due to lack of adequate communication facilities to this impenetrable forest packed with a high population of savage animals both in land and water.

However, after a lapse of

about 25 years Banerjee et Das (1972) and Rao et sastry (1974) have made some stray reports on the occurrence of mangrove taxa in this terrain while studying the ecological aspects of coastal vegetation of Orissa. In recent time, being aware of the richness and diversity of species composition, many-fold socio-economic importance and necessity for the germplasm conservation of rare and vulnerable mangrove species Banerjee (1984), Choudhury (1984, 1986, 1987) have provided some information pertinent of the mangrove forest of Bhitarkanika.

At present one can enjoy the panoramic beauty and luxuriance of mangroves as well as diversity of various wild lives extant at Bhitarkanika. However, some years back the overall equilibrium of this ecosystem was in danger and many life forms were on the threat of extinction when Bhitarkanika was under the Zamindari system of Kanika due to ruthless cutting of free species for fuel and timber, over exploitation of other useful plants and animals for earning money, reclamation of forest land for paddy cultivation, hunting of saltwater crocodile, leopard, beron of various categories, giant water monitor lizzard, deer king cobra etc.

Later on, with the enforcement of Zamindari abolition act (1951) the Kanika Zamindari came under the jurisdiction of Revenue Department of Orissa with effect from 26th November 1952. Subsequently, this was transferred to Athgarh Forest Division in 1957. Still the biotic interferences could not be effectively checked and the depletion of mangroves and destruction of wildlives continued.

Hence, realising the necessity of conservation of this unique habitat and the vulnerable ecosystem the Government of Orissa (Forest, Friseries and Animal Husbandary Department) declared the forest land and the waste land known as kanika forest in Ali, Rajanagar, Pattamundai and Mahakalpara police station within the Kendrapara Civil Sub-division in the district of Cuttack including all creeks, channels, nalas, wetland and riverbeds situated within the above said protected forest as Bhitarkanika wildlife Sanctuary (vide Notification No. 6958-4 f (W) - 34/75 - FAH / dt. 22.4.1975). However, for better mangement and effective supervision, ultimately in 1980 Kanika forest range came under the direct control of separate wild life division named as 'Chandbali Wild life Conservation Division' in Balasore district

which is now under the control of Divisional Forest Officer. Bhitarkanika is one of the 14 notified wild life sanctuaries of Orissa and there are as many as 9 proposed ones (Anonymous, 1986) which are expected to be notified in future. Government of Orissa is now making sincere efforts to protect and conserve the natural resources by checking the genetic erosion of the endangered and vulnerable plants and animals. In this connection, declaration of Similipal reserve forests at Mayurbhanj as a National park in 1978 is an important achievement. In recent time again the Bhitarkanika wild life sanctuary has been upgraded to a 'National Park' (vide Notification No. 8F(W) 53/88/22904/FFAH/dt. 3.10.88). This National park spreads over an area of 367 sq.kms. as against the previous coverage i.e. 650 sq.kms. under the sanctuary.

Due to adequate protection and care given to this sanctuary the equilibrium of the ecosystem has been restored, genetic erosion of many life forms has been checked and there is luxuriant growth and development of plant and animal communities in this terrain. It is a fact that in respect of number, diversity and abundance of mangrove taxa, probably Bhitarkanika is next

to the Sundarbans of West Bengal. But unfortunately this mangrove forest is rather less known to the scientific communities as well as to the common public.

GEOGRAPHICAL LOCATION AND TOPOGRAPHY

Bhitarkanika lies in a deltic region of the North-Eastern coastal plain of the Cuttack district covering an area of 141.44 sq.kms. of which mangrove forest cover is Ca 115.5 sq.kms. It is bounded by the river Dhamra (confluence of Brahmani and Baitarani) and river Maipara (part of Dhamra river) and ca 35 kms. of sea shore. The land mass is about 0-8m. above the sealevel. A network of creeks and channels, extensive sand dunes and sand bars provide congenial condition for the growth and development of mangrove and sandy vegetation.

In order to reach Bhitarkanika one has to go upto Chandbali covering a distance of 190 Kms. by road from Bhubaneswar (the capital city of Orissa) and then from Chandbali to Nalitapatia village by motor launch covering a distance of ca 20 Kms. Finally, from Nalitapatia to Dangmal forest Rest House (having four suits) by walk or by trolley a distance of about 6

Kms. Of course, one can directly come to Dangmal forest Rest House from Chandbali by Forest department or Revenue Department motor launch which can not be availed of by the common people. Dangmal forest Rest House can also be approached from Rajnagar by another rout. From Bhubaneswar one can reach Rajnagar via Kendrapara covering a distance of 130 Kms. and then from Rajnagar to Nalitapatia by motor launch. From Nalitapatia to Dangmal Forest Rest House by walk or trolley rickshaw. From Dhamra one can also reach Dangmal by Talchua-Dhamra-Chandbali Service motor launch conducted by a private party. Besides Dangmal Forest Rest House, accommodation can also be availed of at Ekakulia and Gupti.

ENVIRONMENT

Three main seasons namely, (a) summer (b) rainy and (c) winter prevail in Bhitarkanika. The maximum temperature rises upto 45 C during April while the minimum temperature comes down to 10 C during January. The mean annual rainfall is 1700 mm.. The relative humidity of driest month is 75% and that of the wettest month is 82%. This terrain is highly prone to oceanic cyclones which are experienced during the

transitional period of rainy and winter season. These cause much devastation of plant and animal communities.

Bhitarkanika the core area of the sanctuary enjoys a macrotidal range. The salinity of the water bodies exhibits seasonal variation, so also at different depths. In general, water salinity ranges from 20-28 gm/lit. and the tidal height varies from 3.6 to 5.5 metres. The soil is mostly clayey loam and highly slushy in nature along the fringes of the water bodies. This is about 3-4 metres in depth and is more or less saline in nature. In the elevated area, soil is less slushy after mixed with coarse sand, specially towards the coastal regions.

FLORA AND FAUNA

Characteristic mangrove formation is met with along the meandering creeks, channels and islets. This comprise of quite a diverse type of plants belonging to different unrelated families. Generally two-storey system is met with in this mangrove forest since the ground flora is either very poor or practically absent. The forest is semi-evergreen type and the mangrove elements exhibit different degrees of xerism. They are provided with knee roots which give additional sup-

port to the plant body to withstand the effects of inundation. Extensive net work of pneumatophores which project above the muddy flats and forest floor gives a spectacular view specially at ebb. Quite often, the trunk bases are buttressed to maintain the uprightness of the plant body. Generally leaves are coriaceous, shining above, provided with a single midrib. Presence of thick cuticle, mucilage glands etc. are halophilous characters. Vivipary is a common phenomenon generally met with among the typical or true mangroves while cryptic vivipary is found among the semi mangroves. Fruits are provided with thick ribrous covering which besides giving protection against saline water, helps in buoyancy. Majority of the taxa are salt tolerant and are adapted to regular inundation.

The dominant mangrove taxa constituting the top canopy are:- *Sonneratia apetala*, *Avicennia officinalis*, *A. alba*, *Excoecaria agallocha*, *Heritiera fomes* etc. Gigantic growth and luxuriance of *Sonneratia apetala* attract one's attention. *Avicennia* spp. are also gregarious which colonise the banks of river and creeks like the former taxon. *Xylocarpus granatum* is sometimes found in such habitat. Very large and

rounded fruits hanging from the branches help to identify this species. *Pongamia pinnata*, usually away from the waterbodies are also found in abundance which attends a great height. In more elevated areas mixed forest of *Excoecaria agallocha* and *Heritiera fomes* are met with. These are often associated with *Phoenix paludosa* and *Tamarix troupii* in the peripheral regions. Of course, pure formations of these two taxa are wide spread from Dangmal upto Nalitapatia. The second storey is composed of by the shrubby elements and undertrees such as *Brownlowia tersa*, *Kandelia candel*, *Lumnitzera racemosa*, *Rhizophora mucronata*, *Ceriops decandra*, *Cynometra iripa*, *clerodendrum inerme*, *Aegiceras corniculatum*, *Hibiscus tiliaceus* etc. These elements enjoy the effects of tide and ebb as well as high degree of salinity. *Brownlowia tersa* is very gregarious along the fringes of the water bodies and remain half-submerged in water. Similarly, *Rhizophora mucronata* with their interwoven knee roots in the middy flats provide a distinctive sight during waterfall. In the terrestrial or swampy areas usually *Flagellaria indica*, *Salvadora persica*, *Phoenix paludosa*, *Briguira gymnorrhiza* etc. are found. These occur mostly in

heterogenous formation. Common climbers of this mangrove forest are *Derris trifoliata*, *Derris scandens*, *Finlaysonia obovata*, *Mucuna gigantea* etc.

Among the narrow and defuncted creeks usually *Acrosticum aureum*, *Acanthus ilicifolius* are found in close association. Often a spiny element *Caesalpinia nuga* is also not uncommon in such places. Here the crocodiles lay their eggs. The ground flora is rather very poor. Usually in the muddy flats *Myriostachya wightiana* is found in pure formation. *Porteresia coarctata* is also found in patches but less dominant. Other notable herbaceous elements are *Suaeda maritima*, *S. nudiflora*, *Salicornia brachiata* etc. *Tylophora tenuisima*, *Laggera aurita*, *Eugenia bracteata*, *Hemidismus indicus*, *Fimbristylis* spp. etc. are found in more dry and elevated areas. In the sand dunes and sand bars close to satavya and Gahirmatha the salt bush formation is generally found. *Ipomoea pescaprae*, an extensive creeper is dominant in such habitat. Other herbaceous taxa are:

Hydrophylax maritima, *Launea sarmentosa*, *Sesuvium portulacastrum*, *Pedaliium murex*, *Cyperus arenarius*, *Spinifex littoreus*, *Gisekia pharnaceoides* etc.

It is to be noted that plants like *Cerbera manghas*, *Acanthus volubilis* are found in very low frequency. Moreover, these taxa are not found in the mangrove forests of other regions of the State. In addition to these, *Heritiera kanikensis* has been identified as a rare element. Hence, appropriate measures should be taken to conserve the germplasm of these vulnerable and rare taxa. Mostly in the sandy regions *Casuarina equisetifolia* have been planted by the department of forest so as to resist the oceanic cyclones and to check soil erosion. Bhitarkanika is very rich in wild lives. Saltwater crocodile, which was fast disappearing, is now abundantly found in the river and creeks of Bhitarkanika. Some of them are quite gigantic in size, attending upto 7.5 metres in length. There is a crocodile research centre at Dangmal. Artificially, hatched juveniles are regularly released into the water bodies and therefore, their number is increasing. Partial albino variety, locally known as 'Sankhua' is also found in the creeks and channels. Besides these, lizzards like giant water monitor, land monitor, mud skippers (fish) arthropods like limulus red crabs and different types of fishes are notable aquatic fauna. The migratory olive Ridley sea

turtles come in thousands to the Gahirmatha sea beach formass nesting during December-March every year. Similarly, visit of large number of migratory birds during winter, like openbilled storks, white ibis, Grey pelican etc. adds to the diversity of wild life of Bhitarkanika. Different types of resident birds like Night herons, cattle egrets, grey herons, King fishers, water fowls are abundantly found. Notable terrestrial animals are python, king cobra, spotted deer, wild boars, chital, jackal, hyena, porcupine, fishing cat, mongoose etc.

Thus, Bhitarkanika is a grand repository of life forms of different types with high degree of genetic variabilities. The tranquil atmosphere, network of creeks and channels, peculiar type of plant community as well as diversity of wild lives combinedly form a paradise for the nature lovers, environmentalists as well as academicians.

SOCIO-ECONOMIC IMPORTANCE OF THIS MANGROVE FOREST.

Mangrove forest of Bhitarkanika possesses a many-fold utilitarian values. The wood of *Avicennia* spp., *Excoecaria agallocha*, *Tamarix troupitii*, *Bruguiera cylindrica* etc. having high

calorific value are used as fuel. Timber of *Xylocarpus moluccensis* is used for making furniture. Stems of *Phoenix paludosa*, *Heritiera fomes* are used as poles for the thatched houses and the leaves of *Myriostachya wightiana* are used as roofing material. This and the leaves of *Flagellaria indica* are also used in basket making. The bark of *Rhizophora* spp., *Sonnertia* spp., *Kandelia candel* etc. contain high percentage of tannin. *Excoecaria agallocha*, *Sonneratia apetala*, *Xylocarpus granatum*, *Aegiceras corniculatum* are potential source of saponin and flavonoides. Fruits of *Cynometra iripa*, *Sonneratia caseolaris* are edible. *Suaeda maritima* and *S. nudiflora* are used as potherbs.

Xylocarpus granatum, *X. moluccensis*, *Acanthus ilicifolius*, *Lumnitzera racemosa*, *Salicornia brachiata*, *Tamarix troupitii* etc. possess different types of medicinal properties.

Besides these, the forest meadows and swampy places sustain a large number of resident and migratory birds. This mangrove forest provides breeding ground and nursery for a large number of fishes and prawns. Good quality honey is also available from this forest. Over and above, this plant community stabilize the

shore line and act as a bulwork against the encroachment of the sea. In recent time considerable amount of awareness has developed among the administrators for conservation and better management of this vulnerable ecosystem and therefore a National mangrove committee has been organised by the Government of India to develop adequate strategies for sloving various problems connected with the protection, management and conservation of the mangroves of India. The State level mangrove steering committee, Government of Orissa under the guidance of the above-said body are taking appropriate measures for the conservation, management and rehabilitation of the mangroves of Orissa.

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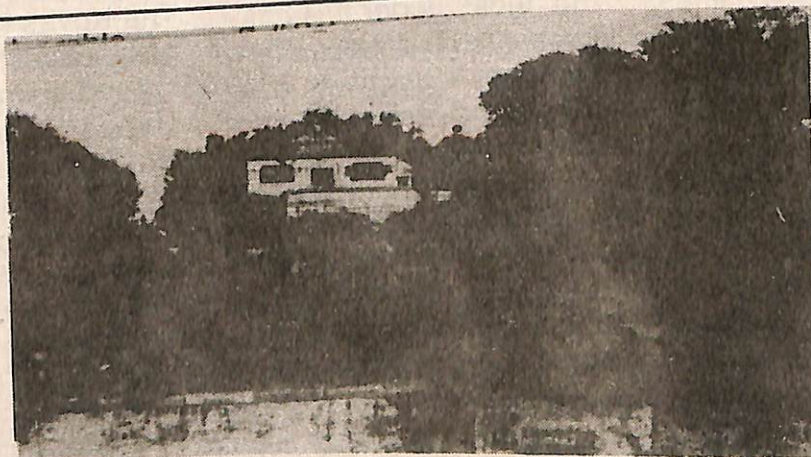
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SOCIO-ECONOMIC PROFILE OF TRIBALS OF ORISSA

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The tribal population constitutes a significant portion of Orissa. The percentage of scheduled tribes in the state is 23.11% as compared with the all India figure of 6.94%. In the districts of Keonjhar, Sundargarh, Kalahandi and Koraput the percentage of scheduled tribe to that of total population in the districts is 46.96, 53.40, 58.34 respectively. The Orissa state in general and these tribal districts covering more than 50% of tribal population in particular are rich in various natural resources.

Rislay, Lacey, Elwin, Grigson, Shoobert, Tallents, Sedwick, Martin, A.V.Thakkar and others have described scheduled tribes as 'aborigines' or 'aborginal'. Hutton call them Primitive tribes. Dr. Ghurye describe them as "So-Called aborigines" or 'backward Hindus' and now accepts the designation 'Scheduled

Tribes' as formulated in the constitution of Indian union. some scholars and reformers have described them as Adivasis. Dr.Das and others designate them as "Submerged humanity". The economic life of the tribal population of Orissa is in depressed state.

Life styles of different sections of tribal population may be divided and discussed under 4 categories. They are as follows:

1. Hunting-gathering:

The tribes under this category are not in isolation. They have close contact with other people and reciprocal relationship with their neighbours. The important tribes of this category are the Birhor, the Chenchu, the Maller, the Korwa and the Kharias of Sundargarh and Mayurbhanj districts. Their number is about 10,000 and they live in small groups

called local banks. Each band is associated with a geographical range.

The hunter-gather bands are migratory and they do not have ownership right of the resources. They live in bamboo hunts and leaf shelters. Their fundamental economic base includes a camp life and division of labour with males and tubers from the nearby forests. Intergroup visiting, marriage alliances and reciprocal exchange of goods and services constitute the core features of their socio-economic life.

Hunting-gathering refers to a mode of subsistence and the subsistence base of the hunter is much more substantial. Some marginal hunters actually work for less number of hours and exploit abundant food sources.

2. Pastoral:

The Koyas by nature show great interest in cattle breeding and animal husbandary. They take pork, beef and other types of meat. But they do not drink milk and eat milk products. The reasons are many. Firstly drinking milk is an Aryan Practice. Since the tribe is non-Aryan they do not prefer to drink milk. Secondly, they consider that milk is meant for young calves and not for

human beings. Finally, still others feel that milk causes diseases. In a nutshell, they do not appreciate drinking milk for this reason. In the words of Dr.N.Pattanaik, "It is out of love for the young calves and for the fear of getting diseases that they are averse to the practice of milk drinking."

3. Shifting Cultivation:

The total number of forest dwellers practising hunting and gathering does not exceed a few thousand. But the bulk of tribes who dwell in the hills and forests are dependent upon the produce of the slash and burn type agriculture.

Shifting Cultivation, popularly known as 'PODU' is a primitive form of agricultural practice dear to the tribals as their way of life. The primitive tribes practising this method of cultivation are Bonda, Didayi, Koya, Parija and Gobada of Koraput district, the Kondas of Koraput, Sambalpur, Kalahandi and Phulabani districts, Lanjia Saura of Koraput and Ganjam district, the Juanga of Keonjhar district of Pauri, Bhuiyan of Sundargarh and Keonjhar districts.

Shifting cultivation is the oldest method of agriculture in the world practised by many primitive tribes inhabiting in tropical and sub-

tropical regions. It has survived for last five thousand years as estimated by Dr. Unwin. Verrier Elwin says shifting cultivation is a stage in the evolution of human culture and almost all the races have resorted to the practice in some stage or other. The Negroes of South Africa and the Pacific landers are practising it at present. The method is being followed by all ancient tribes inhabiting different states in India-the Baigas of M.P., the Nagas of Nagaland, the Khasis of Assam, the Malayab of Malbour and the like.

The shifting cultivation is the oldest, crudest and simplest form of productive activity but certainly not the best. Though shifting cultivation essentially involves rotation of cultivation, it is the most wasteful process. It consists of cutting of trees and clearing of bushes on hill slopes, burning the felled trees and dried bushes, spreading of the ashes into the cleared area and broadcasting of mixed seeds on the soil.

Ploughing is either not done at all or if done, it is practically scratching of the soil, by hoe or axe. In lower slopes ploughing is done through bullocks. In Koraput these operations are done between January and March. Mixed cropping is

the practice in Koraput. It is interesting to observe that very often as much as 10 to 12 crop seeds are sown at the same plots of land, the period of ripening being different for different crops. In Koraput the tribals grow mostly high land paddy, minor millet black gram, niger, maize and beans. The preserved fertility of the virgin soil or the low lying fallow land yields naturally a rich harvest for a period of two to three years at a diminished rate, of course. Then the fertility is practically exhausted as the hill slope is eroded of soil and lacks moisture after the period of cultivation. Then that plot of land is abandoned, a new stretch of hill-slope is chosen and the process is repeated. Thus the cultivation is shifted from one patch of land to another after a few years of cultivation for which the practice is known as Shifting cultivation. The tribes return to original patch of land in 8 to 12 years after the process of shifting cultivation has full cycle.

In an estimate recently made on the basis of vegetation map prepared by the French Institute, Pondichery, it is found that 27.3 Lakh hectares (11 thousand miles) of land of Orissa (20.9% in southern Orissa and 9.1% in northern Orissa) are affected by the practice of shifting cultivation.

People depending upon shifting cultivation are normally of low income groups. According to a survey conducted by the State Tribal and Harijan Research-Cum-Training Institute, Bhubaneswar, in the Kudumulgumma area of Malkangiri sub-division, Koraput district in the year 1969-70, the average annual income per household of hill Didayi practising shifting cultivation was Rs.468/- where as the average annual income per household of the plane Didayi depending on wet cultivation was Rs.158/- in the year 1986-87 at the current prices against the State average of Rs.324.83 for the same year.

4. Settled Agriculture:

Large number of tribal

population in Orissa are dependent on settled agriculture, though they supplement their earning by activities like hunting, gathering and shifting cultivation etc. The Santals, Mundas, Hos, Bathudis, Kishans, Oraons etc. are predominant tribal groups who earn their livelihood from settled agriculture. They are non-migratory in character and they have the right of ownership on the land and other forest resources. To substantiate this point, I may quote Prof. Surajit Sinha, "the Munda, Hoe, Santal, Dudkharia, Bathuri, Bhunj, Oraon and Savara of southern Bihar and Orissa the Raj Gond of Madhyapradesh and Hyderabad are settled agriculturists."

Tribal society is multi-ethnic,

Multi-lingual and multi-cultural. Most of the socio-cultural diversity is space-specific and gives rise to space-specific social and economic structures. The space bound socio-economic structures need space-oriented or group-oriented action and plans. It can appropriately illustrate the needs and priorities of the tribal group. So micro-level plans and sub-plans specially designed for the group and the society are the only tools for unfolding the latent energy of tribal people and exploiting potential resources of the tribal region.

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By Orissan Vaisnavism, it is here meant as adherence to that sort of Vaisnava faith which centres around the cult of Jagannatha. The origin of this Religio-philosophical movement can be traced in the writings of Sridhara Svami (*Bhavartha Dipika*) and later on this point of view is found to have been further developed in the writings of the five great Vaisnava writers, viz., Jagannatha, Balaama, Achyuta, Yosavanta and

A STUDY ON ORISSAN VAISNAVISM

Dr. Bijayananda Kar

Ananta. It is needless to say that Sri Caitanya who acknowledged Sridhara to be his spiritual mentor (*guru*) is

also found to have appreciated a Vaisnavite faith that unconditionally accepts the importance of the cult of Jagannatha.

Attempts have already been made to explore as well as expose the philosophical basis of this sort of Vaisnava movement. It is widely held that Orissan Vaisnavism advocates devotion blended with comprehension (*Jnana-misra bhakti*).¹ It is

also interpreted as devotion based on concentration (*yogacari bhakti*).² On account of noticing the propagation of some form of nihilism (*sunya vada*), some critical scholars have gone on to conclude that this form of Vaisnavism presents a variety of cryp to Buddhism (*praccanna Bauddha vada*).³ On the otherside, the sympathetic scholars find in this religio-philosophical movement the deep-seated impression of Advaitism and in that way they rather prefer to identify it as an approach within the Vedantic fold. But, while acknowledging the Advaitic leaning, it is also pointed out that Orissan Vaisnavism is not simply Advaitic but goes further in location a meeting ground between the path of *Jnana* and that of *bhakti*. Such synthesis between two different standards is thought to have been possible when one transcends the sphere of limited intellectualisation and moves in the realm of purs vision (*prajna*). Basing on such standpoint, it is advocated that Orissan Vaisnavites are supporters of *Dvaitadvaita vada* and also are practisers of Advaitavada.⁴

II

To a general reader, it may, *prima facie*, appear to be somewhat disturbing as to

how this type of Vaisnavism can accommodate so many different varieties of philosophical thoughts that have actually been originated from purely independent roots. Take, for instance, the doctrines like *sunyavada* and *Advaita vada*. Both of these views have clearly been set up on two distinct and independent philosophical traditions. Advaitism is on Vedantic tradition that admits the reality of being or essence. That which remains unsublated and thus is eternal (*sasvata* or *nitya*) is alone acceptable as philosophically genuine. Nihilism, on the other hand, is on Buddhistic tradition that admits the sense of essenceless (*nihsva bhava* or *anitya*) alone as philosophically genuine. Perhaps this may be one of the grounds as to why classifying former as *astika* (prone for affirmation) and latter as *nastika* (prone for negation) has some relevance. It is further interesting to note that while Vedanta is found to have been rooted in the concept of *purnata*, Buddhism is found to have been based on *sunyata*.

Further *Jnana* as well as *bhakti*, from at least one specific point of view, seem to be clearly incompatible. While one is backed by some sort of rational justification, the other is posed as a state of absolute surrender sacri-

ficing the sense of reason altogether. That is why perhaps one notices in the Indian tradition a clear sense of dichotomy between the two. Why in Indian context alone, one can move further and maintain that *Jnana*, being the expression of reason and logic, and *bhakti*, being the expression of belief and faith, can have nothing in common and thus are opposed to each other. If this is granted, the expression *Jnana-misra bhakti* surely demands an explanation.

It is also interesting to note that in the classical Indian philosophical tradition, within the framework of Vedanta, there are many formulations such as Advaita, Visistadvaita, dvaita, Dvaitadvaita and Acintyabhedabheda. Each of these formulations are built upon different points of views and this have diverse philosophical outlooks. Sankara and Ramanuja may have common Vedantic basis. But their speciality lies in so far as they advocate Advaitism and visistadvaitism respectively. To one Brahman is *nirguna*, to other it is *saguna*. There cannot be any compromise between the two so long as one adheres to one's own point of view. The doctrines, from this angle, can be treated as logically distinct. Now, any attempt to recon-

cile the Sankarite and Ramajujaita viewpoints would thus be a sort of transcendence and cannot be placed on the same scale. It has to be conceded at least from the point of view of rational cogency that such reconciliation is an altogether different formulation, being a movement beyond the tracts of both Advaitas and Visistadvaita.

Similarly Dvaitas and Advaita are viewed as opposed to each other. That which is affirmed by one, is negated by other. A sankara and a Madhya may adhere to Vedantic ground. In that way they both may be placed at a common platform as opposed to say, a Carvaka or a Baudha and so on. But, so far as their distinct philosophical positions are taken into account they have to be viewed independently. And, in this sense, their philosophic distinctness (if any) can be properly exposed. It is, from this point of view, certain that Dvaitadvaita is another original formulation and is not a simple combination of Dvaita and Advaita.⁵ As stated before, in a slightly different context, the so called synthesis between Dvaitas and Advaita is done only at a transcendental sphere which neither admits duality nor non-duality. That is why Advaitins, Visistadvaitins, Dvaitins and dvait-

advaitins are accepted as original philosophers as their own right.

Acintyabhedaveda is not clearly asserted by Caitanya himself, though later on his followers like Rupa, Jiva and Baladeva (all identified as exponents of *suddha bhakti vada*) have been found as advocates of the doctrine of Acintya bhedabheda. This doctrine too is on an independent footing and should not be confused with Dvaitavada or Advaitavada.

Again, the linkage of Orissan Vaisnavism with the cult of Jagannatha needs some elucidation. It is said, by way of explanation, that while Goudiya Vaisnavism regards Krsna as *avatari (amisi)*, Orissan Vaisnavism regards Jagannatha as *avatari*. It is interesting to note here that similarly Vaisnavites who are devotees of Rama as *avatari*. Now, to regard Krsna (of Gopa-Mathura) or Jagannatha (of Puri) or Rama (of Ayodhya) as *avatari* or Lord (*Visna*) himself may have some popular regional appeal and in that way probably each of these formulations quite admirably caters to the emotion and sentiment of the mass of a particular area. But how at all on that basis, one of these points of view is to be justified as having religio-philosophical

significance and supremacy over others? There ought to be, I suppose, exploration of some specific rational basis in order to establish the philosophical significance of Orissan Vaisnavism in this context simply by points out that Orissan Vaisnavism has some affinity with Dvaita or Advaita or Acintyabhedaveda or even *Sunya*, perhaps, does not bring out its distinctiveness and originality in the precise form.

III

It should be conceded here, of course, that the prominent Orissan vaisnave exponents like Jagannatha and his other contemporaries have not presented their views in the traditional Indian philosophical style. Their writings are not clearly treatises on *darsana* in which one can easily discern a philosophical position and locate the different arguments (*yuktis*) that support the position. Such writings are mostly devotional compositions in praise of lord who again has been presented both with form and without form, with attribute as well as without attribute. For the realisation (*siddhi*) both *jnana* and *bhakti* are propagated. No special form of reasoning is at least made explicit as to how such opposite formula-

tions can be rationally synthesised. But this need not necessarily suggest that one, on account of that, fail to explore the rational basis of such a point of view. What I mean here is that a more penetrating investigation is required to bring to the focus the philosophical significance of this form Vaisnavism. And this can be done not so much by a literal investigation but by a sort of interpretative exploration.

True, Jagannatha is the central pivot encircling which Orissan Vaisnavism has its origin and growth. There are number of references about Jagannatha found in the Orissan Vaisnavite writings. Jagannatha, there, is identified as Visnu and also as Brahman. Again Brahman has been viewed as *Sunya*. But, how to conceive the theistic Lord (Visna) same as the formless ontological absolute has been, of course, found greatly *enigmatic* in the philosophical discussion. There is said to be a definite chasm between metaphysical speculation and the theistic imagination one is supposed to be grounded on abstract reasoning while the other is said to have been grounded on imaginative faith which amounts to a sort of surrender to all reason and logic. Thus far the track for both is held to be

different and non-harmonious. Perhaps this is the reason as to why Sankara never equates Brahman with *Isvara* and has clearly maintained Brahman alone as real and *Isvara* as *maya*. He also has no compromise with either *karma* or *bhakti* so far as *Brahmavagatiis* at issue. That can only be made possible through *jnana* and *jnana* alone.

IV

Sridhara, being in the Advaita tradition, cannot afford to neglect the importance of *jnana* in his philosophic framework. He, too, admits the Advaita Brahman alone as real. It is not only Advaita but it is also held as *nirguna advaya* and *nirakara*. But, even then, he has made an attempt to introduce *bhakti* within the Advaita fold by upholding the view that Brahman, though is formless and attributeless can be an object of worship as long as one has not attained Brahma-realisation *Bhakti* thus is not disallowed; rather it is taken up with full sincerity and seriousness; for it also facilitates concentration and discipline. Formless Brahman thus becomes the object of devotion. Sridhara, in this manner has found no difficulty in interpreting *Bhagavata* from Advaita point of view. Though ultimately, the realisation of

Brahman is a matter of *suddha jnana*, in the place of *vyavahara* where no conception can be formulated without the aid of form and attribute, the theistic rendering of Brahman has to be entertained as a sort of practical necessity. It is, in this sense, Sridhara pleads for a meeting ground between *jnana* and *bhakti* within Advaita framework.

Thus it can be seen that the root of what is later known as *jnana-misra bhakti* is found to have been laid by Sridhara. Caitanya, also having full regard for sridhara's view-point and himself favouring Advaita, has accommodated both *jnana* and *bhakti* in his religio-philosophical framework. While Sankara maintains (Commenting on *Brahma sutra*) that on account of the difference between knowledge and ignorance the (scriptural) statements point at two fold account of Brahman ("*Vidya avidya visaya bhedena Brahmanah dvirupatam darsayanti vakyan*) he seems to have accepted *sagunatva* but put it in the realm of *avidya*. Sridhara seems to have taken a clue from this and moves a step further by showing that since it is through *vyavahara* one is led to *paramartha*, *sagunatva* should be regarded as not unimportant in the Advaita framework

and that is how *bhakti* can be incorporated. This is also found to have been acceptable to Caitanya, only he by holding Brahman as no other than *Vishnu* himself preferred perhaps, not to emphasise the terminology of *maya* or *avidya*. Further, in his religio philosophical framework he has found no difference between *Vishnu*, *Krsna* and *Jagannatha*.

The Orissan Vaisnavites like *Jagannatha*, *Balarama* etc. have made a remarkable contribution on this issue, by way of making an attempt to harmonise not only *jnana* with *bhakti* but also holding a view that there can be a legitimate move from *sunya* to *purusa*, from *arupa* to *rupa*, from *ajapa* to *japa*. This is not because they were crypto Buddhists; not because they were half-hearted Advaitins, not because they were sincere enough to bring out a totally novel philosophical point of view that formlessness as well as formlessness cannot be conceived singly without the aid of the other. Affirmation of one implies the negation of other. But this very logic of contrast reveals that any one of the two cannot alone be accepted in the conceptual framework without the other. In order to conceive what affirmation is, one has to contrast it from negation and vice versa. So also the subject (*Visayi*) cannot be

made intelligible without the prior recognition of predicate (*visaya*) and vice versa. Hence the terminologies like *maya*, *avidya*, *sunya* might have been already used profusely in Advaita and Buddhist sources. The mere occurrences of such terminologies in those sources need not suggest that these Vaisnavite thinkers were only reiterating the philosophy of either Advaita or Sunyavada of Buddhist origin. They, were of course, quite aware of these two traditionally deep-seated points of view. At least, on the basis of historical testimony, one can notice the spread of Advaitism as well as Buddhism in Orissa much before the rise of Orissan Vaisnavism. But this, also, need not necessitate the conclusion that the thinkers belonging to this group were just following the philosophy of the old tradition without adding their own contribution on the issue under discussion.

The Advaitas talk about pure essence (*satta*) is here interpreted as the pure being (*suddha visayi parama purusa*) which is not vitiated by any attribution, characterisation, and categorisation. In this sense it is *sunya*. It does not mean here total void or nothingness. It is only free from all qualifications and predications. The

pure being is thus regarded as *sunya*.⁷ But, though the very concept of pure subject is acceptable in the level of abstraction, it needs the coupling of predication or attribution so that a meaningful structure in the very conceptual framework becomes possible. In that way "This is X" or "This is Y" becomes comprehensible in the judgemental plane and that is how *sunya* is not simply conceived as *nirguna purusa* but as *saguna purusa*. In this way there is significance in the saying that there is the acceptance of transition from *sunya* to *purna*, *arupa* to *rupa*, *nirguna purusa* to *saguna purusa*. There is, thus, no sight of inconsistency in moving from nothing to something. It is not at the expense of intelligibility but rather there is an attempt to point out that it has its clear footing on intelligibility. There seems to be here some sort of Hegelean attempt of synthesising thesis and antithesis at a different level.

But, however, it should be noted that here by *Jagannatha* it need not be understood as the particular presiding diety of particular locality; it rather refers to the Lord of the Universe of which the particular image is just a living symbol. As a symbol, of course, it has its own significance and purpose. There cannot be any dis-

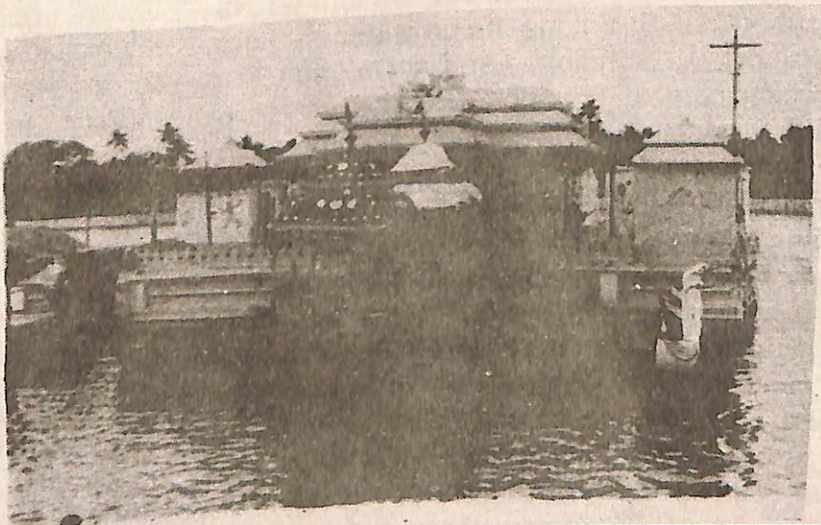
pute over that. But, then, it should not be taken that the symbol is itself everything and that for which it is a symbol is a bare non-entity and as such non-significant.

In this way, it appears that the Orissan Vaisnavism cautiously keeps itself in a middle position almost in so far as it neither gives sole emphasis on *sagunatva* relegating fully the *nirguna* aspect (as some other prominent Vaisnavites prefer to adopt), nor also it only adheres to *nirguna*, *alekha* Brahman and thus fully relinquishes the image-worship (as the Mahimaitis advocate). There is an attempt for some sort of unique synthesis between diverse concepts and that again has considerable impact at the moral and spiritual dimension.

NOTES

1. Vide Si basvarodaya ("Gurura sarana jai Brahma nirupana jei Brahma nirupana je janai jnana misra bhakati laksana"-25th stanza) quoted by Kahnu Charan Mishra: Oddisi Vaisnavadharm, Bhubaneswar: Orissa Sahitya Academy, 1961, p.37.
2. Kahnu Charan Mishra, op.cit.p.18.
3. Vide Nagendra Nath Basu: The Modern Buddhism and its followers in Orissa, Calcutta, 1911.4. Vide Kahnu Charan Mishra, op.cit.p.65.
5. While for Sankara there is the acceptance of identity alone and for Ramanuja there is the acceptance of identity qualified by difference, for Nimbarka (Dvaitadvaitavadin) there is the acceptance of both identity and difference. Vide C.D.Sharma: A Critical Survey of Indian Philosophy, Delhi: Motilalbanerasidass, 1964, p.377.
6. Vide, in this connection, the remark made by Kahnu Charan Mishra which, perhaps, needs reconsideration, p.66.
7. Vide Achyutananda's Sunya Samhita (Sunya purusa alage rahichhi sunya para basi (ita karuchhi) and also Chaitanya Das's Vishnugarbha Purana ("Sunya garbhe alekha, alekha garbha sunya, alekha purusa sunya ekai samana") quoted by Kahnu Charan Mishra: Odiya Sahityara Dharmadhara, Bhubaneswar: The Orissa State Bureau of Text Book Preparation and production, 1978, p.118.

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POLICE, THE CORRECTIONAL SERVICES AND SOCIAL DEFENCE.

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Introductory:

1. Crime is prevalent in all societies. Its significance lies not merely on its increased incidence and changing pattern but also on the multiplicity of causes contributing to it. Further, the concept of crime is essentially the conduct of individuals in society. Everyone owes a certain duty towards his fellow-man and at the same time, enjoys certain rights and privileges which he expects to be respected by others. Any individual behaviour or group action which comes in conflict with socially accepted patterns of behaviour or the law of the land, is termed as crime. So far, human ingenuity has failed to ascertain an alternative to law as the basis of reference, against which an act could be defined as crime. And a society that accepts law as a reference point or

the behaviour of its members, naturally lays down certain sanctions against violation of such laws. Therefore, punishment of crime is something that society expects.

Social Defence:

2. Traditionally, the term "Social Defence" has been used to mean the protection of society from crime. However, the concept of Social Defence, as adopted and popularised by United Nations, has a wider connotation. Social Defence in a restricted sense, refers to the social function of punishment, i.e. the doctrine of deterrence. Critics question the popular belief that crimes can be prevented by punishments only. They ask I can infliction of punishment alone correct a criminal, reform him and wean him away from crime, when in the light of modern knowl-

edge, it is known that there are compulsions and forces involved in a man's criminal behaviour and seldom he has any control over them. They argue that an offender may commit aggression on his fellow-beings owing to certain compulsions like committing theft owing to extreme poverty or killing a person on the spur of uncontrollable emotion or indulging in vandalism owing to latent mental disorder. Modern Social Defence concept does not over emphasise the customary repressive and authoritarian approach towards crime. It takes into account the basic human rights and scientific discoveries on human behaviour and advocates a theory that prevention of crime can be achieved by removing the criminogenic conditions in the individual and society mainly through programmes of individual correction and rehabilitation. The term "social Defence" implies therefore an integrated approach initiated by the State and the Community as a whole to combat forces of social deviance by reforming criminal tendencies and by creating conditions in the society for a favourable and healthy growth of human life. The treatment of offenders is today the most widely prevalent trend of Social Defence philosophy. Social Defence in other words, is a social

reform movement of far greater dimension that it is ordinarily understood. It is sustained by various organisations and resources of the community for dealing with the phenomena of crime and the 'person' of the criminal and elimination of the breeding grounds of criminality.

3. Social Defence measures aim at prevention of crime by eliminating the root cause of crime and the breeding grounds of criminality without in any way offending the dignity of the offending human beings. The human wave has global beginnings and it has been reiterated by United Nations (Congress in Geneva 1975) as- "The modern trend is to eradicate the cause of crime rather than the criminals by educative, corrective and reformative methods". The focus has shifted from the "crime" to the "criminal" and humanizing the criminal process involving the community. The four broad distinguishable components of Social Defence are- (i) protection of society from crime by apprehension of the individuals who come into conflict with the law, (ii) treatment, correction and rehabilitation of such individuals, (iii) prevention of crime by reorientation of potent delinquents likely to adopt criminal career, and (iv) creation of social, moral

and material hygiene conducive to good conduct of all members of society. In India, at present, we take Social defence to include a variety of crime prevention programmes as well as Penal and Correctional Services such as Prison, Probation, Parole and other institutional treatment Schemes provided under the Social legislation. Social Defence strategy, in order to succeed has to take into account the functional role of the various sub-systems of the Criminal Justice System i.e., the Police, the Prosecutors, the Judiciary, the Correctional Services (including Prisons) and above all of the Community and the extent of co-ordination and mutual understanding that can be brought about amongst them.

Apprehension of individuals who come into conflict with law-Role of Police.

4. Police resort to conventional methods like patrol, surveillance, apprehension, prosecution and conviction of dealing with crime. Police as an agency for law enforcement, comes in contact first in point of time with offenders as it invariably apprehends the offender and produces him before the Magistrate along with the evidence that decides the criminal case. The quality of work that a Police

investigating officer puts in, has a direct bearing on administration of justice. The report (Under Section 173 Cr.P.C.) prepared by the O.I.C. of a Police Station after the completion of the investigation contains all materials on which the court decides and passes an appropriate sentence. In fact, this report should contain additional materials regarding the age, home surroundings, social circumstances of the crime and the reformatory potentials of the offender so as to facilitate the court in its difficult task of passing an appropriate sentence in a particular case according to the prevailing notions of modern penology which strives for reformation rather than imprisonment of the offender. Police should ensure that offenders capable of reformation should not be deprived of the benefit of kind provisions of corrective laws.

5. The time-honoured provisions of physical prevention and punitive deterrence adopted by Police have obvious limitation in prevention of crime but it definitely helps to keep under check criminal who are prone to habitual violation of the Law and render insecure the life of citizens. The United Nations Congress on crime prevention (September, 75) held in Canada, has laid

stress on crime prevention role of Police when it observed-

"The role of Police should be crime prevention and a better recognition of the social service element of Police work, such as advice to individuals involved in petty conflicts without taking recourse to arrest and prosecution; advising citizens and business establishment; helping in tracing missing persons; counselling young-sters who might get into trouble; rendering assistance to the stranded etc. so that the image of the Police as the friend of the people gets firmly established."

Sentencing Practices:

6. One of the most important facets of criminal justice administration is the imposition of a just and appropriate sentence on the offender. Our system of criminal trial has now two stages- the first stage is aimed at guilt finding and the second is the postconviction-determining the appropriate sentence to be awarded to the offender. Further, it has been made mandatory that in the second stage of criminal trial, the offender should be given an opportunity to represent to the court regarding the proposed sentence and the

court should give its pointed attention and consider as to whether the facts of the case and the antecedents of the offender deserve the invocation of rehabilitative measure instead of sentencing the offender. In other words, there has been a perceivable change in attitude and philosophy in the matter of awarding severe sentences. Reformation and rehabilitation of offenders and not mere deterrence are now among the foremost objects of the administration of criminal justice in our country. This has been reflected in the enactment of several legislation like Probation of offenders Act 1958, the Juvenile Justice Act 1986 and Sections 360 and 361 of the criminal procedure code 1973. The Supreme Court as far back as in 1964 focussed the attention of courts and prison authorities on modern trends in Criminology and observed.

"Modern criminology does not encourage the imposition of severe or savage sentences on criminal, because the deterrent or punitive aspect of punishment is no longer treated as valid consideration in the administration of criminal law. But it must be remembered that ordinary offences with which the normal criminal law of the country deals are committed by persons

either under the pressure of provoked or unbalanced emotions or as a result of adverse environments or circumstances and so while dealing with these criminals who in many cases deserve a sympathetic treatment and in a few cases, are more sinned against than sinners, criminal law treats punishment more as reformative or corrective than as a deterrent or punitive measure" (ATR 1964 SC 1140)

Correction and Treatment of known offenders:

7. Social defence is regarded as a matter of organising the various resources of the community so that society will be able to not only correct or reform the known offender but also prevent crime. Correction of offenders through treatment is regarded as a clinical method. The two wings of treatment- institutional and non-institutional cover the field work of the correctional services. Institutional services are Prisons, Certified Schools, Borstal Schools, Juvenile Homes, After care Homes etc. It needs no emphasis that prison is also a correctional institution to treat adult offenders under the proper perspective of social defence. Non-institutional

services are probation services, After-care services, Parole and Licence Services, Social Investigating Services, Case workers etc.

Institutional treatment:

8.1. The history of prison reforms initiated in our country consists of three main phases- (i) Removal of punitive and brutalising prison conditions by bringing about constant upliftment in living conditions, (ii) Enforcement of discipline in Jails and creation of environment of humanisation in our prisons and treating the prisoners more humanly (iii) Development of a new humanism, a cultural environment in our prisons so that a prisoner will get more chance of improving his attitudes and social adjustment.

8.2. The first step in correction (or reformation) in the correctional institutions (also called penal institution) is on identification and classification of the offenders lodged. The reaction of the offenders to the programmes in the institution like diet, canteen, vocational programmes, education, games, recreational activities, cultural activities are closely watched and responses of inmates evaluated. Correctional officers (the term correctional officers is used

as complete transformation of a human being through imprisonment, training or treatment is regarded as not possible), help in correcting or reforming the offenders by providing him with proper opportunities and creating an environment which leaves a lasting impression on the personality of the offender where in good habits and good attitudes are inculcated or nurtured. It is well known that attitudes lead to approaches and approaches lead to value schemes. Thus the value schemes of an offender which are in wrong direction are redirected by correction. Throughout the stay of the offender in the institution, he is not bereft of his fundamental rights but his liberty, in the very nature of things, gets circumscribed. The offender enjoys all the constitutional rights to consult and engage a lawyer, right to legal aid, speedy trial etc. as well as the time-honoured provisions and practices in Jail Manual regarding meeting family members, relations and friends. It is also realised that it is not enough to have only reformative measures and correction to enable an offender (prisoner) to go back to society as a law abiding citizen. It is also necessary that he continues in society without reverting to crime. This is possible if

adequate attention is paid to rehabilitative and after-care programmes and financial assistance and other means are secured to provide him a job and adjust in society. One has to understand that an employed and rehabilitated ex-offender means less crime hazard for society.

Non-institutional treatment:

9.1 Probation is the most important mode of non-institutional treatment. In fact, it is a treatment meted out while the offender stays in the community. The main features of the Probation of Offenders Act 1958 are:-

- a) Admonition in simple cases,
- b) reports through probation officers in selected cases for release on probation with or without intensive supervision.
- c) Calling for reports of Probation Officers in cases of young offenders before imposing sentences.

9.2. It is believed that many offenders are not dangerous criminal but are either weak characters or who have surrendered to temptation or provocation. In placing such type of offenders or the young offenders and other categories of petty offenders, on probation the Court encourages their own

sense of responsibility for their future and protects them from the stigma and possible contamination in a penal institution. Further, sentencing petty offenders to undergo short sentences in a penal institution has no therapeutic or rehabilitative value. The success of the probation system depends on the quality and preparation of the pre-sentence report which serves to guide the court in its decision and on the effective supervision of the probationer by a well-trained probation officer. The probation machinery available in all Districts and important Sub-divisions, needs to be activated and strengthened in order that it is able to give effect to statutory principles and policies of probation. Voluntary agencies can play a useful role in probation work as in the present stage of socio-economic development, most of the offenders placed on probation need only care and protection rather than any concerted supervision.

Re-orientation of potent delinquents likely to adopt criminal career.

10. The problem of juvenile delinquency which includes both violations of law and mal-adjustment of children and adolescent youths is not confined merely to urban areas of our country but has reached the

rural areas as well. In the formative years of child, a number of factors like unhappy home, neglect and lukewarm attitude of parents, feeling of insecurity, fear, lack of recreational facilities etc. give rise to anti-social tendencies in the child. In order to satisfy his unmet needs, the child moves out of home and gets exposed to environmental factors like gang influence, vagrancy, indecent film show, pornographic literature, lure of easy life etc. and becomes a delinquent and indulges in criminal and anti-social activities. The responsibility for the social malady lies on the society which comprises, sociologists, workers, parents, school masters etc.

11. Juvenile delinquency is considered to be the gateway of adult criminality. It is very necessary to check this malady from the earliest stage. As juvenile delinquents are considered to be potential adult offenders, ineffectiveness in correcting and reforming them adds to crime problem which falls on the lap of Police and other agencies.

12. The programme relating to prevention and control of juvenile delinquency centres round the implementation of Juvenile Justice Act-1986 which came into force on 2nd October 1987.

This Act prescribes separate streams of enforcement procedure and treatment methods for neglected children and delinquent juveniles following their apprehension and also envisages separate institutions, functionaries for their training and education. The destitutes and neglected are no longer bracketed together with those who come in conflict with penal laws as was the case and flaw in the earlier childrens Act. Both Police and probation services have been given specified duties and responsibilities. Section-19 of Juvenile Justice Act lays down that when a juvenile is apprehended, the Police will inform the parents or the concerned Probation Officer. The Act has prohibited lodging of juveniles in Jails under any circumstances and the Probation Services get meaningful involvement at every stage of juvenile justice proceedings, i.e. right from apprehension, care of neglected and delinquent juveniles, treatment etc. Further, social workers connected with child welfare and community based voluntary agencies have been involved at various stages of apprehension, care and rehabilitation of neglected children and deviant juveniles. In short, this Act seeks to provide socially deviant children, justice with com-

passion because of their psycho-social and mental immaturity for which they cannot be equated with adults. It is also felt that harsh treatment will be injurious and serve no purpose in reclamation of the juvenile deviant.

13. Police as the first symbol of authority to come in contact with juveniles—both neglected and deviant have a crucial role to play. It should adopt a sympathetic attitude and avoid any word or action which might further harden or traumatise the child. It has to ensure that due to mishandling or for other reasons the juveniles do not fall an easy prey to criminal career. Barners and Teeters in his book "Criminology, problems and perspectives" have said—handled in his first clash with the law will often decide whether a criminal career will result or not."

Enforcement of protective legislation for Women and Children as a preventive device against social deviance.

14. Women and Children due to their physical and mental immaturity, and especially those who are in distress are targets for exploitation and commission of various atrocities. Various laws have been passed to check these maladies.

For instance, chapter VI of the Juvenile Justice Act contains provisions prescribing appropriate punishment for those who exploit or commit abuse in respect of children or engage them in questionable means like begging, traffic and administration of drugs, forced labour and also profiting by the earnings of the children. There are statistics to show that juveniles get involved as victims in different forms of crimes particularly offences arising from social legislation like prohibition Act, Immoral Traffic (Prevention) Act etc. The implementation of progressive statutes like Immoral Traffic (Prevention) Act, Anti-Beggary Laws, Lunacy Act, Juvenile Justice Act had so far a limited coverage in the absence of adequate infrastructure and institutional treatment schemes which form an integral part of these Acts. The enforcement of these protective legislations should be activated and improved.

Payment of compensation to victims of crime.

15. In our criminal law, every care is taken for the well being of the perpetrator of crime, while apprehending him and lodging him in the jail as an undertrial and later as a convict, but no attention is paid to the victim of crime, except to require his

presence as a witness. In other words the victim of crime is almost left alone. In many cases the victim suffers incapacitation, either temporary or permanent and while in death, the family's sole earning member is lost but, the State offers very little help to the victim of crime or his dependents. In most of the cases, the victim or their dependents are left to their own resources with the result that many of them are prone to exploitation or themselves indulge in anti-social activities. The concept of compensation, if properly utilised in the correctional process, may also contribute to a great extent to the rehabilitation of offenders. The Supreme Court, recently underlined the need about compensation to victims of crime—

".....Sub Section (3) of Section 357 Cr.P.C. empowers the Court to award compensation to victims while passing of judgement of conviction. In addition to the conviction, the Court may order the accused to pay amount by way of compensation to victim who has suffered by the action of accused. It may be noted that this power of Courts to award compensation is not ancillary to other sentences, but it is in addition there to. This power

was intended to do something to reassure the victim that he or she is not forgotten to the criminal justice system. It is a measure of responding appropriately to crime as well as reconciling the victim with all offender. It is to some extent, a constructive approach to crimes. It is indeed a step forward to our criminal justice system.....The quantum of compensation may be determined by taking into account the nature of crime, the justness of claim by the victim and the ability of the accused to pay..... The payment may also vary depending upon the acts of the accused. Reasonable period of payment of compensation of necessary by instalments may also be given. the Court may also enforce the order by imposing sentence in default..... The life long disability of the victim ought not to be by-passed by the Court. He must be made to feel that the Court and accused have taken care of him. Any such measure which would give him succor is far better than a sentence by deterrence" (Hari Singh Vrs Sukhbir Singh & others 1988(3) Crimes SC 541).

Need for specialised Police units or Social Police.

16. The statute Books are full of Social Legislation. The Police are not in a position to bear the entire burden of implementing all these legislations, as some of these legislations call for specialised knowledge and orientation. For, instance, at the level of Police stations and even in trying juvenile Court, there is inadequate perception of the need for careful and soft handling of juvenile deviants. Regular Police in course of their day-to-day work and frequent interactions with violent elements of society are likely to indulge in same rough handling while dealing with juvenile delinquents, which cannot be effectively corrected by mere exhortations or circulars. The solution lies in creation of special Police units like Juvenile Aid Police Units(JAPU) or Juvenile Crime Squad, as existing in some states and metropolitan cities. These units deal exclusively with all crime work relating to juvenile deviants as well as handling of neglected children and juvenile delinquents at all stages till they are lodged in some custody by the court. Such a specialised wing alone can, apart from soft handling, maintain effective liaison with other sister agencies like the Social Welfare Services,

the Probation Services, the After-care-organisations, the observation, Home etc. Japan has a separate "Juveniles and in enforcement of Welfare Legislation concerning juveniles. Sweden has a "Social Police" which is well organised and trained to enforce social legislation. A Swedish specialist in Social Defence, Karl Schlyter, has raised the slogan "Empty the Prisons" and expressed the opinion that the term "criminal code" should be replaced by the "Social Defence Code".

Conclusion.

17. Legal measures without a vigorous support by the public and active back-up by the community welfare agencies is likely to yield unsatisfactory results. Society has a stake in the process of treatment and rehabilitation of offenders. And criminals are there due to disparities and malfunctioning of social system and society must move in the matter by removing the conditions which breed crime.

Inspector General of Prisons
Orissa

SHRI BIJU PATNAIK



Born on 5th March 1916, Sri Biju Patnaik saw Mahatma Gandhi at Cuttack in 1927 while he was a student of the Ravenshaw Collegiate School. He was associated with the underground movement of 1942 along with Jay Prakash Narayan and Ram Monohar Lohia. Shri Patnaik, who was imprisoned during 1943-45 for participation in India's Freedom Movement, played a distinguished role in the Freedom Struggle of Indonesia for which he was honoured by Indonesian Government. He landed the first platoon of troops in Srinagar which engaged the Pakistani raiders.

Shri Biju Patnaik was first elected to the Orissa Legislative Assembly in the first general elections of independent India in 1952. With his victory in the recent elections, Shri Patnaik has been elected eight times to the Orissa Assembly. He was the Chief Minister of Orissa during 1961-63 and Chairman, State Planning Board in 1971-72. During his tenure as Chief Minister, Shri Patnaik infused dynamism into the State administration and initiated numerous programmes for socio-economic development of the State including creation of employment opportunities and eradication

of poverty. His contribution for expansion of education and technical education in the State was significant. Paradeep Port, H.A.L. at Sunabeda and a number of industries were also set-up during this period.

Shri Biju Patnaik was elected member of the Rajya Sabha in 1971 and to the Loka Sabha in 1977. He was Union Cabinet Minister from 1977 to 1979. Shri Patnaik was elected to the eighth Lok Sabha in 1984 and resigned from the Lok Sabha in March 1985 on being elected to the State Assembly. He was the leader of Opposition and Chairman, Public Accounts Committee in the ninth Orissa Assembly from 1985 till its dissolution in March 1990.

A daring and accomplished pilot, Shri Patnaik was a well-known industrialist of the country. He has instituted the prestigious Kalinga Prize, for popularisation of Science, monitored by the UNESCO. With a distinguished career as industrialist, politician and philanthropist, Sri Patnaik today occupies a unique position among the top-most leaders of the country.

Shri Biju Patnaik's first love is Orissa. He is proud of being an Oriya and is profoundly committed to the cause of Orissa's socio-economic growth.



SHRI BIJOY MOHAPATRA
Minister, Irrigation & Power (Irrigation) and
General Administration (Parliamentary Affairs)



SHRI CHAITANYA PRASAD MAJHI
Minister, Education & Youth Services
(Education)



SHRI GHASIRAM MAJHI
Minister, Health & Family Welfare



SHRI JAGANNATH MALLIK
Minister, Agriculture & Co-operation



SHRI NALINIKANTA MOHANTY
Minister, Works and Housing & Urban
Development



SHRI NARASINGHA MISHRA
Minister, Law

INTRODUCTION :

Forests provide a valuable resource base for socio-economic development of any nation. Inventory of any resource is very essential for its efficient management and planned development. This is even more true in the case of renewable resources like forests for more than one reason. Firstly - the diversity and variety of products available from forests ranging from fuel wood for cooking food to food items, from small timber for rural household to timber for national requirements and raw materials for various essential industries, make them a very strong natural resource base for the nation. Secondly - being renewable they can be almost inexhaustible under a well planned management strategy. Thirdly - working as a vast industry to replenish the earth's atmosphere with the life gas oxygen and as the protective cover for effective soil and water conservation, forests greatly influence our environment and keep it habitable. Fourthly - effects of changes in forest management are slow to come about and there is relatively little flexibility for taking corrective measures once the adverse effects of a management system have manifested themselves.

USE OF REMOTE SENSING TECHNOLOGY IN FOREST MAPPING AND MONITORING

Arun K. Bansal

Conservation and planned utilisation of forest resources calls for reliable and up-to-date information of its nature, location and extent. Ground surveys of extensive forest areas are very time consuming and updating of information at short intervals is not feasible. In the modern age, we have necessarily to employ advanced techniques of data collection and monitoring to take conscious and informed decisions for efficient management of our forest resource. Emphasising upon the need for adequate and up-to-date data about the forest resources of the nation, the new national forest policy enunciated in December, 1988, states :

Inadequacy of data regarding forest resources is a matter

of concern because this creates a false sense of complacency. Priority needs to be accorded to completing the survey of forest resources in the country on scientific lines and to updating information. For this purpose, periodical collection, collation and publication of reliable data on relevant aspects of forest management needs to be improved with recourse to modern technology and equipment. (Anon., 1988a)

REMOTE SENSING :

Remote sensing is the science and art of obtaining data about objects on or near the earth's surface with which we are not in direct

contact, and using the captured data to provide meaningful information (Anon., 1983). Remote sensing includes aerial photography and satellite sensing along with photo/data interpretation, and presentation of the acquired information in map form or as statistics. Evolution of space borne remote sensing has been a major technological advance that has opened new avenues for the acquisition of information about the earth's resources. Satellite remote sensing provides repetitive multispectral coverage of the earth's surface and environment and offers the unique possibility for making such information available with a short turn-around time.

In India, use of remote sensing in the form of aerial photographs was started in 1965. Since the launch of the first of a series of earth resource technology satellites by USA, later renamed Landsat series, in 1972, India has gradually acquired capabilities for the acquisition of remotely sensed data from American Landsat and French SPOT satellites, and the use of these data for various purposes including vegetation mapping. Remote sensing techniques offer potent means of updating information on different aspects of the forest resources, such as :

monitoring logging and afforestation schemes, regeneration inventory, fire and other damage assessment, and for undertaking timely remedial and control measures.

NATIONAL NATURAL RESOURCE MANAGEMENT SYSTEM :

Evolution of National Natural Resource Management System (NNRMS) using a series of Indian Remote Sensing Satellites. IRS-1A launched in March 1988 is the outcome of operationalisation of the remote sensing system in the country.

Based on the growth of remote sensing technology in the country and noting its potential, the Planning Commission and Department of Space have been working towards a broad nationwide coordination of various activities pertaining to remote sensing techniques in order to enhance and accelerate its applications to the management of various natural resources. Following the recommendations of the Planning Committee of NNRMS, Planning Commission constituted a 'Task Force on Forestry' in 1984 under the chairmanship of the Inspector General of Forests. The terms of reference of the Task Force included, among others, study in detail the role of

remote sensing in the information requirement areas of information where remote sensing can substitute, complement or supplement conventional methodology.

After indepth study of all related aspects, the Task Force recommended adoption of remote sensing technology as a routine system for supplementing the traditional methods of forest resources survey in the country and for establishment of remote sensing units with both visual and digital data analysis facilities in many states, including Orissa (Anon., 1985a). Following the recommendations, Orissa Remote Sensing Applications Centre (ORSAC) has been established as a multi-disciplinary organisation under administrative control of the Department of Science and Technology of the Government of Orissa.

VEGETATION MAPPING OF ORISSA USING REMOTELY SENSED DATA :

Vegetation mapping of the entire state was done by the National Remote Sensing Agency (NRSA) Department of Space, Government of India, in 1985, as a part of "Mapping of Forest Cover in India". Visually interpreting Landsat false colour composite imageries of 1:1 mil-

lion scale generated from digital multi-spectral scanner data. NRSA assessment revealed the forest area of Orissa to be merely 39425 square kilometres, of which only 28812 square kilometres was closed forest, against the recorded forest area of 59599 square kilometres. Total forest area of the country was reported to be 14.10 percent as compared to recorded figure of 22.8 percent (Anon., 1985b). However, subsequently it was found that apart from the fact the NRSA report was prepared in a short time (6 months) with very limited ground verification, it suffered from inadequacies for some other reasons, such as use of satellite imageries of inappropriate season.

The Forest Survey of India (FSI) made an independent assessment of the forest cover using remotely sensed data of 1981-83, similar to those used by NRSA, but with intensive ground truth verification, and use of information gathered from aerial photographs. Forest area of Orissa was reported to be 53163 square kilometres, of which 28573 square kilometres were dense forest. It is pertinent to mention that 1:1 million is a very small scale for forest mapping. Due to cartographic limitations areas less than 400 hectares cannot

be interpreted leading to both omission (non-identification of forest patches which are less than 400 hectares in extent) and commission (identification of small blank/nonforest paths inside forest areas as forest) errors. Linear plantations, such as those along the roads and railway lines, can also not be mapped. (Anon., 1988b)

In a more recent report, FSI interpreted satellite images on 1:250,000 scale generated from remotely sensed acquired by Landsat thematic mapper sensor system, with greatly improved spatial, spectral, and radiometric resolutions compared to the multi-spectral scanner, pertaining to the period 1985-87. Forest area of Orissa has been assessed to be 47137 square kilometres of which about 58.5 percent is dense forest. In spite of the fact that this assessment, which is based upon data from improved sensor system on a larger scale, is technically likely to be different from the previous assessment, the losses of forest area in the case of Orissa are reported to be real. According to the report 400 square kilometres of dense forests have been lost in Koraput district. The report reveals that Orissa has lost approximately 10 percent of the forest cover in a period of 4-5 years. Such a situation is indeed quite

alarming. (Anon., 1989) However, the national level forest mapping does not give adequate details which may be relevant for state's planning purposes.

A project for mapping forests of Orissa using data obtained from Indian Remote Sensing satellite (IRS-1A) has been taken up by ORSAC to prepare detailed forest maps of the state on 1:50,000 scale. Yet another study being conducted by ORSAC envisages monitoring of plantations in the state. However, results of these studies have not yet been available.

CONCLUSION :

Considering the vastness of the state's existing forest resources and their importance in the well being of the people, higher emphasis upon the use of modern remote sensing techniques is warranted for reliable detailed mapping of existing forest resources and effective monitoring of the forests and various afforestation programmes on a regular basis. To achieve this goal, forestry organisation would be better placed in the long run by creating a Remote Sensing based forest resources survey and monitoring unit under the control of the Principal Chief Conservator of Forests. The unit would

strengthen the efforts of ORSAC in respect of vegetation monitoring, and should work in close collaboration with NRSA and FSI for optimal utilisation of the technical manpower and other resources.

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Bhubaneswar.*





10th OLA Elections

RESULTS OF THE ELECTIONS TO THE TENTH ORISSA LEGISLATIVE ASSEMBLY

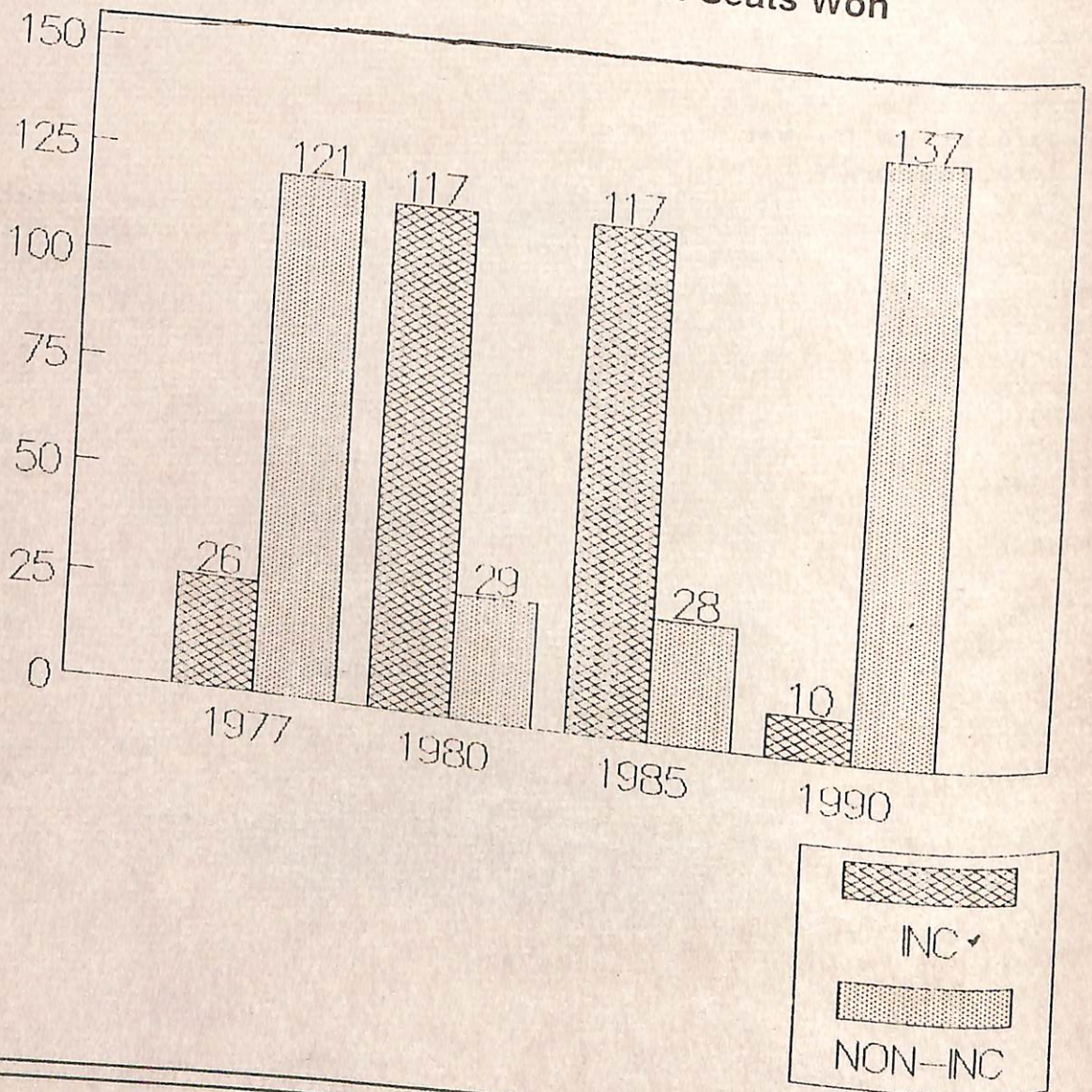
Elections to the tenth Orissa Legislative Assembly were held on 27 February 1990. Results and analysis of results have been compiled in the computerised information system by the Orissa Computer Application Centre, a Government of Orissa organisation. We reproduce here some of the data collected from this source.

Report on Percentage of Votes Polled
as against the Number of Electors for
the 10th Assembly Election, ORISSA, 1990.

District Name	No of Electors	No of Votes Polled	% of Votes Polled as against No of Electors
BALASORE	1721538	1130778	65.68
BOLANGIR	1008256	536193	53.18
CUTTACK	3608083	2345897	65.02
DHENKANAL	1211571	656404	54.18
GANJAM	2062959	1125564	54.56
KALAHANDI	964466	495861	51.41
KEONJHAR	802088	387595	48.32
KORAPUT	1779163	861687	48.43
MAYURBHANJ	1177142	587970	49.95
PHULBANI	539432	292758	54.27
PURI	2258981	1374930	60.87
SAMBALPUR	1652147	913753	55.31
SUNDERGARH	961325	482976	50.24
State Total :-	19747151	11192366	56.68

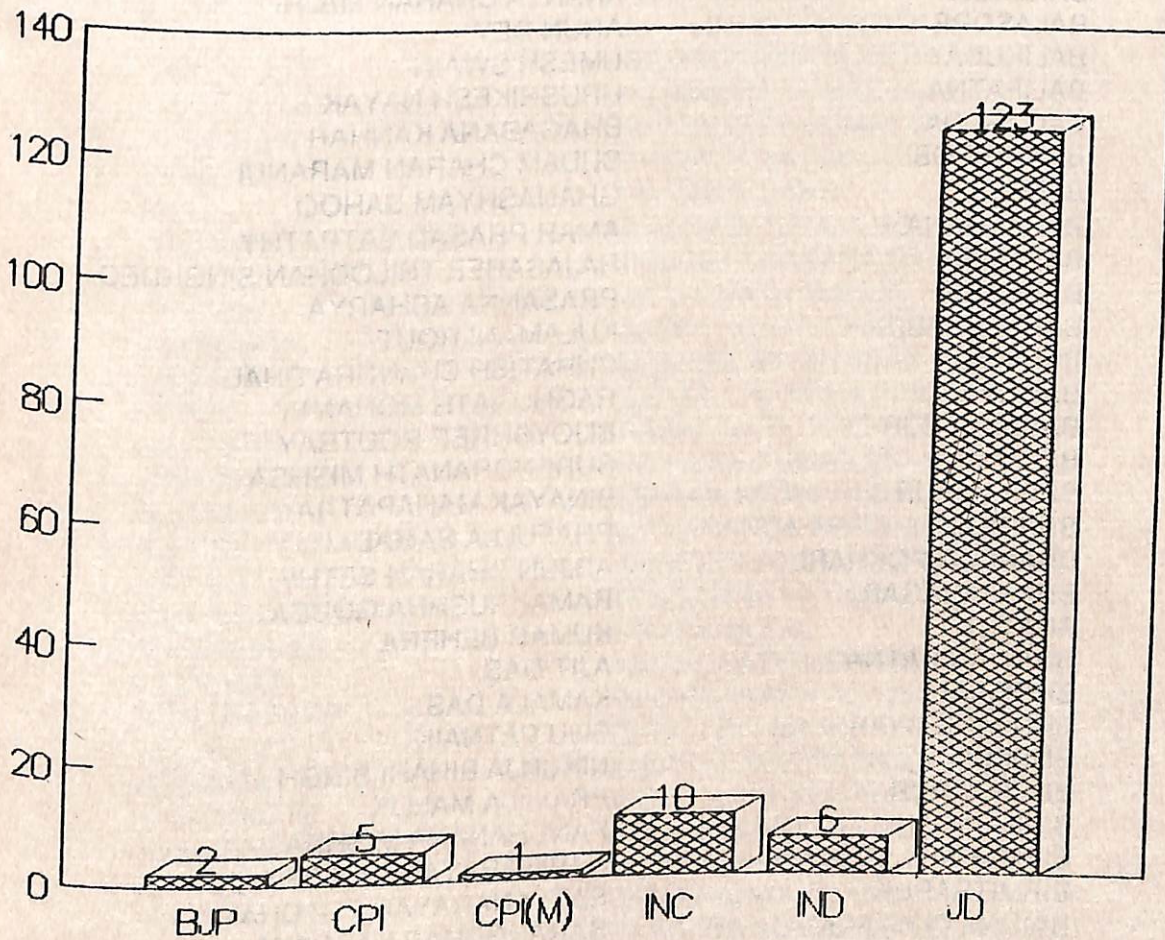
OPD '90 - An OCAC Table.
Computerised Information System
for 10th Assembly Election, ORISSA.

Comparative Analysis of Seats Won



Seats Won by different Parties

10th OLA Elections



MEMBERS OF THE TENTH ORISSA LEGISLATIVE ASSEMBLY

CONSTITUENCY

MEMBER

ANANDAPUR	DASARATHII JENA
ANGUL	ADWAIT PRASAD SINGH
ASKA	DUTIKRUSHNA PANDA
ATHAGARH	RANENDRA PRATAP SWAIN
ATHAMALLIK	NAGENDRA KUMAR PRADHAN
AUL	SUSHREE DEVI
BAHALDA	KHELARAM MAHALI
BAISINGA	ANANTA CHARAN MAJHI
BALASORE	ARUN DEY
BALIKUDA	UMESH SWAIN
BALIPATNA	HRUSHIKESH NAYAK
BALLIGUDA	BHAGABANA KANHAR
BANGRIPOSI	SUDAM CHARAN MARANDI
BANKI	GHANASHYAM SAHOO
BARACHANA	AMAR PRASAD SATPATHY
BARAMBA	RAJASAHEB TRILOCHAN SINGHDEO
BARGARH	PRASANNA ACHARYA
BARI-DERABIS	KULAMANI ROUT
BARIPADA	CHHATISH CHANDRA DHAL
BASTA	RAGHUNATH MOHANTY
BASUDEVPUR	BIJOYSHREE ROUSTRAY
BEGUNIA	SURENDRANATH MISHRA
BERHAMPUR	BINAYAK MAHAPATRA
BHADRAK	PRAFULLA SAMAL
BHANDARIPOKHARI	ARJUN CHARAN SETHI
BHANJANAGAR	RAMAKRUSHNA GOUDA
BHATILI	KUMAR BEHERA
BHAWANIPATNA	AJIT DAS
BHOGRAI	KAMALA DAS
BHUBANESWAR	BIJU PATNAIK
BIJEPUR	NIKUNJA BIHARI SINGH
BINJHARPUR	PRAMILA MALLIK
BINKA	PANCHANANA MISHRA
BIRMAHARAJPUR	RABINARAYAN PANIGRAHI
BIRMITRAPUR	SATYANARAYAN PRADHAN
BISSAM CUTTACK	SARANGDHAR KADRAKA
BOLANGIR	ANANGA UDAYA SINGH DEO
BONAI	JUAL ORAM
BOUDH	SATCHIDANANDA DALAL
BRAHMAGIRI	AJAYA KR. JENA
BRAJARAJNAGAR	PRASANNA KUMAR PANDA
CHAMPUA	SAHARAI ORAM
CHANDABALI	BAIRAGI JENA

CHATRAPUR	PARSURAM PANDA
CHIKITI	USHA DEVI
CHILIKA	BISWABHUSAN HARICHANDAN
CHITRAKONDA	PRAHALLAD DORA
CHOUDWAR	RAJ KISHORE RAM
CUTTACK CITY	SAYED MUSTAFIZ AHMED
CUTTACK SADAR	RAJENDRA SINGH
DABUGAM	JADAB MAJHI
DASAPALLA	RUDRAMADHAB RAY
DEOGARH	PRADIPTA GANGA DEB
DHAMNAGAR	HRUDANANDA MALLICK
DHARAMGARH	BHARAT BHUSAN BEMAL
DHARMASALA	GURUCHARAN TIKAYAT
DHENKANAL	TATHAGAT SATPATHY
ERSAMA	DAMODAR ROUT
GONDIA	NANDINI SATAPATHY
GOPALPUR	RAMACHANDRA SETHI
GOVINDPUR	RABINDRA KUMAR MALLIK
GUNUPUR	RAMMURTY GOMANGO
HINDOL	TRINATH NAYAK
HINJILI	HARIHAR SAHU
JAGANNATH PRASAD	MADHABANANDA BEHERA
JAGATSINGHPUR	BISHNU CHARANA DAS
JAJPUR	JAGANNATH MALLIK
JALESWAR	ASWINI KUMAR PATRA
JASHIPUR	MANGAL SINGH MUDI
JATNI	SARAT CHANDRA PAIKRAY
JEYPORE	RAGHUNATH PATNAIK
JHARSUGUDA	KISHORE KUMAR MOHANTY
JUNAGARH	BIKRAM KESHARI DEO
KABISURYANAGAR	NITYANANDA PRADHAN
KAKATPUR	SURENDRANATH NAIK
KAMAKHYANAGAR	PRASANNA PATNAIK
KANTABANJI	PRASNNA PAL
KARANJIA	RAGHUNATH HEMBRA
KENDRAPARA	BED PRAKASH AGARWALA
KEONJHAR	CHHOTRAI MAJHI
KESINGA	KIRAN CHANDRA SINGH DEO
KHALLIKOTE	V.SUGNANA KUMARI DEO
KHANDAPARA	ARUN KUMAR PATTANAİK
KHARIAR	DURYODHAN MAJHI
KHUNTA	BIRABHADRA SINGH
KHURDA	PRASANA KUMAR PATASANI
KISSANNAGAR	YUDHISTHIR DASH
KODALA	RAMAKRUSHNA PATNAİK
KODINGA	SHYAM GHONO MAJHI
KOKSARA	SURENDRA PATTAJOSHI
KORAI	ASHOK KUMAR DAS
KORAPUT	HARIS CHANDRA BUXIPATRA
KOTPAD	SADAN NAIK
KUCHINDA	BRUNDABAN MAJHI

KULIANA
 LAIKERA
 LAXMIPUR
 LOISINGHA
 MAHANGA
 MALKANGIRI
 MELCHHAMUNDA
 MOHANA
 NARLA
 NAYAGARH
 NILGIRI
 NIMAPARA
 NOWAPARA
 NOWRANGPUR
 PADAMPUR
 PALLAHARA
 PARLAKHEMUNDI
 PATKURA
 PATNA
 PATNAGARH
 PATTAMUNDAI
 PHULBANI
 PIPLI
 POTTANGI
 PURI
 RAGHUNATHPALI
 RAIKAKHOL
 RAIRANGPUR
 RAJAGANGPUR
 RAJANAGAR
 RAMACHANDRAPUR
 RAMAGIRI
 RANAPUR
 RAYAGADA
 ROURKELA
 SAINTALA
 SALEPUR
 SAMBALPUR
 SATYABADI
 SIMULIA
 SONEPUR
 SORO
 SUKINDA
 SUNDARGARH
 SURADA
 TALCHER
 TALSARA
 TELKOI
 TIRTOL
 TITILAGARH
 UDALA
 UDAYAGIRI
 UMERKOTE

KANHU SOREN
 HEMANANDA BISWAL
 AKHIL SAUNTA
 NARASINGHA MISHRA
 SARAT KUMAR KAR
 NAKA KANNAYA
 KURARI PRASAD MISHRA
 SURYANARAYANA PATRO
 BALABHADRA MAJHI
 BHAGABAT BEHERA
 CHITARANJAN SARANGI
 BENUDHAR SETHI
 GHASI RAM MAJHI
 HABIBULLA KHAN
 BIJOY RANJAN SINGH BARIHA
 DR. NRUSINGHA CHARAN SAHOO
 DARAPU LACHANA NAIDU
 BIJAYA MOHAPATRA
 KANHU CHARAN NAIK
 BIBEKANANDA MEHER
 RADHA KANTA SETHY
 PADMANAVA BEHERA
 PRADIP KR. MAHARATHY
 JAYARAM PANGI
 BRAJAKISHORE TRIPATHY
 RABI DEHURY
 BASANTA KUMAR MAHANAND
 CHAITANYA PRASAD MAJHI
 MANGALA KISAN
 NALINI KANTA MOHANTY
 BADRINARAYAN PATRA
 HALDHAR KARJEE
 SARAT CHANDRA MISHRA
 RAMACHANDRA ULAKA
 DILIP KUMAR RAY
 JANGYESWAR BABOO
 KALINDI CHARAN BEHERA
 DURGASANKAR PATTANAYAK
 CHANDRAMADHABA MISHRA
 PARSURAM PANIGRAHI
 KUNDURU KUSHUL
 KARTIK MOHAPATRA
 PRAFULLA CHANDRA GHARAI
 BHARATENDRA SHEKHAR DEO
 SHANTI DEVI
 BRUNDBAN BEHERA
 RANJEET BHITRIA
 NILADRI NAYAK
 BASANTA KUMAR BISWAL
 JOGENDRA BEHERA
 ROHIDAS SOREN
 NAGARJUNA PRADHAN
 GURUBARU MAJHI



Chief Minister, Orissa, Shri Biju Patnaik addressing the Basanta Utchhab function organised by "Chinta O Chetana" on March 12, 1990 at Soochana Bhavan, Bhubaneswar.

Picture shows Srimati Bina Devi, Director, Doordarshan, Srimati Manorama Mohapatra, Associate Editor, Samaj, Professor Manmath Nath Das and Dr. Prasanna Patsani, M.L.A.



XIV National Sports Championship for Women, 1989-90 was inaugurated on March 14, 1990 at Barabati Stadium, Cuttack by Sri L.I. Parija, Chairman, Orissa Public Service Commission.

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