

Vir Surendra Sai The Indomitable Hero of Orissa

Braja Paikaray

The heroes who fought against the Britishers to keep the prestige and dignity of Mother India shall be remembered by the countrymen for ever. Vir Surendra Sai who was a great revolutionary has glorified the pages of Indian history for his deep patriotism, rare courage, indomitable spirit and relentless struggle against the foreign rulers.

The First War of Independence, better known as the Sepoy Mutiny of 1857, broke out all of a sudden. However the rebellion could not be sustained for long. But it was Vir Surendra Sai who could sustain the flame of revolution till 1864 due to his uncommon mental strength and unique guerrilla warfare.

Vir Surendra Sai was born on 23rd January 1809 in Chauhan royal family in village Khinda situated at a distance of thirty Kms, on the northern side of Sambalpur town. He had married the daughter of Hatibadi Zamindar of the-then Gangpur state and had become the father of a son named Mitrabhanu Sai and one daughter. In 1827 the King of Sambalpur died issueless and



the British Government installed the widow queen Mohan Kumari on the throne of Sambalpur without caring for the legitimate right of Vir Surendra Sai. Though queen Mohan Kumari was completely unfit for the managing the State Administration, she was appointed as the ruler of Sambalpur as because she could play to the tune of the Britishers. But on the other hand the British rulers had known it pretty well that Vir Surendra Sai was not the person to follow the dictum of the British Government. The selection of queen Mohan Kumari as the successor of Sambalpur throne irked many Adivasi Zamindars

who revolted against the decision of the British Government and it was Vir Surendra Sai who took the leadership of those Zamindars and fought against the foreign rulers to the last drop of his blood.

Surendra Sai spent 37 years of his life inside the prison and had fought relentlessly against the Britishers for 20 years i.e. from 1827 to 1840 in the first phase and from 1857 to 1864 in the second phase but had never bowed down his head before the enemies.

'Surendra Sai was an able general whose unique organizing capacity and sound military knowledge had become a constant source of headache for the British rulers. The British Ramgad Battalion stationed at Sambalpur under the command of Captain Higgins could not be able to face Vir Surendra Sai as he was an expert in guerrilla warfare. In order to crush the rebellion, another battalion of British soldiers rushed to Sambalpur from Hazaribag of Bihar. Though the rebellion was crushed to some extent it could not be wiped out completely. Hence, the British Government under compulsion of the situation dethroned queen Mohan Kumari and installed Narayan Singh, a distant relative of Sambalpur royal family as the ruler of Sambalpur. Once again the rebellion erupted at Sambalpur.

In 1837 Surendra Sai, Udanta Sai, Balaram Singh and Balabhadra Deo, (the Zamindar of Lakhanpur assembled together at Debrigada to decide the future course of action. But unfortunately all of a sudden the British Soldiers reached at the spot and killed Balabhadra Deo mercilessly. Fortunately Surendra Sai and his followers escaped from the clutches of the Englishmen.

In the year 1840, Surendra Sai, and Udanta Sai along with their uncle Balaram Singh were caught and imprisoned at Hazaribag Jail as life convicts with rigorous imprisonment.

In 1849 when Narayan Singh expired Vir Surendra Sai was still a prisoner at Hazaribag Jail. On 30th July 1857 at the time of Sepoy Mutiny, the rebellious sepoys forcibly dashed inside the Hazaribag Jail and freed Surendra Sai along with 32 prisoners. Surendra Sai returned to Sambalpur and organised the people to fight against the Britishers.

In 1861 Major Impey was appointed as the Deputy Commissioner of Sambalpur. He followed the policy of peace instead of war and stopped fighting with Surendra Sai. The mutineers who surrendered themselves were pardoned and their confiscated properties were restored to them.

When the brothers and only son of Vir Surendra Sai surrendered, Major Impey treated them with respect and dignity and allowed them to stay at their village Khinda. On 16th May 1862 Surendra Sai met Major Impey inside the dense forest at night and surrendered himself. He was also allowed to stay in his village.

In 1863 Major Impey expired and after his death the political situation of Sambalpur completely changed. In place of Major Impey, Captain Cumberledge became the Deputy Commissioner of Sambalpur. He did not prefer to follow the policy of peace. In order to crush the rebellion from the bud, Captain Cumberledge conspired with Captain Stewart and Mr. Berryel and ransacked the hide out of Vir Surendra Sai on 23rd January 1864 at midnight while he was asleep with his relatives and made them captives. They were taken to Rayapur at the dead hour of the night. Later on Vir Surendra Sai and his family members were sent to Nagpur Jail and finally to Asirgad Fort in the year 1866. On 28th February 1884 Vir Surendra Sai breathed his last inside the Asirgad Fort prison.

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Biswanath Das, Patriot With A Difference

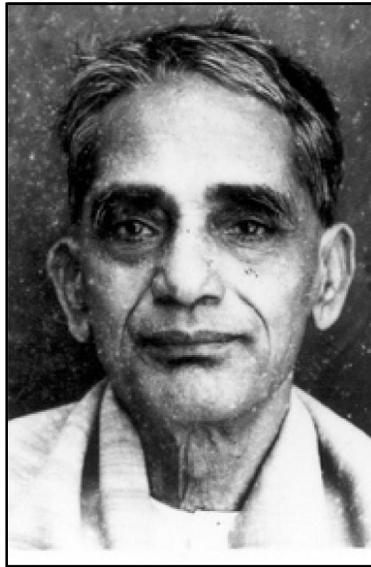
Gurukalyan Mahapatra

The people of Orissa even today remember Biswanath Das as a patriot and ace administrator who once dominated Orissa politics during the pre-independence period. In his role as a Prime Minister of Orissa or a Governor or Chief Minister, he always emphasized on morality, character building, honesty and integrity. Very few politicians of our state rose to the national level in the past. He was one of them.

Commenting on Biswanath Das, former Union Steel Minister late Kumar Mangalam once said, 'he is the only person in the country at whose character no accusing finger can be pointed out.'

Biswanath Das was born in Belagan village of Ganjam district (Orissa) in 1889. Some say that he was born on 8th March in that year and others claim that his date of birth was 21st April in the same year. However, it is upto the historians and research scholars to find out the exact date of birth.

Biswanath, in his early life was educated at Cuttack. He was a school student of the then Victoria High School (now it is Bhakta Madhu Vidyapitha). Subsequently, he was educated in



Revenshaw College and Calcutta University. He was attracted to the personality of Utkal Gaurav Madhusudan Das, who was then a renowned lawyer in Orissa and West Bengal. After completing studies he used to go to Madhu Babu regularly and got himself involved to the legal profession. He preferred to be a junior advocate under Madhu Sudan Das. After some time he returned back to Berhampur and started the legal practice independently.

In the meantime, he entered public life. It was his ambition. By that time, the landlords and zamindars were oppressing the royats or farmers. Biswanath organised them and formed an union of Royats in the northern district of Madras Presidency. Biswanath became the President of the Union and Varah Venkat Giri (V.V.Giri) was its Secretary (who later became the President of India) Eminent Professor, and lawyer late Dr. Sreeram Chandra Das has narrated this event in one of his articles. "I have myself heard Giri addressing Biswanath Das as *Bhaia* (elder brother) when Giri was the President of India and Biswanath Das was the Chief Minister of Orissa in 1971-72. As Royats'

representatives, both of them were elected to Madras Legislative Council. Later, when the Raja of Bobbili who became the Chief Minister of Madras on behalf of the Justice Party wanted to contest election from the southern part of northern districts of Madras as a farmers' representative, Biswanath advised V.V. Giri to give up Royat politics and seek election as a representative of Railway Labourers who were to be organised by V.V. Giri under Biswanath's advice. Thus under the Government of India Act, 1919 when Montford Reforms were introduced, Shri Das, Shri Giri and Raja of Bobbili were elected to Madras Council In later years Giri rose to prominence as a leader of the Railway Men's Union in India and as a leader of the working class, he became the Labour Minister of the Government of India, represented India in International Labour Organisation and finally his eminence brought him the office of the President of India.'

In fact, the eminent labour leader and former President of India V.V. Giri was product of late Biswanath Das. But it was the characteristic of his personality that he never took advantage of Shri Giri at any time, even when he was the Union Labour Minister or the Vice-President or the President of India.

All over India, Gandhiji's call for the non-co-operation movement in 1921 had tremendous impact. Along-with Shasi Bhusan Rath, Niranjana Pattnaik, Lal Mohan Pattnaik (former Speaker of the Orissa Legislative Assembly), Biswanath joined the freedom movement. Biswanath represented Ganjam district in the Madras Legislative Council from 1921 to 1930.

However, Biswanath Das set new precedents when he was the Premier (Prime Minister) of Orissa during pre-independence period which were followed throughout India.

Many spoke high of the bold administrative measures taken by him for the smooth functioning of our democracy.

His political maturity was conspicuous when he first became the Prime Minister of Orissa on July 19, 1937. He was elected from the Jagannath Prasad Assembly constituency. There were two other ministers in his Cabinet. One was Nityananda Kanungo and another was Bodhi Ram Dube. He wanted to implement the Government of India Act of 1935 during his Prime Ministership. In that Act, the provision was that the meeting of the Council of Ministers or the Cabinet would be held in the Government House and the Governor would preside over the Council or Cabinet meeting. But Biswanath deviated from the prevalent system and he himself presided over the Council of Minister's Meeting keeping the Governor in dark about that, which was informed to the Governor subsequently. Sardar Ballav Bhai Patel known as the Iron Man of India (also former Deputy Prime Minister of India) was the Chairman of the Congress Central Parliamentary Board at that time and he himself highly appreciated this act of Biswanath Das. That practice was followed by all other provinces in India.

Biswanath was praised for his political as well as administrative boldness. Sir John Hubback, the first Governor of Orissa in 1938 was granted leave for four months. And Sir John Rutherford Daim, the Revenue Divisional Commissioner was appointed as the Acting Governor of Orissa. Prime Minister Biswanath, however, could not accept this and complained that one of his subordinate officials who used to sit in the gallery during cabinet meetings could not be made the Acting Governor to preside over the meeting. Biswanath even threatened to resign if that was done. When the matter was brought to the notice of Gandhiji, he agreed to the arguments of Biswanath Das. On that particular

issue all other provincial Prime Ministers of India also threatened to resign. The then British Government in London was in a fix over this constitutional crisis. Subsequently, as per the British Government's order, the Governor of Orissa John Hubback withdrew his leave application. But again in 1939 he applied for leave and in his place G.T. Boag, the then Chief Secretary of Madras was appointed as the Acting Governor of Orissa.

Biswanath Das was a member of the Constituent Assembly in 1946. He was a member of All India Servants of India Society (Lok Sevak Mandal) in 1955. When Lal Bahadur Shastri (former Prime Minister of India) died Biswanath Das replaced him as the President of that society. He was appointed as the Governor of an important State like Uttar Pradesh from 1962 to 1967. In the Raj Bhavan premises he took personal care of his garden and orchard when he would have taken rest from the routine work. Most of the time, he will distribute the fruits and vegetables to the employees of the Governor House. He did not hesitate to sit and eat with them on the floor. He did not spend a single pie of his salary and donated all for establishing Ved Bhavan at Puri. He also helped the poor and needy students from time to time.

There are now nine Universities in our State to look after the higher education and research work. But when there was no single University in the State, Biswanath appointed the Utkal University Committee under the Chairmanship of Pandit Nilakantha Das (Former Speaker of Orissa Legislative Assembly). On the basis of that committee's report, after a span of five years, the then Education Minister, Pandit Godabarish Mishra (a famous poet also) in consultation with Pandit Nilakantha Das established the first University, known as the Utkal University on November 27, 1943.

His another significant achievement was to control flood in the river Mahanadi. He appointed Sir Viswesaraya, a famous engineer of our country to find out the remedies. His recommendations were very much needed to control the flood and build a dam on the river at Hirakud.

For a stint, Biswanath was the Chief Minister of Orissa in 1971. During his Chief Ministership one interesting incident took place. A senior most officer of the education department was asked to come to meet the Chief Minister. That senior most officer who came to the Chief Minister had put on a multicoloured shirt. Chief Minister was unhappy about it and said, "please come with a decent dress, don't come like a student." The officer was ashamed and never put on a multi-coloured shirt during office hours again.

Biswanath Das, breathed his last on 2nd June in 1984 at his Kaji Bazar residence in the Cuttack city.

He is no more. But his simple living and high thinking has attracted many when he was alive.

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Magic Lantern Speech and the Articulation of Popular Protest in Colonial Orissa

Dr. Kailash Chandra Dash

During the Non-Cooperation movement under the leadership of Mahatma Gandhi several methods were adopted to articulate popular protests against colonial rule in Orissa. The Non-Cooperators continued to protest against colonialism even in 1927. They undertook widespread constructive programmes for the development of the rural sectors in Orissa, which included the formation of national schools for educational activities and spinning and weaving in rural centers for the spread of khadi (Swadeshi dress). An interesting method to train the rural people in this phase to protest colonialism was the exhibition of some objectionable picture slides accompanied by objectionable explanatory speeches. The exhibition was conducted by magic lantern. We come to know this Magic Lantern Speech from the confidential files of the Board of Revenue (as preserved in the Orissa State Archives, Bhubaneswar, Acc. No.4 of 1927).

On 8th September 1927 the Collector of Puri, D.N. Das received from the Superintendent of Police, a confidential diary of Sub-Inspector of Police-in-charge of the Bhubaneswar Police Station dated 7th September 1927, which according to his note contained the Magic Lantern Exhibition of some objectionable picture slides by some non-cooperators accompanied by objectionable explanatory notes. Similar exhibitions were organised in Khurda on 12th

September 1927. The slides shown by them came under the purview of section 153(A) I.P.C. and section 124(A) I.P.C. According to the report of D.N. Das, the miscreants who had been organising such exhibitions were men of straw and they had no reputation or family prestige to lose if they would be jailed. Some of them at any rate wanted to have a chance to become martyrs. This statement of D.N. Das had clearly recorded the tone of popular protest in Orissa even at the grass root level in the Non-Cooperation Movement phase.

According to the Note of the Collector of Puri given to the Commissioner of Orissa Division these speeches would not strike the imagination of the audience or produce any effect on their minds. Most of the audience belonged to a category who were not concerned in any way and they came out to see these exhibitions as spectators and enjoyed those as a fun. Besides the explanatory speeches that came under purview of penal sections appeared to be loosely worded. So according to his note it was not advisable to take any legal action. But he suggested that these people should not be allowed to organise such exhibitions in the public freely. They should be seriously warned against such conduct in future. The persons to be selected to receive such warning were the chairman of the meeting, the proposer, the seconder and those who had given

objectionable speeches. In Bhubaneswar the group consisted the following :

- (a) Raghunath Mohapatra - Chairman
- (b) Banamali Panda - Proposer
- (c) Banamali Garabadu - Seconder
- (d) Kripasindhu Hota - Speaker
- (e) Sadhu Charan Mohanty- Speaker

On 6th September 1927 morning Non-cooperators Kripasindhu Hota, Sadhu Charan Mohanty and Laksmana Padhi of Utkal Khadi Department, Berhampur arrived at Bhubaneswar and stayed in the local dharmasala.

They had brought with them khadars for sale. On 7th September afternoon it was announced in Bhubaneswar town by the beat of drums that Magic Lantern Lectures would be delivered on "The History of Indian Cotton Industry and the Freedom Movement." Printed notices were also circulated. At about 8 P.M. of 7th September, the proceedings of the meeting began. Banamali Panda proposed the Non-cooperator Raghunath Mahapatra to be the chairman of the meeting. Then it was seconded by Banamali Garabadu. Raghunath Mahapatra occupied the chair and the following slides were exhibited and clearly explained to the audience consisting of about 200 people.

1. The prison in which Mr. Gandhi was imprisoned.
2. Knowing the Mother Land (written in capital letters in English)
3. Mahatma Gandhi
4. Evils of Modern Education (written in English in capital letters)
5. A European holding a chain and ready to hang round the neck of a school boy.

In explaining this slide Non-cooperator Kripasindhu Hota said; "the present day's education makes us slaves. As soon as a boy gets education in a school, he only gets his hand and foot bound."

6. An England returned man getting a high job in India and sitting surrounded by poor Indians. (In explaining this slide Hota said that the condition of the country was not to be judged by the appearance of the England returned man but by that of the men sitting and standing beside him).

7 & 8. School buildings in India in ancient and modern days. (The high expenditure involved in the modern school buildings was explained to the audience).

9 & 10. Places of pilgrimage such as Banares and Ramesvara.

11. India in Asoka's time.
12. India in the period of Pathans.
13. India in the period of Mughals.
14. India in the period of English
15. Delhi in the peirod of Pathans.
16. Delhi in the period of Mughals.
17. Delhi in the period of English.
18. Tajmahal

In explaining slides 11 to 18 Hota said that India was prosperous in every respect in the past and was getting worse in every respect these days.

19. East India Company.

Future rulers of India came as Traders - Written in English in capital alphabets and was explained.

20. Sivaji

21. A passage in English quoted from "Bolt's consideration of Indian affairs".

In explaining this slide non-cooperator Sadhu Charan Mohanty described the condition of the English people who came to India first as traders. In course of his explanation he said that certain English traders looted a ship of certain Indian traders. So these English men were dragged to Yakul Sidiq's court with iron chains round their neck. They were further whipped in streets and were then driven out. This was the position of those who then occupied the throne of India.

22. "Arrogant assertions of the East India Company in distressed Bengal" Written in capital letters.

23. Lord Clive.

24. Shiraj Uddaula, founder Nawab of Bengal.

25. Mir Kasim.

26. Battlefield of Plassey.

27. Mir Jafar.

In explaining the slides from 22 to 27, non-cooperator Sadhu Charan Mohanty described how Lord Clive won the Battle of Plassey, played treachery with Mir Kasim and laid the foundation of British Empire in India.

28. British rule commences with and continues for British interest - Written in capital letters.

29. Lord Lytton's letter in English quoted from Dutt's Economic History, Vol. 1, page-426. The whole letter was written on the slide and was explained.

30. "Railways and steamers serve British interest" Written in English on the slide and explained in Oriya.

31. Gwalior fort.

32. Bijapur fort.

33. Jaunpur fort.

34. The Ganges with Railway Embankment.

35. The Ganges prior to the Railways.

In explaining slides No.30 to 35 non-cooperator Sadhu Charan Mohanty said that the introduction of Railways in India had made the above forts useless and had brought about malaria, flood and distress in the country.

36. Ships in ancient India.

37. Ships of British people when they first came to India.

38. Warships of Marathas and the then English.

In explaining slides No.36-38, Sadhu Charan Mohanty said that the Indians had as good ships as the English. The Maratha warships were better than English warships. The English had caused the extinction of those ancient warships of India.

39. Buddha

40. Mr. Gandhi (Mahatma Gandhi)

41. Indians of different nationality, such as Christians, Hindus and Mohammedans.

In explaining slides 39 to 41 Sadhu Charan Mohanty said that during Buddha's time India suffered from religious degeneration and Buddha solved the problem by abolishing caste system. At present the British Government followed the policy of "Divide and Rule" in India and Mahatma Gandhi tried to solve this problem.

42. "Cotton Industry destroyed for British Interest" - written in Capital Letters on the slide and explained to the audience.

43. Eulogy of Mahatma Gandhi quoted from a passage written by Ronald Roland of France.

44. The following was written in English on the slide - "In Godavari district 1830 - 1840. During the years one fourth of the population died owing

to the high assessment of land revenue by the British Raj". This was explained in Oriya to the audience.

45. Cloth mills of today.

In explaining this slide Sadhu Charan Mohanty said that it was these mills, which covered the property of the people.

46. Law courts with judges and lawyers. Speaker Sadhu Charan Mohanty explained that the law courts of these days only increase litigation in the country.

47. Ashoka pillar.

48. Ancient Indian machines for making many other articles.

Kripasindhu Hota made a final speech on the topic, which has been quoted from the police diary. "The object of these slides to you is to make you realize that one day we, Indians had powerful empires than the British empire of today. Our ancient empires existed for many centuries where as the British Empire has been here in existence only for 150 years. If the ancient empires have been destroyed then why we should think that it is impossible that the present British Empire will not vanish." Sadhu Charan Mohanty remarked on that occasion - "It is khadar, which will make the English people, leave India of their own accord." He requested the people to use khadar and all swadeshi articles.

On 11th September 1927, a group of non-co-operators as members of the Utkal Khadar Department had gone to Khurda from Bhubaneswar with a magic lantern and some khadar clothes, bed sheets etc. through Dakhin-Mundamuhan. Non-cooperator Kulamani Santara stayed in the rented house of Bansidhar Rautray and accompanied them where Raghunath Mahapatra had taken shelter. On 12th September 1927 morning Kripasindhu Hota, Sadhu Charan

Mohanty, Lakhman Padhi went out in the town for sale of the khadars. At about 7 P.M. of that day they showed slides of the magic lantern in a local club.

The non-co-operators were -

- (a) Kripasindhu Hota of Nayagaon, P.S. Satyabadi
- (b) Sadhu Charan Mohanty of Delang P.S.
- (c) Lakhman Padhi of Berhampur
- (d) Kulamani Santra of Dakhin Mundamuhan.
- (e) Raghunath Mahapatra of Bhubaneswar.

Non-cooperator Damodar Mishra of Bolgarh, Brajamohan Das of Banki, Bira Mahapatra of Nayagarh, Udainath Nanda of Gurujang, Dasarathi Nanda (teacher of L.P. School) joined the group.

The exhibition of slides of the magic lantern began at about 7 P.M. and lasted till about 8.45 P.M. Non-co-operator Sadhu Charan Mohanty with the help of Lakhman Padhi showed the slides and explained to the audience.

1. *Bharat Mata* - in khadar clothes. Sadhu Charan Mohanty explained, "as children just after birth do not recognize their mothers but recognize their mothers when they are grown up, So Indians have not yet recognized 'Bharat Mata'."
2. *School children being tied to posts* (in capital letters). He explained the evils of modern education.
3. *Comparison of village children*. He explained that the modern school education taught the children to be slaves.
4. *An England returned man getting high job in India in the midst of poor Indians*. He explained that the condition of the

- country should not be judged by the appearance of the England returned men but should be judged by the condition of the men in the midst of whom was standing.
5. School buildings in India in ancient days.
 6. School buildings in India in modern days.
He gave stress on the expenditure of the school buildings in the modern days.
 7. Pilgrimage is the best way to education.
Sadhu Charan Mohanty explained that pilgrimage by road on foot made the people acquainted with the various parts of India and the habits and manners of different regions. Where as by making journey by Railways and steamers, pilgrims had little opportunity to get an idea of any part of the country and different people of these places.
 8. *Guru Sikshya* - Teaching by Gurus in ancient days was true and of essence.
 - 9 & 10. Places of pilgrimage - Both Gaya, Ramesvara, JainMandir, Muktijhar.
 11. Mahavira Siva Mandir
 12. Vishnu Siva Mandir
 13. Puruna Banares
 14. Modern Banares
 15. Rameswar Kshetra
 16. Asoka Rajatva (Rule)
 17. Krishnadeva Raja of Vizianagar
 18. Builder of Mughal Empire
 19. Swarajya of Akbar.
 20. Delhi at the time of Jujestir
 21. Delhi at the time of Mughals
 22. New Delhi prepared at the cost of crores of rupees.
 23. East India company (in capital letters) came as traders.
 24. Aurangzeb
 25. East India Company. (He explained that Aurangzeb had misunderstanding with the traders of the East India Company and he drove them out.)
 26. Shivaji (Maratha Lion)
He explained that the British traders called Shivaji as "Mountain Rat", but he was the Maratha lion.
 27. Arrogant assertions of the East India Company in the distressed Bengal (written capital letters).
 28. How shop keepers (traders) turned out to be rulers.
 29. Lord Clive.
 30. Nawab Shiraj Uddaula.
 31. Mir Jafar
 32. Mir Kasim
 33. Battlefield of Plassey
 34. British rule had commenced with and continued for British interest.
 35. Lord Lawrence's letter in English capital letters was to the effect that the Indians should not get higher appointment in administration.
 36. Lord Lytton's letter in English capital letters.
 37. Railways (service).
 38. Steamers (service).
(He explained that by these services brought flood, malaria, famine, silt in the rivers and distress to the Indians. Malaria came to Orissa from Bengal.)

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| <p>39. Gwalior Fort</p> <p>40. Bijapur Fort.</p> <p>41. Joanpur Fort (Jaunpur Fort)</p> <p>42. The Gangas with Railway embankments.</p> <p>43. The Gangas prior to Railways</p> <p>44. Warships of India in ancient days.</p> <p>45. Warships of British</p> <p>46. Warships of the Marathas and of British.
(He explained the Indians had as good warships as the British. The Maratha ships were better than that of the British. The English had caused the extinction of the worships of the Indians.)</p> <p>47. Image of Buddha. (He explained that Buddha had solved the problems of caste system in India.)</p> <p>48. Mahatma Gandhi. (He explained that Mahatma Gandhi had tried to unite the different castes of the Indians by charakha and spinning.)</p> <p>49. Elephant.</p> <p>50. Camel. (He explained the utility of the camel in carrying the war materials by the animals in steppy hills at a height of 40 feet But Railways and steamers could give no such help.)</p> | <p>51. Machine for preparing glass.</p> <p>52. Machine for melting iron. Asoka pillar. (He added that the iron of Asoka pillar is far superior iron to that of these days.)</p> <p>53. Tajmahal. Building architects of ancient days.</p> <p>54. <i>Indians of different nationality.</i> The Magic Lantern lecture on "The History of the Indian Industry and Freedom Movement" in Bhubaneswar and Khurdha by the Non-cooperators in 1927 was a clear expression of anti-colonial attitude of the leaders in Orissa. The group, which was active in this direction, was a strong supporter of Gandhian strategy for freedom in India. They in the Magic Lantern Speech did not present a communal feeling. On the other hand they had great admiration for Muslim rule in India. The exhibition of the slides to the rural people by the Non-cooperators was an unmistakable indication of popular protest at the grass-root level in Orissa.</p> |
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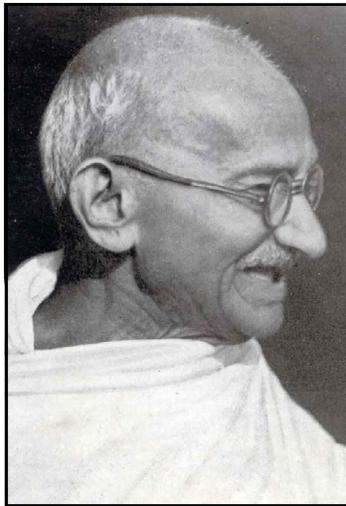
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Participation of Oriya Leaders in Indian National Congress

Dr. Janmejaya Choudhury

The formation of the Indian National Congress on 28th December 1885, had its own impact on the politically conscious people of Orissa. The political consciousness of the people of Orissa had been sufficiently aroused by the last quarter of the 19th century. The 'Utkal Sabha' was soon regarded as the most prominent political organisation of the intelligentsia in Cuttack, the principal town of the Orissa Division which wielded considerable influence in moulding Public opinion in the Province.

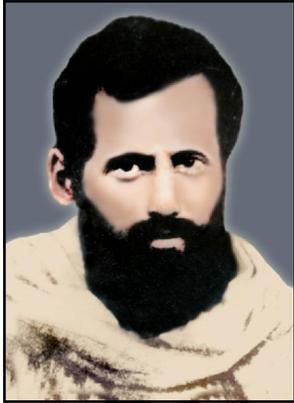
The political consciousness of the people of Orissa was further accentuated, as elsewhere in India, during the last decade of the 19th century by their association with the Indian National Congress. No delegate from Orissa attended the first session of the Indian National Congress. But immediate attention of the people was drawn to its activities, and a public meeting was held in the town of Cuttack on 3rd March 1886 to discuss the resolutions adopted by the Congress in its first session. All leading men attended the meeting and took part in its deliberations. Except the partial modification of one resolution, all other resolutions were accepted in that meeting. The modified resolution related to the examination for entering



into Indian Civil Service for which it was felt that the candidates should not be asked to go to England due to apprehension for the loss of caste. To the second session of the Indian National Congress held in the last week of December 1886,

the 'Utkal Sabha' sent its four selected representatives. They were Madhusudan Das, Golak Chandra Bose, Hariballabha Ghose and Kalipada Banerjee. Besides, the National Society of Balasore also selected three delegates namely, Baikuntha Nath De, Bhagaban Chandra Das and Ramesh Chandra Mandal, for participation in the Congress Session. Thereafter delegates from Orissa, nominated by these associations attended the

Congress Sessions held at different places. Rev. Shem Sahu, John Samson Raut, Munshi Mohammad Atahar, Bhagaban Chandra Das, Ramesh Chandra Mandal, Gouri Sankar Ray and Madhu Sudan Das took keen interest in the activities of the Congress in its early years. Especially the leaders of 'Utkal Sabha' like Madhu Sudan Das and Gouri Sankar Ray acted as the pioneers in bringing the message of Congress and its liberal ideas to Orissa in the last two decades of the 19th century. The 'Utkal Sabha' of Cuttack,

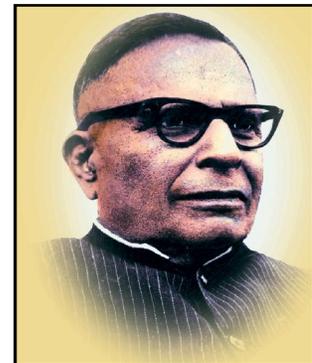


Pandit Gopabandhu Das

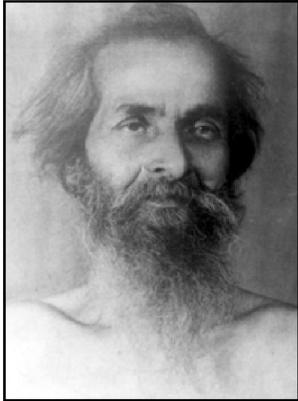
the 'National Association' of Balasore and the 'Utkal Hitaishini Sabha' of Paralakhemundi used to send their delegates to the various sessions of the Indian National Congress. On 29th January 1888 the Utkal Sabha held a meeting at Cuttack, in which the delegates who had attended the Madras Session of the Congress explained the objects of the Congress Organisation and exhorted the people to join it. Another meeting for the same purpose was held at Cuttack on 16th February 1888. Deputed by this meeting, Madhu Sudan Das went to Kendrapada and exhorted the people to join the Indian National Congress.

Madhu Sudan Das was the pioneer in spreading the Congress ideas in Orissa. There were some other Oriya intellectuals such as Nanda Kishore Bal, Gopal Chandra Praharaj, Biswanath Kar, Madhu Sudan Rao, Gokulananda Choudhury, Narendra Narayan Ray, Mahasay Lokanath Samantaray and Md. Abdul Satar who associated themselves with the early sessions of the Congress. Like most of the early Congress leaders, the early Oriya delegates who attended the Congress belonged to the English educated elite class and were moderates in their political outlook. They laid the foundation of Constitutional Struggle of the people against the British Authorities. However, the energy and enthusiasm of the leaders in Orissa was soon diverted to a different problem and that dissociated some of them from the national mainstream for about two decades from the beginning of the 20th century.

Though Madhusudan Das had associated himself with the Congress in the early phase, subsequently he kept himself aloof from it, being unable to get support from the Congress leaders for the merger of Oriya tracts. He kept himself pre-occupied with the Oriya movement. Consequently, in 1920, when Gandhi started the non-Co-operation movement, there was practically no Congress Organisation in Orissa. In 1920-21 Pandit Gopabandhu Das virtually started afresh the Congress movement in Orissa at the clarion call of Gandhi. The Nagpur Session of the Indian National Congress, held in December 1920, which finally passed the Non-Co-operation resolution was attended by a number of delegates from Orissa such as Pandit Gopabandhu Das, Bhagirathi Mahapatra, Jagabandhu Singh, Jadumani Mangaraj, Mukunda Prasad Das, Niranjana Patnaik and Harekrushna Mahatab. This session of the Congress decided to form the Provincial Congress Committees on linguistic basis. As a result a separate Provincial Congress Committee was formed for Orissa even though Orissa had not yet become a separate province. Soon after the Nagpur Congress session, the Utkal Union Conference was held at Chakradharpur under the Presidentship of Jagabandhu Singh. In this Conference Gopabandhu Das suggested a modification in the outlook of the Utkal Union Conference. He held that though the merger of all Oriya-speaking areas was a vital issue for Oriyas, yet Orissa should not remain aloof from the mainstream of the national



Dr. Harekrushna Mahatab



Acharya Harihar Das

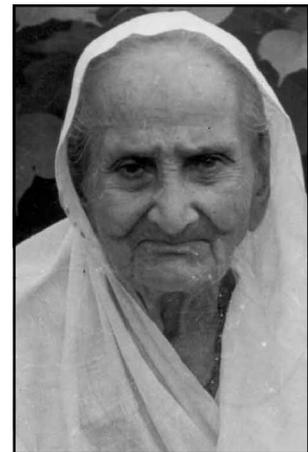
consciousness represented by the Congress. He resolved that '*Swaraj Prapti*', not '*Desha Mishran*' should be the goal of the Utkal Union Conference. This was accepted by the Conference, even though quite a number of people including the President of the Conference abstained from voting in it as a mark of dissent. On his return from Chakradharpur, Gopabandhu Das held a public meeting at Cuttack on 24th January 1925 and exhorted the students to join the Non-Co-operation movement. Mahatma Gandhi came to Orissa in March 1921 and in his addresses to the people of Cuttack, Puri, Bhadrak and Berhampur he appealed to them to join the Non-Co-operation movement. The Utkal Pradesh Congress Committee was formed in March 1921 with Gopabandhu Das as the President, and Bhagirathi Mahapatra as the Secretary. The Utkal Pradesh Congress Committee deputed the following twelve members to represent Orissa at All India Congress Committee. They were Gopabandhu Das, Jagabandhu Singh, Nilakantha Das, Gopabandhu Choudhury, Niranjana Pattanaik, Harekrushna Mahatab, Bhagirathi Mahapatra, Dharanidhar Mishra Banaprastha, Nilakantha Das Choudhury, Atal Bihari Acharya, Brajamohan Panda and Jamini Kanta Biswas.

Gandhi's appeal produced nationwide response. In Orissa a number of brilliant youngmen left schools, colleges and government service. Harekrushna Mahatab, N. Kanungo, Nabakrushna Choudhury and R.K. Bose left the colleges at the call of Gandhiji and joined the Non-

Co-operation movement. Gopabandhu Choudhury resigned from the post of Deputy Collector. Bhagirathi Mahapatra a promising young lawyer, gave up legal practice. Surendra Nath Das, an S.I. of Police and Mahammad Hanif, an Excise S.I. resigned from their services. Mahendranath Verma and Achyutananda Purohit, the two lawyers of Sambalpur gave up their legal practice to join the Non-Co-operation Movement. Soon after the First World War, the Muslims of India had started the *Khilafat* agitation against the British Government, because in the war Britain was fighting against the Ottoman Empire, the head of which was the Caliph, the religious head of the Islamic World. The Muslims of Orissa also started the *Khilafat* agitation. They formed a *Khilafat* Committee at Cuttack under the Presidentship of Dr. Ekram Rusool.

In the middle of 1921, Gopabandhu went to Calcutta to enlist the volunteers from among the Oriya labour population at Calcutta. Gopabandhu's inspiring speech to the Oriya workers in Calcutta produced the desired result. Most of the Congress leaders of Orissa, closely associated with the Non-Co-operation movement were arrested and imprisoned.

The Lahore Session of the Indian National Congress, held in December 1929, marked the beginning of a new phase in the freedom struggle. In this session, the Congress declared complete Independence as its goal to be achieved by Civil



Annapurna Maharana



Malati Choudhury

Disobedience. The Congress decided not to take part in the proposed Round Table Conference discussions. The party made preparations for civil disobedience. To take part in the Civil Disobedience

Nilakantha Das, Lingaraj Mishra, Godabarish Mishra, Nanda Kishore Das and Narayan Birabar Samanta resigned from the Legislatures. On 26th January 1930, the Orissa Congress Party observed the Independence Day at Cuttack. On that day the National Flag was hoisted at Lokasevashram and a meeting was held at the residence of Gopabandhu Choudhury. Gandhi was in the meantime planning to launch the Civil Disobedience by violating the Salt Laws. H.K. Mahatab, the President of the Utkal Congress Committee at that time, was specially interested in the agitation for the violation of Salt Laws. The Utkal Pradesh Congress Committee decided to send twenty-one Volunteers in the first batch to manufacture Salt in violation of the Salt Laws. The following were the Volunteers : Acharya Harihar Das, Murari Tripathy, Gunanidhi Mohanty, Madhabananda Das, Durga Prasad Guru, Sadhu Charan Padhi, Gokulananda Mohanty, Gouranga Charan Mohanty, Ram Prasad Sahu, Govinda Chandra Mohanty, Siba Prasad Bhagat, Sudhanshu Sekhar Gupta, Biswanath Hota, Raghunath Mishra, Udayanath Mohanty, A.M. Mahapatra, Kalipada Das, Sridhar Maharana, Balaram Das, Golaknath De, Purna Chandra Bose. Women leaders like Rama Devi, Malati Choudhury, Sarala Devi and Annapurna Devi played a conspicuous role in the

Civil Disobedience Movement of 1930. On 26th April 1930, Harekrushna Mahatab and Gopabandhu Choudhury, the President and Secretary of Utkal Pradesh Congress Committee were sentenced to eighteen months rigorous imprisonment after conviction. The following leaders were also imprisoned for participation in the Civil Disobedience Movement : Krushna Prasad Mohanty, Harihar Das, Jibaram Kalyanji, Golaknath Das, Raj Krushna Bose, Gobinda Mishra, Jadumani Mangaraj, Gunanidhi Mohanty, Mathura Mohan Behera, Murari Tripathy, Kishori Mohan Joardar, Purna Chandra Bose, Ram Prasad Singh, Krushna Chandra Pradhan and Krupasindhu Hota. As a result of the Gandhi-Irwin Pact of 5 March, 1931, the Civil Disobedience Movement was discontinued.

By the middle of 1942, the Congress strategy changed. The All India Congress Committee passed the Quit India Resolution on 8th August 1942 at Bombay. The next day all the Congress leaders from various parts of India who had assembled at Bombay were arrested. The following prominent Congress leaders of Orissa had attended the All India Congress Committee held at Bombay and were arrested - Harekrushna Mahatab, Radhakrushna Biswas Ray, Malati Choudhury, Sardar Surendra Das and Surendra Nath Dwivedy. At the same time, in Orissa, the Government by Gazette Notification declared all Congress institutions in the province as illegal. All the Congress offices in the Province were seized by the Police by 10th August 1942. All the district level prominent Congress workers were arrested by the Police.

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Freedom Fighters of Panimara

Saraja Kumar Panda

It was really an extraordinary event in the Indian freedom movement that the entire village jumped into the fire of freedom struggle. Popularly known as Ahinsa-Tirtha, this small village Panimara of Bargarh District occupies an eminent status for the tremendous sense of dedication and determination with which the villagers participated in the freedom movement. The freedom fighters of this village raised their voice against the British Government at different times. They were not so educated and rich except a few. But the spirit of Swaraj in the country touched their heart and they joined the freedom movement. Their struggle was not only for political unrest but also for the moral progress, social justice, abolition of blind-beliefs, boycott of foreign goods, abolition of untouchability and prohibition of liquor etc. They were totally devoted for a reformation.

As many as thirty-two persons of Panimara joined the freedom movement by sacrificing their happiness, pleasure, life and property. They belonged to the common family of farmers. They participated in the Quit India Movement of 1942. They forgot about their home, occupation and education for the cause of their motherland. They welcomed *jail, jorimana, lathi charge* and *self-torture* for the cause of independence of our country. To participate in the Quit India Movement, forty-two persons were selected

under the leadership of Chamru Parida and Bhagirathi Patnaik. Ten persons were deprived for being minors and finally thirty-two persons joined Movement phase by phase. Chamru Parida forcibly held the office of the civil SDO of Bargarh. Minaketan Saraf was shot dead. Then Chandra Sekhar Sahu who destroyed foreign goods at Bargarh market was arrested. Dhansingh Pradhan and Fakira Behera were imprisoned in connection with the case of breaking the lock of the Congress Office, seized by the British. In the year 1940 minor boys Dibyakishore Sahu and Abhimanyu Behera were arrested and escaped from prison after 15 to 20 days.

In the year 1940-41, Satyagrahis Shyam Sundar Sahu, Rusi Saraf, Jasobanta Bhoi, Chamru Parida, Dibya Sundar Sahu, Dhananjaya Pradhan and others were arrested for giving slogan against British Government. Likewise Fulsar Pradhan, Shankar Pradhan, Fakira Behera, Dhansingh Pradhan, Dhanu Sahu, Chaitanya Sahu, Prabhakara Pradhan, Minaketan Saraf, Jitendra Pradhan, Purna Chandra Pradhan, Kanheilal Sahu, Madan Bhoi, Sunakar Sahu, Gokula Chandra Nayak, Manmohan Pradhan, Harihara Bhoi, Dasaratha Nayak, Kaira Sahu and Sukasaran Bhoi went to prison. In 1942 Mayadhar Purohit of Purena organized meeting at Soda, Amti, Chheliamal, Kutna, Jharbandh and

Sakti. Under his leadership people destroyed liquor shops at Soda and Amti. For this he was imprisoned for one year and two month.

As a result of the absence of its thirty-two worthy sons, the small village Panimara felt a tremendous sense of emptiness. Some left their sons who were ten to twelve years old, newly married wives, some people's marriage ceremony was held-up and cooking was very often stopped at homes without their earning sons. In addition to this to avoid police atrocity and torture the remaining villagers used to do their work at night. At that time of freedom movement the police was also afraid of the villagers of Panimara. For that reason some 200 police personnels camped at Kulthia Tikra. Their duty was to create a sense of fear in the minds of the people of Panimara.

After Quit India Movement was over, the Congress workers organized a political meeting in the village Panimara. The Satyagrahis sang a song "*Ame Aethipayeen Ta Gariba*" and Tulsiram Giri was arrested in the meeting. In that year Khadi Seva Kendra and Nayeetalim Centre was established. Shyam Sundar Sahu joined the state custom movement in the year 1945 at Bolangir by the direction of the Congress workers.

Chamru Parida of Panimara participated in the Prajamandal Movement which was organised at Binka. Biranchi Narayan Pradhan had gone to Dhenkanal and joined the Prajamandal movement. At that time Congress workers decided to enter into the Jagannath temple of Puri. The leader of Harijans of Bargarh, Bishi Bibhar went to the Jagannath Temple and gave flowers and Chandana to the high-caste people, as a protest. Nruparaj Pradhan, the conservative Gauntia left the village forever and started living at Ghanapali.

When the villagers got the news of Independence on 15th August 1947 they were

overwhelmed. The map of India drawn by phulishar Pradhan was carried by the villagers in a procession around the village with great enthusiasm. The tragic death of Gandhiji created a sense of immense loss to the people of Panimara. There is a Gandhi Smruti Pitha established to remember the freedom struggle. The names of thirty-two freedom fighters have been engraved on this *Stambha*. Besides this, the names of veteran Congress leaders of Panimara, Bhagirathi Pataik of Barpali, Ghanashyam Panigrahi of Manpur and Prahallad Ray Lath of Sambalpur have been written on a marble stone.

The people of Panimara participated in the Bhoodan movement which started under the leadership of Acharya Binoba Bhave. Binobha Bhave, Gopabandhu Das, Rama Devi, Malati Devi, Harekrushna Mahatab and Annapurna Moharana came to the village Panimara and organized meetings to promote donation of land (Bhoodan). The village Panimara was declared as *gramadan* village by the arrival of Sarvodaya leader Binoba in the year 1963.

The women of Panimara played an important role in the freedom movement. Ketaki Parida, the mother of Chamru Parida was a daring woman. It is known from a fact, that once police personnel entered into the home of Ketaki Parida without her permission and showing a brave face she threw hot *Peja* on the police. The women like Indu Pradhan, Jambubati Sahu, Sebati Pradhan and Lelabati Pradhan occupied important place in the pages of history for their organization work.

In the list of freedom fighters of Panimara not only *Gountias* like Purna Chandra Pradhan from Samanta family but also poor peasants like Dhansingh Pradhan, cowherds like Sribatsa Naik, landless people like Dayanidhi Nayak and Suka Saran Bhoi took part in the national frenzy of

freedom struggle. Many of them suffered a lot in prison. They sacrificed all their personal comforts and pleasure for achieving the freedom of the country.

Now, only three freedom fighters of this village are alive. The freedom fighters of Panimara have contributed a lot for our motherland. They were inspired by the Gandhian ideology and philosophy. By dint of their dedication and sacrifice they are immortal in the pages of Indian History.

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Hon'ble Chief Minister Shri Naveen Patnaik unveiling the statue of the great leader Biju Patnaik at Chandrabhaga, Konark on 10.12.2005. Shri Surendra Nath Naik, Minister, Agriculture is also present.

Civil Disobedience Movement in Orissa

Arati Rani Dakua

Civil disobedience movement which is popularly known as Labana Satyagrah is one of the important movements in the history of Indian freedom struggle. Civil disobedience movement which started on March 12 with the famous Dandi March by Gandhiji, the great hero of Indian War of Independence. The whole nation supported Gandhiji in this movement. From Sabarmati Ashram of Gujarat, Gandhiji moved towards Dandi sea coast with 78 Satyagrahis to break the unfair Salt Law of British Govt. Only one Satyagrahi from Orissa named Motibas Das, about 20 years of age, joined that Satyagrah with Gandhiji. After 24 days of long procession, Gandhiji, the Father of the Nation reached Dandi and broke the Salt Law on 6th April 1930.

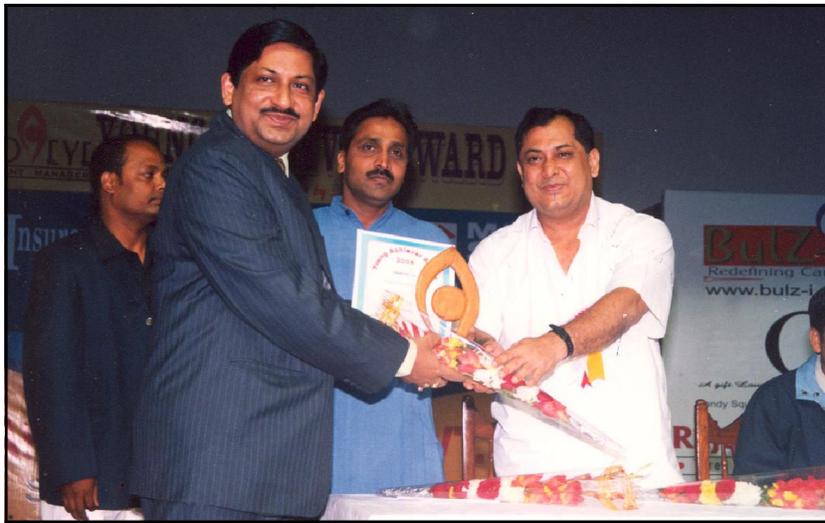
Orissa Congress Committee decided to launch that movement on 16 March 1930. Eminent freedom fighter Gopabandhu Choudhury took charge to carry out the programme. All District Congress Committees sent their workers to participate in the movement. Renowned freedom fighters H.K. Mahatab and Surendra Nath Das prepared the ground at Inchudi in Balasore District on the sea coast for the Salt Satyagrah. Next to Gujarat, Inchudi occupied the second place in India in the History of Salt Satyagrah. The Government of Orissa took some preventive measures to check the national movement. Government imposed 144 in order

to prevent the leaders from addressing public meetings. Pandit Laxmi Narayan Mishra and Bhagirathi Pattanaik were arrested for violating the Government Order at Sambalpur on 17th March. Gopabandhu Choudhury and Purnachandra Bose addressed a mass meeting at Cuttack during Satyagrah. A training camp was organized at Cuttack to give necessary inputs to Satyagrahis for civil disobedience movement. Gopabandhu Choudhury and Acharya Harihar began their journey to Inchudi from Swaraj Ashram, Cuttack. On their way Gopabandhu Choudhury was arrested. After that Satyagrahis led by Acharya Harihar reached Inchudi on 12th April 1930. On 13th April 1930 Acharay Harihar alongwith volunteers began the preparation of salt in the sea coast of Inchudi. The police arrested Acharya Harihar and his followers immediately after the incident. Thus began the Civil Disobedience Movement in Orissa. Large number of Satyagrahis reached in several batches in Inchudi from Cuttack, Puri, Ganjam, Sambalpur, Baripada and other parts of Orissa. The local people fully supported and joined the movement. Surendra Nath Das organized the villagers near Inchudi. The people were ready to be arrested without any hesitation. The police officers tried to check the preparation of salt. They used all types of aggressive measures but could not succeed. The contraband salt was sent to the

towns of Balasore and Cuttack where people purchased it heartily. Ramadevi and Malatidevi led women Satyagrahis of Cuttack district. Rani Bhagyabati Pata Mahadei of Kujanga royal family along with 500 women Satyagrahis played an important role in violating Salt Law. In Puri district several centres were opened in Kuhudi, Singheswari and Latra for Salt Satyagraha. The salt agitation was organized by Pandit Nilakanth Das. In Ganjam district the place Huma was selected to break the Salt Law. More than 1,600 people participated in that mass movement under the leadership of Niranjan Pattanaik, Biswanath

Das and Sarala Devi. Entire Orissa was influenced by the Civil Disobedience Movement. Other programmes such as picketing before excise shops, boycott of foreign cloth, spread of Khadi, non-payment of Chaukidari tax, formation of Village Panchyats were organized by the volunteers. One of the important features of the Civil Disobedience Movement in Orissa was the participation of women and teen-agers called Banarsena.

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Shri Debasis Nayak, Minister, Information & Public Relations, Sports & Youth Services felicitating Dr. Bhabani Charan Ratha at Krupajal Engineering College during 3rd Achievers Award 2005 function held at Rabindra Mandap on 19.12.2005.

Orissa During the Great Revolt of 1857

Pabitra Mohan Barik

The great Indian Revolt of 1857 is one of the greatest events of modern Indian History. The revolution which broke out against the British rule, for some times gave a feeling that the British empire would disappear from India. First time the people of India raised their strong voice against the mighty Britishers. So the year 1857 is a defining period in Indian History. But the character of the great uprising of 1857 is controversial. The scholars of England called the famous event of 1857 as the Sepoy Mutiny. On the other hand some Indian historians have preferred to portray it as the "First war of Independence." It is not justified to say that the great event was simply a sepoy mutiny. The leaders of that uprising Rani Lakshmi Bai of Jhansi, the Mughal Emperor Bahadur Shah of Delhi, Maratha leader Nana Saheb, Tantya Tope, Kunwar Singh of Bihar and Surendra Sai of Sambalpur of Orissa were not sepoys. Another view is that the sepoys as well as the common people both bravely fought against the empire. The common people helped and encouraged the sepoys in many places. The public played a vital role in fighting with British. They were ready to sacrifice their life for the sake of motherland. But unfortunately, prominent persons of that time John Lawrence and Williamkey called it the Revolt of Sepoys. The great Nationalists V.D. Savarkar, Ashok Mehta and other scholars strongly voiced to support it as a National Movement. According to them this revolt was an organised movement. Great Nationalist V.D. Savarkar described the Revolt of 1857 as the "Indian War of

Independence". So many causes were responsible for the outbreak of the Revolt of 1857. They were political, economic, social and even religious. At first the revolt started at Barrackpore and there after immediately brokeout in many parts of India.

In Orissa the impact of the great Revolt was also felt. A great son of Orissa Vir Surendra Sai and his life-long struggle during that revolt is remarkable. Another Nationalist Oriya Rama Krushna Samanta Singhar, the Zamindar of Balia also dedicated his life in the revolt. Raja Arjun Singh of Parhat and his Dewan Jagu also actively participated in the anti-British activities. British authorities in Orissa took steps to prevent disturbance. Special attention was given to sepoys who visited Puri during the car festival of Lord Jagannath. Some of the disbanded sepoys of the 19th and 34th Bengal Native Infantry visited Puri before returning to their homes. The Commissioner advised the Magistrate of Puri to warn the police to be alert and observe the activities of the disbanded sepoys going to Puri. District Magistrate reported that about fifty sepoys came to Puri and most of them had gone away. Cockburn, the Commissioner of Orissa ordered to strictly check the religious persons. The Government of Bengal also directed to all the Magistrates to produce weekly reports regarding the state affair during the revolt. At that time the police officers were given power to arrest any one in case of any suspicion. His name, address, name of the regiment, and the destination of sepoy

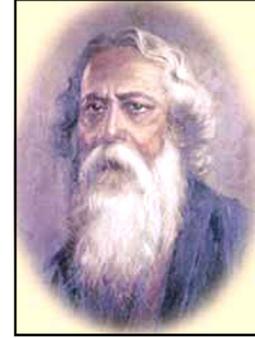
were recorded. The Commissioner also ordered the zamindars of Orissa to surrender their arms and ammunitions. Orissa Government took all types of preventive measures in the time of the Revolt of 1857. During the crucial period of the mutiny, some sepoy came from Bengal to Puri. One hundred and sixty-seven sepoy from Jalpaiguri and Berhampur came to Puri during the months of August and November in 1857. All sepoy were thoroughly searched by the police at Puri and their activities were carefully examined. One incident related to Chakhi Khuntia during the great Revolt is remarkable. Chakhi Khuntia's original name was Chandan Hajuri, a sepoy Panda of Puri. He was suspected as a "rebel" as he had good relation with sepoy of Northern India. There were thousands of Panda engaged in Jagannath temple who travelled throughout the country in search of devotees to earn some money. These Pandas used to visit the up-country military stations to induce sepoy to visit the Jagannath temple. When the Revolt broke out Chakhi Khuntia was probably in some northern military station. He remained absent in Puri for a long time which naturally created suspicion in the minds of the British authorities. It was also rumoured that he was directly involved in the Revolt. It is also said that Chakhi Khuntia had kept direct contact with Rani Lakshmi Bai of Jhanshi during the mutiny. His property was confiscated. He was arrested at Gaya but was released soon after the Queen of England's Proclamation in 1858. The Tributary Mahals of Orissa became silent during the great Revolt of 1857. The kings of Tributary Mahals rendered their support to the British Government. Rajas of Mayurbhanj and Keonjhar provided good service to British during the mutiny of 1857. The ruling chief of the two native states were rewarded with the title of "Maharaja" by the British Government.

Maharaja Sai, the King of Sambalpur died without leaving any issue. The British Government

allowed his widow Rani Mohan Kumari to succeed him, as a result of which disturbance broke out and conflict increased between the recognised ruler and other claimants for the throne of Sambalpur. The most prominent claimant was Surendra Sai of Khinda who was the descendant from Madhukar Sai, the fourth Chauhan Raja of Sambalpur. In course of time Rani Mohan Kumari became unpopular. Her land revenue policy did not satisfy especially the Gonds and Bhinjal tribal zamindars and subjects. The British authorities removed Rani Mohan Kumari from power. After that British Government did not consider the case of Surendra Sai for succession. They selected Narayan Singh, a descendant of royal family but his mother belonged to an inferior caste. Once again the claim of Surendra Sai was ignored. Rebellion broke out in the regime of Narayan Singh. Gond zamindars, who were supporters of Surendra Sai created much disturbances. In an encounter with the Govt. troops Surendra Sai, his brother Udyanta Sai and uncle Balaram Singh were captured. They were sent to the Hazaribagh Jail as life prisoners. Balaram Singh died in the jail. King of Sambalpur Narayan Singh died in the year 1849. Lord Dalhousie annexed Sambalpur in 1849 by applying Doctrine of Lapse, as Narayan Singh had no male issue to succeed him. During the uprising of 1857 the sepoy broke open the jail and set Surendra Sai and his brother Udyant Sai free. The resistance to British continued in Sambalpur under the leadership of Surendra Sai. He was heartily supported by his brothers, sons, relatives and some Zamindars. Finally Surendra Sai was arrested in 1864. In the year 1884 on 28th February Surendra Sai died in the Asirgarh fort, away from his native land which he loved very much.

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Rabindranath Tagore: The Guru of Indian Poets



Pradeep Kumar Gan

During the days of freedom movement, several poets and writers of India produced creative works capable of inspiring nationalism and patriotism among the people. Among the poets Rabindranath Tagore was a great Indian poet, who contributed enormously to the nation's freedom movement.

The Guru of Indian poets, Rabindranath Tagore was born in Calcutta on 7th May 1861. The Tagore family had a long tradition of culture and yet was not closed to the new winds coming from the west to India at that time. And what is more, the family was ready to provide its children every thing that was congenial to the flowering of their inherent talents.

Rabindranath Tagore ran away from a traditional school during his early teens and had his education seen to and supervised by his father. He was sent to England in 1878 for further education under Henry Morley at London University College. At the threshold of his youth, he had already been initiated into Indian classical literature, Indian and western music and had begun to write verse. In his making as a poet, Tagore was greatly influenced by the inspirations from Brahma Samaj. His books of poems, dramas, short stories and novels in Bengali soon gave him a distinctive place in that literature.

Initially a raconteur, his compendium 'Letters from a Sojourner in London' which was based on his life and times in London was published in book form in 1881. During the same

year he wrote the play 'Valmiki Prativa' and it was a rare stage appearance when Tagore appeared in the title role. Tagore's genius entered a new phase when he composed the poems of 'Manasi', the musical play 'Mayur Khela' and the drama 'Raja Rani'. He was the editor of the monthly magazine 'Sadhana'. He ultimately published his works 'Sonar Tari' and 'Panchabhuta' in the same journal.

It is the powerful patriotic spirit of Tagore's literary works that brought him in the mainstream of the freedom struggle and earned him national wisdom. He captured the depth of the nation's feelings in his poem 'Into That Heaven of Freedom' a poem that moved many nationalists to tears.

*Where the mind is without fear
And the head is held high,
Where knowledge is free,
Where the world has not been broken up,
Into fragments by narrow domestic walls,
Where words come out from the depth of truth,
Where tireless striving stretch its arm towards
perfection,
Where the mind is led by thee into ever-widening,
Thought and action into that heaven of freedom,
My Father; Let my country awake.*

As a patriot poet and a nationalist, Rabindranath Tagore influenced not only the leaders of the national movement but also the masses. His works generated a spirit for liberating India from colonialism. He was on a poetic mission

to save India from slavery. His works ignited passion and united people to dedicate themselves to the national struggle. He opposed the Partition of Bengal along communal lines and resented the concept that would divide his beloved state. He preached swadeshi, composed soul-stirring songs, wrote incisive essays, addressed meetings and led protest marches.

Tagore gifted to India her national anthem, a prose paraphrase of which he read at Over Town Hall as part of his world famous essay 'My Interpretation of India's History'. The national anthem was composed for the Brahma Samaja anniversary in 1912. The inspiration and patriotic spirit generated by this song was considerable and immeasurable. The song generated a sense of national unity during the days of freedom struggle which made India stronger than ever before. That poem made one of the makers of modern India. He was a seer and national builder. He was given importance for revival of Hinduism.

Tagore was a great poet. In 1874 his first poem 'Abhilash' was published in 'Tattobodhini Patrika'. During his life his entire writings include 1000 poems, 2000 songs and large number of short stories. In 1912, Tagore sailed for England, where the translation of the 'Gitanjali' (Song-Offerings) created a literary sensation among the British poets. Gitanjali established Tagore as a world poet. In 1913, Tagore's Gitanjali was nominated and selected by the Swedish Academy for the Nobel Prize for literature.

For his literary activities, he was Knighted by the British government in 1915. But protesting the Jallianwalabagh tragedy, Rabindranath Tagore gave up his 'Knighthood' in 1919. During this time he declared, "When the badges of honour make our shame glaring in their congruous context of humiliation, and I, for my part, wish to stand, shorn of all special distinctions, by the side of my country men who for their so called insignificance

are liable to suffer degradation not fit for human beings."

Rabindranath Tagore had started his own school at Shantiniketan in West Bengal in 1901, which grew up gradually to be named as the Visva-Bharati or the centre of the world learning in 1971. The place is now one of the recognized Universities of India and has been a place especially for the study of art, music, literature and cultures of the world. Today this university at Shantiniketan sought to provide a place where children could grow up in freedom, amidst an environment of nature's beauty and warm human relationships.

Tagore was not only a good litterateur, but also was a good painter. In his time each painting of his life was very individualistic. He had given tunes to his songs and having a style and a nuance of their own, they form now a separate category in Indian music called Rabindra Sangeet.

Tagore was a pioneer in the experiment with rural reconstruction in India. The contribution of his songs to the national freedom movement was immense. In short, he is an example of the multifarious ways the excellence hidden within a person can express itself, provided the proper environment is there and provided the centre within the individual is awake to take advantage of that environment.

To conclude, Tagore's life time achievements can be put in Iqbal Masud's words "In Tagore we have a culture going back 2000 years-it is what one can call the Hindu Culture. But a point that is often missed is that Tagore was a product of the Bengal Renaissance, which in turn was a product of 19th century liberalism."

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National Integration and Communal Harmony

T.K. Mohanty

The 42nd amendment came into force on December 18, 1976. The preamble as amended runs as follows :

"We, the people of India having solemnly resolved to Constitute India into a Sovereign, Socialist, Secular, Democratic Republic and to secure all its citizens" Justice-social, economic and political, equality of states and opportunity and to promote among them all, Fraternity assuring the dignity of the individual and unity and integrity of the Nation.

In our constituent Assembly the twenty sixth day of November, 1949 also hereby adopt, enact and give ourselves this constitution fundamental duties.

Fundamental duties were added for the first time in the constitution as :

- (a) To abide by the constitution and respect its ideals and institution the National Flag and the National anthem.
- (b) To cherish and follow the noble ideals which inspired our national struggle for freedom.
- (c) To up-hold and protect the sovereignty, unity and integrity of India.
- (d) To defend the country and render National service when called upon to do so.
- (e) To promote harmony and the spirit of common brotherhood amongst all the

people of India transcending religious, linguistic and regional or sectional diversities.

To renounce practice derogatory to the dignity of women.

Anti-National activities defined and anti-national associations are to be banned. In the amendment anti-national activity in relations to individual or association was defined as follows :

- (i) Which is intended or which supports any claim to bring about, or any ground whats the cession of a part of the territory of India or which invites any individual or association to bring about such cession or secession,
- (ii) Which disclaims and threatens, disputes or intends to threaten or disrupt the sovereignty and integrity of India on the security of the State or the unity of the nation.
- (iii) Which is intended or intending to create internal disturbance or the disruption of public services.
- (iv) Which is intended to threaten or disrupt harmony between different religious, racial, language or rational grounds of castes and communities

- (f) Anti National association means an association
- (i) Which has for its object any anti-national activity.
- (ii) Which encourages or aids person to undertake any anti-national activity.
- (iii) The members whereof under take or engage in any anti-national activity.

If we want to preserve or keep intact the national integration of the country, we should curb the ugly head of anti integration for us.

It is Urdu poet Iqbal who has aptly said "Sare Jahanse Achha Ea Hindustan Hamara, Hum Bulbul hain iski ye gulsitaan Hamara." There is no better land than Hindustan.

Mahatma Gandhi said, "Let us forget all thoughts of, I am a Hindu, you a Muslim or I am a Gujurati, you a Madrasi, let us think, I and mine in a common Indian nationality, we shall be free only when a large number of our people are determined to swim or sink together."

Adi Sankaracharya had brought emotional integration to India by establishing mathas monasteries in four corners of India. The first pitha was Gobardhan pitha in the eastern region (Jagannath Dham Puri, Orissa); second is "Saradha Pitha" Dwarika (Gujurat) western corner; the third is Jyotirmayi (Badrika Ashram) northern zone and Sringeri pitha, southern zone is the fourth Pitha.

The communal harmony between Hindus and Muslims is of 1200 years old. the eminent court poet of Sultan Balban 'Amir Khusro' had defended the cause of building monument in India in order to bring communal harmony between Hindus and Muslims. During the reign of all Mughal rulers, Rakhya Bandhan (Rakhi), Dussera, Diwali, Shivaratri and Basant Panchami were celebrated with geity.

In order to strengthen the National Integration, Guru Nanak (1464-1534), Mahatma Gandhi (1869-1947) & Santha Vinoba (1885-1982) and Maulana Abul Kalam Azad's contribution is rich and memorable. Five hundred years ago, Guru Nanak was using the word, "Hindustan" in all his writings. He propagated emotional integration. Like today's peace march and Sadbhabana Yatra, Nanak had toured in the east Burma, presently Miyanmar, Srilanka and Southeren India and Himalayas and Manasarovar. Later he travelled to Mecca and Baghdad.

Santha Kabir (1440-1518) and Swami Vivekananda, Ramakrishna Paramahansa (1836-1881) were saying God is one-Allah is Ram, Rahim, Krishna and Karim. God is the goldsmith who is preparing ornaments of different qualities and sizes are upto his choice who receives volition in the form of pooja, namaj and Prayer. Rama Krishna Paramhansa said, all religions are the paths that leads to God.

Swami Vivekananda's message "Why so much commotion, war, controversy and blood shed is going on in the name of God ? Those who have not felt the true spirit of religions should not talk in vain about God. It is better to be an atheist than becoming a hipocrat who does not owe or into any idea about God.

The American born, sister Nivedita (1867-1911) the ardent disciple of Swami Vivekananda had aptly said, "Each Indian for ten minutes in the evening should think that we Indians are one and we will not renounce the spirit of unity."

Orissa's harmonious culture : The culture, religion, centuries of myths, legend and history have all blended into a grand composite culture around Lord Jagannath, the Lord of the Universe. One of the most revered and ancient of the deities of Hindus. Some scholars think that, the three main images of Jagannath, Balabhadra and

Subhadra represents the jains. Trinity of Samyaka Jnana, samyaka charitra and samyaka acharana. Many others said that three images represents the Buddhist unit of Sangha and dharma.

Jagannath cult is the synthesis of all religions and philosophy of Lord Jagannath thus defies all definition and is yet comprehensive enough to perceive unity among beliefs of all sects and castes. His three ardent devotees were Jabana (Muslim) by caste Bhakta Salabega, the untouchable Dasia Bauri and Hadi Das.

Information & Public Relations Department's role in promoting communal harmony. I & P.R. Department, Orissa organizes, meeting, seminars, symposia on National Integration and promotes communal harmony. Special programmes, every year is organized at State, District and Sub-division level. January 30, observed as Martyr's Day (Mahatma Gandhi's Death Anniversary); August 20, as Sadbhabana Divas (Rajiv Gandhi's Birth day); October 31, as National Oath taking Day (Late Prime Minister Indira Gandhi's death anniversary).

Mass oath-taking functions are organized in all State Departments, district level and Sub-divisional offices of the State to abjure violence. On 2nd October Gandhi Jayanti Day "Ramdhun" is played by I & P.R. Department starting from State Capital, across its length and breadth. In evening the favourite song of Mahatma Gandhi Baishnaba Jana To Ten Kahiye Je Pida Paparyae Janere .. along with devotional rites are performed.

Sarbadharma Prarthana Sabhas are also organized in the State Capital, District Head quarters and Sub-divisional Headquarter. The Maulabis (Muslim priests), Bishops (Christian priests) and Sikh Priests, Buddhist Vikhyus and Pandits (Hindu scholars) recite same important portion of Koran, Bible, Guru Grantha Sahib,

Dhammapada and Vedas. This creates emotional integration.

The 19th November is celebrated as National Integration Day (Indira Gandhi's Birth Day known as "Quami Ekata Divas" where the mass take oath to maintain the integration of the Nation and to safeguard sovereignty of India. It is also known as National Solidarity Day. A week long programme is organized at State Capital, District and Sub-divisional Headquarters.

Besides this, regular articles are contributed by eminent scholars to the State journal known as Utkal Prasanga and Orissa Review on how to promote national harmony and on secular cult, which is the mouth piece of the State Government. Regular features on communal harmony are sent both in English and Oriya newspapers, so as to reach the message of peaceful co-existence among Hindus and minorities. Documentary films are produced regularly to spread the message of communal harmony. Government has constituted a Minority Commission under Home Department which looks in to the problems of the minorities in the State Government has also established an Urdu Academy to promote Urdu studies in the State. Recognition is also given to Madrasas, which are opened to cater to the Urdu language.

The I & P.R. Department through its traditional method, promotes Pala and Daskathia which spread the message of communal harmony. Satyapira Upasana is also recited through this media. Besides other traditional media like Ghoda nachha and Chadheya, Chadheyani dance also spread the message of communal harmony during their performance.

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Purnachandra Joshi : Remembering A Less Discussed Satyagrahi of Khadial Garhjat

(1919 AC-1993 AC)

Priyambada Hota
Dr. Jadumani Mahapatra

Born as a posthumus child, Purnachandra was the youngest of the seven sons of Sri Chamar Joshi and Smt. Ratnadevi. He was born in 1919 AC at Bhela in the Khadial garhjat.¹ His schooling started late. After completing his primary education at Khadial (also called Khariar) he admitted himself into the local Anglo-Vernacular English School and passed the Middle English Examination in 1937 AC.² In the same year Purnachandra proceeded to Bhabanipatna in Kalahandi Garhjat for studying in the High English School. At that time common men were using either bullock cart track (*bagilot*) or negotiating the distance by foot-path. The high-way was usually used by the government officials and members of the ruling class. On his way to Bhabanipatana by a bullock cart young Purnachandra was seriously disturbed and emotionally wounded by this discriminatory feudal arrangement. This constantly hunted his mind during his studentship at Bhabanipatana. On one occasion he crossed a *nullah* in the Bhabanipatana town through a bridge earmarked for the use of the privileged class. This was not in conformation with the law of the land for which a prostrated apology was demanded from him. On refusal Purnachandra was fined with a sum of Rs.05/- and was expelled from the High School in February 1938. Since there was only one high school in Kalahandi (from where he was expelled) and no high school in Khadial, Purnachandra had to proceed to Raipur for further study. At Raipur he managed to admit himself in the newly founded

Hindu High School (unrecognized by the Government) in the middle of the academic session.

It was a tough time for young Purnachandra to persecute his study at Raipur. His parent had already passed away. The eldest brother Krushnachandra had predeceased. Rests of the brothers were living in a joint family (*ijmali or ekjamali*). Subsisting mainly on agriculture they found it difficult to meet the need of each of the family members. The second, third and fourth brothers were against the forced labour (*bethi and begar*) and the different measures of repressive taxation adopted by the *raja* of Khadial with the tacit support of the British administrators. But they neither believed that situation could be better than this, nor they had confidence on the Congress philosophy of a mass movement by which the grievances of the common people could be redressed. They were opposed to the fifth and sixth brothers' pro-Congress leanings and were not in favour of 'wasting so much money' in the education of the youngest one. In fact the fifth brother Jagadishprasad and the sixth brother Gangaprasad, who were men of liberal disposition and progressive attitude, supported Purnachandra's education at Raipur which, however, was inadequate to meet the expenditure of the ward. Therefore sometime Purnachandra had taken to tutoring the primary school children

for supplementing his expenses. Occasionally Bhagaban Rao Modak,³ the *Gountia* of Bhela, working as a teacher in the government school at Raipur, and his widow sister Annapurna Bai extended financial support in terms of paying his examination and tuition fees. It was here at Raipur that Purnachandra came under the influence of Annapurna Bai and other Congress workers. He watched the activities of the Congressmen and understood the movement led by Gandhiji. Deeply moved by this, Purnachandra left his study incomplete and hastened back home to work as a lieutenant of his elder brother Jagadishprasad.⁴ Now as a full time nationalist worker he availed the opportunities to accompany his brother on Congress work to places like Bargarh and Sambalpur. At Sambalpur he came in contact with leaders like Dayanidhi Satapathy, Pandit Lakshminarayan Misra, Sibanarayan Padhi, Prahallad Rai Lath, Krutartha Acharya, Nrusingha Guru and others. The Sambalpur District Congress Committee selected Purnachandra to undergo training in the preparation of *khadi* yarn by handling the *charkha* at the Bargaon training centre in Dhama police station. Under the inspiring guidance of elder brother Jagadishprasad and Annapurna Bai he participated in all Congress activities. On completion of the training at Bargaon he worked for the popularization of the *Khadi* Movement in the Khadial estate.

In 1940 Gandhiji gave a call for individual Civil Disobedience and nominated Vinoba Bhave as the first *Satyagrahi* who inaugurated the movement by giving an anti-British (not to support the British cause in the Second World War) speech at Paunar on 17th October 1940. Bhagirathi Pattnaik, the noted freedom fighter of Barpali, toured round Jagdalpur, Khadial, Nawapara and Kantabanji etc. to inspire the youths for Satyagraha and prepared a list of Satyagrahis. Purnachandra volunteered himself for the task and his name was approved by the District Committee and also by Vinobaji as a

Satyagrahi. On 6th February 1941, the day following Annapurna Bai's death, Purnachandra courted arrest at Tarbord village by delivering a short anti-British speech stating thus : "*British Sarkarko tan man dhanse sahayata karna maha pap hei.*" He was produced before the Sub-divisional Officer Mr. Palit's Court at Nawapara and sentenced to jail till the end of the Sessions Court and fined with Rs.50/-, failing with the compliance of which one month extension of jail sentence was imposed. He was confined to the Nawapara Sub-jail. This also adversely affected his position and privileges at home. The elders who were not very much in favour of Purnachandra's anti-establishment activities separated him from the joint family lest they might incur the displeasure of the *raja* and his men. His belongings were shifted to the corn pounding room (*dhenkishala*). However, Purnachandra's joining the *Satyagraha* movement was highly appreciated by his immediate elders Gangaprasad and Jagadishprasad. The people of Bhela too supported his activities whole heartedly.

In 1944 he got married to Taramani Devi who proved to be a like minded life partner of Purnachandra. Being inspired by Jambuvati Devi, wife of Bhagirathi Pattnaik and Parvati Giri of Samaleipadar in Bijepur Taramani followed her husband to work for the popularity of the Khadi movement. She organized the women in the Khadial estate for the *charkha andolan*. One year later, their first son Bhanuprakash was born. In spite of the extra work of rearing the new born Taramani did not hesitate to move from one village to the other to train and supervise the *khadi* weaving activities of women in Khadial and Nawapara.

During the post-independence period Purnachandra fully shouldered the responsibility of his family. He entered into private service for a short period but finally left the job and collaborated with his elder brother as a forest contractor dealing with minor forest products like

gum resin, honey, mahua flower etc. The suffering of his early days had deep imprint in his mind which impelled Purnachandra to work for the betterment of the native people. In 1958 he opened a fixed deposit account in the Khariar Road Branch of the Central Bank of India which later on formed the core fund for opening a private High School at Bhela. He mobilized the village headman for the necessity of opening a High English School in the locality as Khariar was too long a distance for the people of the locality for high school education. Further the Sundar River was a great obstruction for the people to go outside for education. As a result in 1960 a private managed High English School named after Dr. Kailashnath Katju, the first Governor of Orissa was opened at Bhela. Purnachandra was also instrumental in the opening of the Middle English Schools at Budhi Komna (later on upgraded to High School), Tikrapara, Lakhna, and many other places in the erstwhile Khadial estate. He was also extending financial assistances to poor and talented students for their education. For some time he was associated with the *Bhudan* movement of Vinobaji and *Sarvodaya* movement of Jaiprakash Narain. In 1974 he joined the Co-operative Movement wherein his contribution was acknowledged with commendation by Mrs. Nandini Satapathy, the then Chief Minister of Orissa. Purnachandra actively involved himself in the relief activities during the 1966 famine in the Kalahandi district. After living such an eventful life this noble soul passed away for the heavenly abode on 23rd February 1993 at 4.53 A.M. dawn.

Notes & References

This writing is based on some of the personal papers of late Purnachandra Joshi of Bhela and conversations with his son Sri Bhanuprakash Joshi, former MLA of Nawapara Assembly Constituency. We acknowledge with thanks the help extended by Sri Joshi by way of answering to our numerous queries.

1. The date of birth recorded in his horoscope is Shaka 1840 1 month 14 days, *Vaishakha Shukla Tryodashi diva 13 danda 49 lita*. Bhela was in the Mahasamund tehsil of Khadial zamindari in the Raipur district of Chhattishgarh Division in the Central Provinces and Berar.
2. This was the only Middle English School at the time in the Khadial Zamindari.
3. Although Bhagaban Rao Modak himself was the Gountia of Bhela, but was actually serving as a teacher in Raipur. Hence the affairs at home were managed by his younger brother Nag Rao Modak. Their sister Annapurna had been given in marriage in the 'satut' family of Raipur unfortunately, she became a widow at a very young age. She was a lady of progressive ideas and activities. She joined the Congress Movement as a worker. It was she who profoundly influenced young Purnachandra to join the nationalist movement under the banner of the Indian National Congress. She was popular among the people of her locality as 'Annapurna Bai'.
4. Jagadishprasad was influenced by the Congress ideology and was inducted into the Congress Movement by Annapurna Bai. He actually pioneered the Congress cause within the Khariar area' and was instrumental in founding a primary Congress Committee at Bhela. (cf. Nuapara Gazetteer, 1944, ch. XIV, p.155). He was actively involved in the peoples movement of 1930, popularly known as the *Jangal Andolan* or *Saliha kand*, against the exorbitant tax imposed by the *raja* of Khariar on the grazing of cattle in the forest and felling of trees for fire wood. More the number of cattle and the number of *chullah* higher was the tax, *chari-ranwa* paid by the people to the administration.

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Chandragiri : Paradise for Beholders

Pravukalyan Mohapatra

Chandragiri with rare scenic beauty, which presents a picturesque landscape, is a paradise for all nature lovers. Surrounded by luxuriant tropical forest, gurgling rivers, exquisite mountain slopes and roaring hilltops this exotic place of Orissa is widely known for the Tibetan refugee colony, where immigrants from Tibet have been rehabilitated. Bestowed with bounties of nature, this place is famous for seasonal fruits, Tibetan woolen garments, carpets and dogs of various breeds. The large scale horticulture plantations as well as cultural activities of the Tibetan refugees make this place more colourful and attractive. This hillside settlement of Tibetans, which is also an ideal health resort, attracts both domestic and foreign tourists from far and wide for its pleasant ambience.

Tibetans are used to a living in the cold region. So Government of Orissa selected Chandragiri for the settlement of refugees keeping in view the climatic and environmental similarity between Chandragiri and Tibet. Chandragiri is situated at an elevation of about 3200 feet above sea-level on a plateau of eastern ghat, having approximately 70 inches rainfall and 40 to 80 degree Fahrenheit temperature.

Chinese invasion and occupation of Tibet in 1959 forced about 85,000 Tibetans including

their religious and political head His Holiness 14th Dalailama to seek shelter in India and other places. In response to the personal letter of Dalailama, the then prime-minister Pandit Jawaharlal Nehru requested the state governments to settle the Tibetan refugees in suitable places. Then Chandragiri, about 80 kilometers from Berhampur a southern town of Orissa, was chosen as one of the main six camps / settlements established in the country. The first batch of Tibetan refugees arrived in Orissa on 1st May of 1963 and was settled in Chandragiri of Gajpati district. Subsequently, refugees arrived in batches and arrangements were made by the state government for their accommodation. Settlements were divided into five camps each at a distance of about 4 to 5 kilometers at Chandragiri, Tankilipadar, Lobarsingi, Jiranga, and Mahendragada (special camp). Coming from an entirely different climatic and cultural background and adapting to tropical climate of Chandragiri was a difficult task for the refugees at the primary stage. But with the passage of time and continuous endeavour to adapt the environment Tibetan refugees in the meantime have fully acclimated with the changed situation.

Since majority of the Tibetan refugees were farmers and nomads, agriculture seemed to be

the most suitable occupation for them to follow in exile. By dint of their hard labour, they succeeded in transforming the barren land of Chandragiri into cultivable fields. Apart from agriculture the refugees were also engaged in carpet weaving and handicrafts. Carpet weaving being century old profession of the Tibetans, the carpets produced at Chandragiri are exported to European countries. Tibetan women and children who do not pursue their higher studies are mostly engaged in carpet weaving. Out of the two carpet weaving factories, started with Swiss Government collaboration, one is located at Chandragiri and the other at Lobarsingi.

Apart from carpet weaving, Tibetan refugees are also experts in weaving textiles, producing clothes, wood carving, painting and metal work. In addition to these, Tibetan herbal medicine have also contributed significantly to the Indian society.

Tibetan cooperative society of Chandragiri now runs a handicraft centre, dairy centre, poultry centre, horticulture centre, health centre, mechanical workshop, an elderly persons home, crèche, schools and monastery.

To restrict the exodus of Tibetan refugees to the cities, Danish Govt. has taken up a three year long agriculture development project to provide additional income to the farmers. The agriculture has only one harvest season and the major crops produced are maize, ragi, rice, besides some pulses and vegetables. So this place is also known as "maize bowl" of the state.

Chandragiri is named as "Phuntsokling" by the refugees, which literally means "land of happiness and plenty". It is also a sacred place of Buddhist pilgrims. Because Tibetan refugees are highly religious their religious traditions, rituals are very much reflected in their day-to-day lifestyle. At least one member of each refugee family is dedicated to the monkhood. Besides, Tibetan religious monasteries have been established in every settlement including Chandragiri.

Tibetan refugees are not only conscious of the physical and economic condition but equally aware of protecting, preserving their own culture, tradition, and religion. Besides, celebration of Indian independence and republic day the refugees observe alongwith other festivals Tibetan new year (February 10th), birth anniversary of Dalailama, Tibetan national uprising day, Tibetan democracy day.

It is pertinent to mention here that besides Chandragiri of Orissa, Tibetan refugees settlements have also been established in Bylakupa and Mundagod of Karnatak, Tazu and Changlang of Arunachal Pradesh, Buxa, Darjeeling and Kalipong of West Bengal, Gangatok of Sikkim, Gardenling Happy Valley and Dehradun of Uttar Pradesh.

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Tribal Culture during the Colonial Rule

Neelachala Panigrahi

The region of hills and forests which stretches almost across the entire Orissa is home to many tribes. They are the descendants of early inhabitants. They are described as "the children of nature".

The tribal culture has two aspects, i.e. material and non-material. Material aspects are the sciences, technology, habits of clothing, eating etc. The Non-material aspects of culture are the values, goals, status and roles, language and symbols. Therefore the belief, ideas, attitudes, science and technology are all parts of the complex phenomenon, that is called "Culture".

The tribals, despite their poverty and struggle for survival, have tried to retain their rich and varied heritage of colorful dance and music forming integral part of their day today life. It is through the songs and dances the tribals seek to satisfy their inner urge for revealing their soul. Their songs are rare beauty and deep simplicity. They sing and dance during their work and in the evening after a day's hard work.

The tribal people of Orissa express their cultural identity and distinctiveness in their social organization, language, rituals and festivals and also in their dress, ornaments, art and crafts.

Tribal people love natural surroundings, the villages, the hills, streams, the forest, wild flowers

and animals. The community life of the tribal people in which almost every thing is equally shared is based on the principle of equitable distribution. A tribal never feels lonely or helpless in the vast sea of humanity. There is no question of theft and robbery in their culture.

Unlike the Hindus, the tribals have no caste system. They enjoy equal rights in their social and religious ceremonies. They have strong belief of some unseen powers of nature.

In the tribal culture women are adored. They share equal rights in every matter with their male members. In the choosing of bridegroom or in the event of divorce, the tribal Panchayat gives due weightage to the opinion of women. In their marriage, a bride price is given to the parents of the bride by parents of bride groom. Thus, there is no question of dowry torture & bride burning in their culture, which is the evils of the modern society.

The tribal groups inhabit different ecological and geo-climatic conditions in different concentrations throughout the Orissa and are distinct biological isolates with characteristic cultural and socio-economic background.

The tribals earn their livelihood by hard physical labour. Labour is a thing of pride and honour for them. Collective and co-operative

support is the key to their all round success. Discipline is another instrument which bound them together. They extend good hospitality to friends and guests who visit them.

The tribal are expert in arts and crafts. They are also expert in beautiful wall paintings and floral designs, which depict geometric designs and stylistic figures of plants and animals. They are master in the art of personal decoration. Thus these are some of the values in tribal culture, which are worth preserving.

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Hon'ble Chief Minister Shri Naveen Patnaik inaugurating Passenger Reservation System of East Coast Railways at Jagatsinghpur on 18.12.2005.

Education and Success of Democracy In India

Prof. Jagannath Mohanty

India has declared herself as the Sovereign Democratic Republic and takes an enviable credit for being the largest democracy in the world. But democracy is not merely a form of Government; it is a way of life. In fact, it is the rule of the people, by the people, for the people and with the people. The saying "as the Government as the people" is more true and relevant democracy than any in forms of Government. But unless the people are vigilant, conscious of their rights and responsibilities, democracy has no meaning and no liberty can be safe-guarded with the result that individual freedom and dignity would be endangered and corruption, oppression and authoritarianism would be rampant in the country.

Education is badly necessary for making the citizenry alert and capable of discharging their duties and responsibilities efficiently and effectively. Therefore, it is said that "Universal Education should precede Universal Enfranchisement" and "Let us educate our masters (voters)". Without an educated citizenry democracy cannot be a success and will fail to give its rich dividends.

The Kothari Commission (1964-66) suggested many measures for democratic education and National Policy on Education, 1968 and 1986 provided methods and strategies for introducing democracy in education at various

levels. The most significant fact about the NPE, 1986 is the strong commitment and political will of the Government of India for its implementation. Unlike preceding National Policies and Education Commissions, in this case well-developed strategies and carefully planned procedures were adopted for implementing the provisions of the NPE. As per programmes of action, 1986, a National System of Education was developed and adopted throughout the country. The National curriculum was framed and implemented with emphasis on common core values like India's heritage, freedom struggle, democracy, socialism, secularism etc. Planning procedures were recast and reoriented to suit and facilitate democratization of education at different stages.

Naik (1968) told that the Institutional Planning is unique answer to four problems, namely (i) giving freedom to teachers, (ii) making teaching effective, (iii) involving every teacher in the formulation and implementation of planning and (iv) effective work by monitoring resources. Modern Education, particularly higher education is confronted with three major challenges viz. excellence, equity and efficiency of the system. The major concerns are (i) maintenance of quality, (ii) equalization of educational opportunity and (iii) improvement of efficiency and effectiveness in the system of higher education.

These elements are national for effective and efficient management, improving the quality of higher education for removing disparities existing at various levels, and for providing social justice to the deprived and disadvantaged for who are at the lower levels or lowest rungs of the social ladder. It is necessary for success of democracy not only in structure but also in spirit. Democratisation of the education system needs to be promoted at various levels, not only in theory, but also in practice, not only in precepts, but also in practices.

Democracy also had its impact on higher education structurally as well as functionally. Besides teaching and research, other activities were also undertaken by the institutions of higher education. Colleges and Universities were no longer the "Ivory Towers" of learning. They want to go to the field, and to the community for organizing various co-curricular and social service activities as part and parcel of their duties. In the ancient and medieval times the general assumption was that those who work would not think and those who think should not work. The structure of administrative and financial governance of private colleges are getting reformed with proper representation and participation of teachers, management and funding agencies. Teachers and non-teachers are now given to ventilate their grievance regarding their salary, other facilities and security of service through democratic methods. Since there is no effective machinery for planning and coordination of Higher Education at the state level, it is felt necessary to set up State Councils of Higher Education in all States. It was suggested in the NPE, 1986 and POA 1986 (p.45) and reaffirmed subsequently. Some states have already taken steps in the matter. These councils would prepare consolidated programme of higher education and make Universities and Colleges more effective and more democratic. These bodies

would provide assistance and advice to the UGC in respect of maintenance of standards and to the State Government authorities in determining the block maintenance grants. They would monitor the progress of implementation of programmes and assessment of performance of institutions. They also advise state governments in setting up new institutions including autonomous colleges in the state.

The NPE (1986, p.15) provided for establishment of a national apex body covering higher education in general, agricultural medical, technical, legal and other professional fields in the interest of greater coordination and consistency in policy, sharing of facilities and developing interdisciplinary research. The POA 1986 (p.46) also delineated the functions to be performed by this body. The major functions would be to advise Central government on policy, co-ordinate activities of other bodies, encourage interdisciplinary and interfaces among different agencies and fields to allocate resources and establish as well as manage common infrastructures and institutions.

The POA rightly observed (p.204) that the State Governments were required to work out these details and issue necessary guidelines for developing a multi-level planning model for decentralization and democratisation. It is emphasized that involvement of the local community in the management of educational institutions at various levels would ensure democracy from the elementary to the higher education stage. It has been felt that unless wide participation of people and involvement of voluntary agencies are adequately promoted, the desired objectives and national goals as adumbrated in the NPE, 1986 and 1992 cannot be realized to a great extent. Democracy cannot

take shape and spirit from grass root level, unless education is accordingly reformed and reoriented.

The National Policy on Education (NPE), 1986 and the Revised NPE, 1992 have rightly reiterated, 'India's political and social life is passing through a phase which poses the danger of erosion to long accepted values. The goals of secularism, socialism, democracy and professional ethics are coming under increasing strain' (p.2). The National Policies have emphasized common citizenship and democratic values in education. The National System of Education and Uniform Pattern of Education through out the Country were provided for promoting and sustaining democracy through education. The multi-culture of the India was encouraged for promoting democratic values in education.

Democratization of education at all levels has been fostered both quantitatively and qualitatively and for that infrastructural facilities

are developed and desirable structural changes have been brought about in different stages of education. It was, therefore, suggested in the NPE 1986/1992 to increase the investment on education to reach a level of expenditure of 6% of the National Income as early as possible. But unfortunately such investment on education have not been realized, inspite of several attempts made by the Government at State and National levels as well as by the International Organisations like UNICEF, UNDP, World Bank, DFID etc. It is felt extremely desirable to take immediate steps for realizing democracy through Education in our country on pragmatic stands.

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Shri Golak Bihari Naik, Minister, Fisheries & Animal Resources Development, Textile & Handlooms garlanding the photo of Maharaja Ramachandra Bhanja Deo during State level Birth Day Celebration at Jayadev Bhawan on 17.12.2005. Shri Debasis Nayak, Minister, Information & Public Relations, Sports & Youth Services is also present.

Significance of Art Education in School

Gourahari Rout (Rupakalpa)

Art plays a vital role in our daily life. In each and every sphere as well as every moment of life, we take the help of art either knowingly or unknowingly. That is why our living style is totally based on art. Keeping this view in mind our ancient literary person "Bharttruhari" said long years ago :

*"Sahitya Sangeeta Kala Bihinah
Sakshyat Pashu Puchha Bishanahinah;
Trinang Na Khadannapi Jeevamana -
Stad Bhagdheyang Param Pashunam."*

Means - without literature, music and art we would become the tailless beast and our life could not be fulfilled. Though we can not eat leaf and grass like animals, but we would live in society as the great beast.

So it must be felt that how much importance art has in our daily life ! A country, a community and a society becomes great by its art and culture. Our tradition, view, costume, living style or choice whatever we think - in all sphere, an asthetic sense is hidden behind it. As per the version of a philosopher - "If you yourself is not a great seer, you can't produce the great art." So art gives a more broad sense, it makes a man perfect and takes a man from materialistic world to spiritual world. It takes a man from drakness to light. If art is the essence of our pure life; why it should not be implemented from school level ? Why it

should not be taught to the soft hearted children in their early stage and why it should not guided them to develop their creativity from the very beginning ???

School is just like a temple or 'Mandir' where the children worship knowledge or 'Jnyan'. A teacher is only a priest or 'acharya' to guide children for limitless long walking to search knowledge and to discover their creativity and develop their imagination. Like Mathematics, Science and other subjects, fine art is also a subject in which a child can see his/her reflection. Many times it is found that children are very much reluctant towards art education. Ofcourse academic side is very heavy and as a result they can not get time to practice art. But it is also marked that, students can not concentrate their mind in scholastic subjects. Their patience is too less to sit three or four hours at a time. They are also found to be naughty and imbalanced in many activities. They are not making their life as disciplined as they should.

In this sphere, art is very much essential to solve all these problems. First of all, a small child gets pleasure and great joy when he/she draws and paints some imaginary forms as per his/her choice. Our intellectuals and educationists instruct us to teach children without any pressure and they should not feel any kind of suffocation in learning.

Fine art is a medium of easy teaching method. A child knows the alphabets through pictures. Gradually he/she goes through the book by seeing attractive illustrative drawings printed in books. In the other hand - art creates interest in child's mind for learning. This is the way to teach a reluctant child by creating fun.

It is said that art is the mother of imagination. We can develop creative skill and open the third eye of a child through proper art education. If a child do practice art regularly his/her handwriting can be improved. We should give scope to the children to think to do something in their own way. Art gives the innovative idea for other subjects also. From the very beginning stage of children, it is observed that some are sentimental and hot tempered. Some are having very less patience to sit a while. We can change a child's nature through regular art practice. This is one kind of 'Sadhana' to control ourselves. Through art education, the concentration of a child definately grows, as a result it is very fruitful for academic line. Secondly for balanced nature and for rectifying the naughtyness, no doubt - art education is a must for every child. A child can express his/her creative feelings by the magic touch of art.

It will not be excess to say that deep, internal and sharp artistic sense comes from the fine art only. A person can make his/her life colourful, systemetic and skillful through art. Then is not it the essential for children to learn art education? Is not our prime duty to creat interest in the child's mind towards art and painting? We say imagination and creativity and such innovative ideas are the gifts of true art learning. Whenever the creativity or imagination blooms in the child's heart; it not only flourish in art but also chanalises towards literature, music, drama, poetry and aw well as science. A child can compose poetry, he/

she can look for music, drama, science etc. through his/her artistic sense. Some world famous philosophers, scientists and writers were great artists. We can take examples of Leo-Nardo-Davinci, Michel Angelo, Albert Einstine, Picasso. At one time they were all-artists, sculptors, scientists, philosophers, thinkers, architects, poets and scientists. They were not confined in a perticular field, but their creativity was spread to several spheres. They were having great creative talent and art is the main source of such talent. Is not a necessary thing for children? Is not it vital to give the basic sense of art in school level??

Then come to colour science. Different colours have different meaning as well as different impact on our mind. For example :- white is the symbol of peace, yellow symbolises the sacred sense. Blue colour gives the romantic sense to our mind etc. All these colours have several impact. We can change the negative attitude of children through colour also. Green is the only colour in which we can relax our tension. We can develop our visual power by seeing the green field constantly. This is why according to colour scientists, interior colour of our residence should be green. Colours have powerful impact in our mind. Soft hearted children are very soon attracted by colours. Thus they get pleasure in their mind as a result they learn other subjects with pressure free interest. We can attract the children towards the scholastic subjects by implementing such art and painting in school level keeping all these discussed things in view. Our education system should have soft corner towards art education and should think over it in liberal sense.

Now a days unemployment problem is rapidly growing in our country due to several factors. If children will be trained in art and craft in school level, they can get engagement in any

private organisation or company. Some of them may stand in society with their own talent. Self-dependence is the main question to solve the unemployment problem now a days and art/craft training is the one such way for this.

Some parents feel that it is the wastage of time and their child should read always for getting handsome mark in examination. But they do not know art education gives their child all kind of feedings for perfection that already discussed in this article.

So, question is - wheather a child will be an artist in future ? No, it is not at all. A child may be an artist in future. It does not matter. We just give the basic idea of art. But our motto is to

develop their creativity, asthetic sense, concentration etc. Making an artist is not important, but it is important to show him his own way for a long walk with creative talent. We teach the child to see the world through his/her third eye with the help of asthetic sense. Our moto is to make a perfect, resourceful and skillful child through art education. So art education is must in school level.

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Hon'ble Chief Minister Shri Naveen Patnaik at the National Integration camp organized by Nehru Yuva Kendra Sangathan at Konark on 10.12.2005.

A New Food Crop for Dry Farming - Cassava

*M. Nedunchezhiyan, S.K. Naskar,
Nirakar Ranasingh &
Abhinav Saurabh*

Agriculture is the mainstay of a vast majority of people of Orissa. It provides direct and indirect employment to more than 64% of the total workforce of the state. It has divergent fertile land and suitable agro-climatic conditions. The average rainfall of Orissa is more than 1000 mm. Yet it faces frequent starvation death and malnutrition problems due to non-availability of food. The average agricultural productivity in the state remains abysmally low. The average yield of rice, the major food crop of Orissa is just 1.04 t/ha (2001). Rice was highly succumbing to vagaries of monsoon. Due to poverty, low purchasing power and lack of crop planning farmers are forced to grow rice in poor and marginal soils that cannot support the rice during adverse climatic conditions.

Enhancement of crop productivity in poor and marginal soil comes as a major challenge. Crop diversification and crop selection plays crucial role in sustaining productivity of such soils.

Cassava, a high-energy food crop, is able to sustain adverse weather conditions. The plant morphology of this crop is favouring its survival over the adverse environments. Cassava is propagated through stem cuttings (20 cm length), which has got sufficient carbohydrate and enables the plant to retain its vigour for a longer period even under adverse conditions like drought. Infact

the most advantageous character about this crop is that once it got established the mere scarcity of water alone would not kill the plant. Cassava is well adapted to any type of soils except ill drained, saline and alkaline soils.

Cassava fresh tubers are consumed after boiling or baking. It is also consumed in processed form like chips, wafers, starch and sago. Liquid glucose dextrose and alcohol are also extracted from cassava tubers.

Table 1. Short duration cassava varieties

Sl. No	Variety	Duration	Yield (t/ha)*
1.	H-165	7 months	25-30
2.	Sree Prakash	7 months	30-35
3.	Sree Jaya	7 months	26-30
4.	Sree Vijaya	7 months	25-28
5.	Vellayani Hrushwa	6 months	25-30

* Under optimum management conditions

Central Tuber Crops Research Institute and Kerala Agricultural University have released number of short duration varieties, which are suitable for rainfed cultivation. Sree Jaya, Sree Vijaya, Sree Prakash, H-165 and Vellayani Hrushwa are some of the prominent short duration varieties suitable for Orissa climatic conditions.

May-June, just before the onset of monsoon, is the suitable time of planting for

rained crop. Cassava setts of 15-20 cm length with a smooth circular cut are prepared from healthy mature stems having 2-3 cm diameter. The setts are planted on 25-30 cm height mounds. In case of sloppy lands, ridge (25-30 cm height) and furrow across the slope is the best method in terms of soil and water conservation.

The short duration varieties are planted at 75x75 cm spacing. The setts are planted vertically to the depth of 5 cm. If setts are found dried, immediately replaced with longer size setts.

Cassava needs adequate fertilization. Incorporate 12.5 tonnes of FYM per / ha at last ploughing. Apply 75:50:75 kg of N, P₂O₅ and K₂O for short duration varieties. Half of the quantity of nitrogen and potassium and full quantity of phosphorus is applied at the time of planting and the remaining quantity of nitrogen and potassium is applied 45-60 days after basal application.

Two weeding is essential. First weeding cum earthing up is one month after planting and the second weeding cum earthing up is 1-2 months after first weeding cum earthing up. A few serious

pests and diseases affect cassava. The crop is harvested 6-7 months after planting. The crop can also be harvested staggered as per the requirements.

Cassava can also be grown profitably as intercrop in coconut, arecanut and other horticultural crops. It can also be grown as intercrop in rubber plantation at early stages.

The great flexibility in planting and harvesting, less investment and managerial skill requirements and high yield will strengthen its stake in dry land agriculture of Orissa.

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Hon'ble Chief Minister Shri Naveen Patnaik inaugurating the Emergency Operation Centre at Jagatsinghpur on 18.12.2005.

Water Pollution in Orissa

*Dr. S.K. Sahu, D. Sarangi,
& K.C. Pradhan*

Water is said to be our life because we need it for drinking, bathing, relaxing, fishing and irrigating our crops. Besides, we produce energy from water and navigate in it. Water is so an essential resource for our life that ancient civilizations have been developed in almost all river valleys of our country. With the growth of the modern civilization, our life is threatened due to pollution of water both from surface and underground. The doctors forecast that several stomach, lever and skin diseases spread due to polluted water. In our country, especially in the state of Orissa, the scarcity of pure drinking water is so much felt that 50% of urban people and 80% of rural people are affected by water pollution.

Sources of Water in Orissa

The main sources of water in the state are from the Bay of Bengal, from lakes like Chilika and Ansupa, from 11 rivers such as : Mahanadi, Bramhani, Baitarani, Rushikulya, Budhabalanga, Subarnarekha, Salandi, Kathajodi, Birupa, Kusabhadra, Daya and many rivulets. The water sources include ground water, tanks, ponds, open wells and tubewells.

Quality of Water

The pure water that is H₂O in which two parts of hydrogen and one part of oxygen are present. Obviously, this form of pure water is not

available in all the above mentioned sources. The quality of water depends on the quantity of harmful elements present in it. The water from sea and Chilika lake is salty and the water from rivers, tanks and ponds is very often muddy and contain impurities of suspension, colloids and dissolved particles.

The quality of drinking water depends on the quantity of harmful elements present in it. The drinking water should be clear, odourless and tasteless and its pH value should be between 7 & 8.5. According to the World Health Organization (WHO), the permissible limits of impurities in drinking water are as follows :

Impurities	Maximum permissible limits (mg/Lit.)
Total Solids	500
Hardness	2meq/lit
Calcium	75.0
Magnesium	30.0
Sulphates	200.0
Chlorides	200.0
Iron	0.10
Manganese	0.05
Copper	0.05
Zinc	0.05
Arsenic	0.05
Cadmium	0.005
Cyanide	0.05

Lead	0.05
Mercury	0.001
Phenolic Elements	0.001

The permissible organic impurities include Bacillus coli less than 100ml/lit and other coli bacteria not more than 10 numbers.

How Water is Polluted :

Water pollution means contamination of water due to introduction of some external materials. Water may be polluted either from natural sources or human sources.

1. Pollution Through Natural Sources :

The natural elements which cause water pollution are gases, soil, minerals, humus materials, waste created by animals and other living organisms present in water. During rain, surface water with soil, mud and humus enter into the river, tanks and other water bodies. The inorganic minerals like sodium, potassium, calcium, magnesium and heavy metals like iron, manganese, lead, mercury, chromium, cadmium, nickel, cobalt, beryllium when present above the permissible limit are harmful for drinking. Ground water containing Floride above 0.15 mg/lit. at Begunia in Khurda district, in six villages (Dergaon, Jutiki, Behal, Sargiguda, Kirojhote and Kandhamal) of G.P. Korlakata of block Boden Nuapada district causes diseases like Florosis, bone and teeth deformation, in both human beings and animals.

2. Pollution of Water Through Human Sources :

The human sources of water pollution are due to one of the followings :

(i) **Discharge of Domestic Effluents :** In urban areas people use about 335 liters of water daily for different domestic purposes. About 70-80 percent of this water drains out to the nearby ponds, tanks or rivers through the drains or nalas of the municipality, thereby polluting the water.

(ii) **Discharge of Sewage :** Municipal sewage is considered to be the main pollutant of water. Most of the sewage receives no treatment before discharge in all the cities of Orissa. The cities like Bhubaneswar, Cuttack, Rourkela, Sambalpur and Berhampur generate approximately 10, 7.5, 6.0, 3.075 and 5.0 lakh litres of sewage effluents respectively everyday. These effluents are discharged into the river Mahanadi and Kathajodi in Cuttack, Kuakhai and Daya in Bhubaneswar, Brahmani in Rourkela, Mahanadi at Sambalpur and Rushikulya at Berhampur. The effluents contain heavy metals like lead, chromium, cadmium, zinc and mercury. Besides, the sewage effluents are rich with harmful bacteria and viruses which contaminate the river water. While drinking this contaminated water, people suffer from serious diseases.

(iii) **Industrial Effluents :** In Orissa, there are paper industries at Rayagada, Chowdwar, Jaypore, Balasore and Brajarajnar. The paper industries discharge effluents to the rivers like Rushikulya, Mahanadi, Kolab and Budhabalanga. These effluents containing high amount of Carbonate (6.4 meq/lit.) Bi-carbonates (8.4-10.9 meq/lit.) and heavy metals of Fe, Mn, Zn and Cu, which cause pollution of drinking water.

Discharge of effluents from smelter plants of NALCO to the water bodies at Angul cause flouride pollution in drinking water of wells and tanks through lateral and vertical movement in ground. The water of these sources contains flouride more than 1.5 mg/lit. which is toxic to animals. Fly ash effluents from captive power plants of Angul, Talcher and Damanjodi contain heavy metals like chromium, lead, cadmium and iron. These effluents discharged to the nearby rivers and ponds pollute the water. The river, Nandira, at Talcher is said to be dead due to discharge of fly ash effluents into the river. The river Nandira and the creeks receiving fly ash

effluents join to the river Brahmani in which the water is polluted with the heavy metals as mentioned above.

Press-mud effluents from sugar mills of Aska, Rayagada, Nayagarh, Dhenkanal, Badamba and Deogaon (Bolangir) contain heavy metals like Iron (2500-8000 ppm), Manganese (280-1500 ppm), Copper (90-126 ppm) and Zinc (155-272 ppm). These effluents discharged to the nearby water bodies pollute the water.

The effluents from Chlorine Plant at Chhatrapur containing high Chloride of more than 250 ppm and SAR value of more than 10 meq/lit. cause chloride and sodium toxicity to the river Rushikulya. The ground water of open wells near the plants was detected containing high amounts of Chloride.

The Phosphatic Fertilizer Industry at Paradeep discharges effluents containing Nitric, Sulphuric and Phosphatic acids to the joining mouth of the river Mahanadi into the Bay of Bengal. Liquid Ammonia released from the plant cause pollution to the water in wells and tanks in nearby villages.

(iv) **Mining Operations :** Discharge of Hexavalent Chromium from Chromite mines at Sukinda of Jajpur district pollutes the water of rivulet Dharmasala as well as the water in ponds and wells in around 2-5 km. radius of the mining operation.

Leachates of soluble iron from mines of iron ore pollute the water of river Baitarani and wells and ponds of Keonjhar.

(v) **Agricultural Effluents :** Agricultural water pollution is caused by fertilizers, insecticides, pesticides, farm animal wastes and sediments. Research findings indicate that application and heavy doses of fertilizers pollute ground water through leaching of nitrate from nitrogenous

fertilizers and of cadmium from single Superphosphate and of flouride from rock Phosphates. However, such hazardous effects in ground water of Orissa have not been detected so far.

The use of various types of pesticides and insecticides in agriculture cause water pollution. Death of aquatic animals have been reported in intensive rice growing areas of Orissa due to application of granular pesticides like Furatox and Furadon.

Careless deposit of animal waste close to the wells and ponds situated in the backyards cause pollution of water through leaching. The pathogenic organisms of these wastes transmit to the water and pose serious problems.

(vi) **Man-made Water Pollutions :** It is reported that during the last Dashara festival about 5000 idols of Goddess Durga were immersed in different rivers of Orissa which caused lead pollution in river water. It is estimated that one Durga idol weighing 200 kgs. contains 1.5 kg. lead. Thus 5000 Durga idols when immersed will add 7500 kgs. lead to the water. In similar case, 1 lakh idols of Ganesh immersed in water bodies add 1500 kgs. lead each idol containing 15gm lead.

Effect of Water Pollution :

Pollution of water probably cause more illness of human being than any other environmental influences. The sewage and polluted water are responsible for several water borne diseases such as : cholera, typhoid, infantile diarrhoea, dysentery, infectious hepatitis, polio, ziardiasis, jundice etc.

Presence of Cadmium in water, due to various industrial discharges and mining wastes, cause high blood pressure, kidney damage, destruction of testicular tissue and red blood cells.

Occurrence of hexavalent chromium due to mining of chromite ores cause nausea, skin ulceration, lung cancer and liver damage.

Fluorine in drinking water from various sources cause Fluorosis characterised by mottle of teeth and bone damage.

Lead in drinking water added through sewage, industrial effluents and paints cause anaemia, kidney diseases and nervous disorders.

Addition of mercury from industrial wastes, mining of coal and application of pesticide cause paralysis of nerve and brain.

Water pollution changes the physical and physiological nature of water. Presence of organic dyes changes the colour of the water. Release of sewage and industrial effluents to water bodies cause turbidity in water. Decomposition of organic matter, algae, fungi and filamentous bacteria impart add odors and taste to water. The industrial effluents containing several types of chemicals cause loss of soil fertility.

In general, water pollution has now become a threat to the eco-system and an important cause of environmental pollution.

Common Measures for Controlling Water Pollution :

The following measures can be adopted for controlling or minimizing water pollution.

- (i) Proper treatment of municipal and domestic effluents before draining to rivulets and rivers.

- (ii) Domestic waste water should be used for irrigating crop than releasing it to water bodies.
- (iii) Use of sewage for increasing soil fertility than discharge it to drains.
- (iv) The drinking water resources and its nearby areas should be cleaned.
- (v) Every industry should have its own effluent treatment plant.
- (vi) Use of pesticides in agriculture should be limited and only standard quality pesticide be used.
- (vii) There is a need to conserve several water purifying organisms.
- (viii) The banks of the water bodies should not be used as public latrines.
- (ix) Algae and water born vegetation should be cleaned regularly.
- (x) Water bodies should not be used for disposal of dead bodies and idols.
- (xi) To create public awareness and properly educate the people not to pollute water.

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The Challenges of Public Relations in the Present Day I.T. Scenario

Dr. Jyotirmati Samantaray

The survival, and success of an organization in the present-day world largely depends upon the effective management of Information Technology, which is poised to revolutionise all aspects of social development through new thresholds in human connectivity.

This paper assesses the expanding role of Information Technology in all sectors of human development and how the Public Relations personnel in Orissa can play a pivotal role at the grass root level by providing information to the people.

The main objective of good governance in a democratic country is to deliver goods for the welfare of the people with the willing participation of the people. Eliciting people's participation is the most challenging task in a democratic government. Here comes the relevance and role of public relations.

Public Relations is an essential part of management and this is as true in Public Relations of Central as well as State Governments as in industry. Public Relations in Government Departments has two main tasks - to give regular information on policy, plans and achievements of the Departments and to inform and educate the public on legislation, regulations and all matters that affect the daily life of citizens.

In the I.T. world, the question arises as what public relations can do for the welfare of the public. By public relations people's participation is possible. People's active participation will lead to development.

The main task of the public relations is to create greater awareness among the people by creating opportunities for the people to understand broad screen connected with National Informatics Centre for giving information to the people quickly and effectively. The latest technique of Video Conferencing with grass root level workers, farmers and teachers creates a thrill and generates greater motivation to a large section of human resources full of potential creativity.

For the introduction of the knowledge based society at the grassroots level that is in the village panchayat by the application of latest information technology, the personnel of Public Relations Department have to be well trained to be aware about the different schemes and programmes of the Government. They are the kingpin to inform the general public about various developmental plans and programmes as they play a vital role for its implementation.

"Information Kiosks" need to be opened at all the information centers of the districts; so that the people can get information on various subjects and government legislations.

Information, especially on various legislations on dowry torture, harassment at workplace, forgery, human rights violations, Right to Information etc. are to be given special attention by the Public Relations personnel. They are the personnel, who can let the people know about various aspects of the laws, types of punishment for the violations of these laws and the like.

Public Relations personnel are at the district level to make new innovations, to make the people understand the utility of the various government projects and necessity of people's participations and their contribution.

A key priority is to be given for expanding the base of PCs across the State. This will spur internet penetration which will boost e-commerce. The public relations personnel are the agent of the government, who can materialize this objective.

By Health Management Information System, all the thirty districts will have on-line connectivity with the Orissa Health Systems Development Project. An interactive network can be started with the help of GRAMSAT facility. Public Relations professionals can play a key role by involving themselves in the campaigns to inform the general public about the prevention of various diseases, about the medical professionals and dispensaries etc.

The Information and Public Relations personnel play a crucial role in disseminating various types of information to the illiterate, poor and needy people through the Government of Orissa website. For this work computer and internet facility with training to the PROs is essential.

Information on tourist places in the State, its tradition, culture, customs, festivals, handicrafts and rich biodiversity have been projected on the website. The district level Information and Public

Relations Officers can feed more data on their own districts with new innovative ideas.

The Information and Public Relations personnel as a communicator and catalyst between the Government and the people can create opportunity for the grassroot level small scale entrepreneurs, handicraft workers and other skilled personnel to develop their potential at the State, National and International level.

Due to the effort of the Information and Public Relations personnel, the benefits of the IT can be permeated to people of lower strata of the society and unless it is done, one can not say that huge investments made in the IT sector have met their objectives.

E-learning imparted by the National Open School (NOS) to rural and less accessible areas, provides an effective and economical solution to infrastructure problem. Distance Education through e-learning is a good alternative. Vocational course of NOS that are mainly targeted for school dropouts attract more students. The PR professionals at the district level should be given this responsibility. They can perform this noble job by informing the people about this programme.

The Right to Information Bill empowers the Information and Public Relations Officials to make public interest disclosures. The Research and Reference Wing of the State Information Centre as well as the Information Centers at the district level can feed more vital news, research oriented articles, Govt. achievement reports about important schemes and programmes, statistical data, new innovations etc. for the general public, research scholars and students. These centres can provide information on various subjects through N.I.C. Gistnic booth. The Public Relations personnel can also feed the same data for the public information. District level officials can feed

data on new excavations, new tourist places and new ideas in the computer.

I.T. spending by the Government Sector grow only at 12% way below the average growth of the domestic industry market. However, it would be wrong to attribute this entirely to I.T. losing importance as a priority area for the government. In fact, both the Union Government and a host of State Governments gave a boost to the domestic IT market and was equally responsible for the market reaching Rs.4.089 crore. Earlier, all Government Departments were only purchasing hardware to utilise the allocated budget. In 2003-04, it was more of a case of making strategic IT investments to facilitate administrative and executive functions.

Orissa State Government should set up Cyber Parks in all districts of the State as parts of its goal to use Information Technology for the economic development and improve the quality of the life of people. The Government is to act as

catalyst for the establishment of critical infrastructure in the form of setting up I.T. parks. There should be policy of free right for laying optical fiber network in the state. The role of Public Relations Officer in Government is challenging especially in the I.T. world. These officers are the spokesmen of the Government. They deserve to be utilized in the I.T sphere. The P.R.O.s are the real communicator between the State Government and the people. They play a crucial role indirectly in the social development of the people at the grass root level. Time has come to activate the P.R.O. personnel to cope with the changing needs of the time.

Dr. Jyotirmati Samantaray is working as an Asst. Information Officer in the Information & Public Relations Department, Bhubaneswar.



Hon'ble Chief Minister Shri Naveen Patnaik receiving the Dividend Cheque of Rs.31.25 Crores from the Chairman, OPGC, Shri Asit Kumar Tripathy in the presence of Shri Surjya Narayana Patro, Minister, Energy, Tourism, Information Technology at Secretariat on 23.12.2005.

Need for Electoral Reforms

Siddhartha Dash

Elections are the life and blood of modern democracies. The health and vitality of parliamentary democracy is sustained by ensuring free, fair and peaceful elections where the verdict of the people finds full expression. The Indian electoral system was free from any major flaw till the fourth general elections in 1967. The distortions in its working appeared, for the first time, in the fifth general elections, 1971 and multiplied in the successive elections, especially those held in the eighties and thereafter.

The Tarkunde Committee Report of 1975, the Goswami Committee Report of 1990, the Election Commission's Recommendations in 1998 and Indrajit Gupta Committee Report of 1998 produced comprehensive set of recommendations regarding electoral reforms. A few reforms have been implemented like the voting age has been lowered from 21 years to 18 years; increase in the amount of security deposit from Rs.500 to Rs.10,000 for general constituencies and Rs.250 to Rs.5,000 for reserved constituencies; introduction of electronic voting machine; and making obligatory for candidates for elections to the Lok Sabha and State Assemblies to declare their criminal background, educational qualifications and economic status at the time of filing nomination papers. But a lot has to be done.

Money power has played decisive role in elections in the past and continues to do so with greater force today. Suggestion with regard to putting curb on money power is that of state funding. This practice of state funding for political parties to reimburse their poll expenses is prevalent in some countries like Germany, France, Israel, Canada, Japan, USA etc. In this system, political parties polling a minimum percentage of votes are entitled to subsidy by the state.

Since winning election has become an end in itself, in addition to money power, muscle power has also become an important factor. This is done in two ways: a) by preventing the voters of weaker sections of society on their way to polling stations for casting their ballots; and b) by forcibly capturing polling booths for marking and inserting ballot papers in the ballot box of the candidate of choice. The most significant outcome of the use of muscle power in elections has been that many local muscle men, and criminals whose services were earlier sought for extortion or vote-gatherings are now directly entering the fray and are elected in the process. In order to deter the criminal elements entering the electoral field, law should make it mandatory for a person convicted by a court of law and sentenced to imprisonment for six months or more to be debarred from

contesting polls for a period of the sentence imposed and an additional period of six years. Any person who is accused of any offence punishable with imprisonment for five years or more should be disqualified, even when her/his trial is pending provided that the competent court of law has taken cognizance of the offence and framed the charges against him.

Another deficiency of the system is that inadequate representations of women in legislatures. Instead of following the reservation rule with the possibility of further internal reservation, all recognised political parties should fix a specified percentage of women candidates, in all state and parliamentary elections, that they may take part in.

Political parties play a pivotal role before elections, during elections and in the formation of government after elections. The working of political parties is however not regulated either by constitutional or by legal provisions. One of the most critical needs of the time is to reform political parties and to make them open, democratic and accountable. Political parties should be made more accountable by being forced to do internal audits of their finances and producing evidence of internal democracy.

Another reform that may be suggested is that government in poll bound states should resign before polls. The cabinet ministers of states going to polls, barring Chief Minister, Finance and Home Ministers, should resign after elections are announced. This suggestion seeks to defuse misuse of government money and administrative powers to influence elections.

Voters should be given the right to cast a negative vote. In every ballot paper or ballot electronic voting machine, there should be an option; "none of the above", and if the number of

votes polled in this category is more than 50 percent of the total votes polled, all candidates should be debarred from contesting elections for at least six years by the Election Commission and the election be declared void. The election should then be re-conducted with fresh candidates.

Besides making elections clean, there is utmost necessity of prescribing a maximum age limit and minimum academic qualifications for the candidates. Those want to compete in the elections should be made to sit in a test of knowledge of the Constitution, country's economy, freedom struggle and geography. The Election Commission of India should conduct this test. Certain minimum marks in these subjects should be fixed to qualify for becoming a politician. Psychological tests should also be introduced to judge their overall personality. If the bureaucrats are chosen from among the best in India, why not the leaders? There should be a retirement age for politicians. Often, people above the age of 60 are not issued driving licenses. The logic, according to experts, is that the decision-making ability starts declining after the age of 60. But in our country, most of the leaders of this age are driving the government.

There is also need of reorganization of constituencies. In Delhi itself, while one Parliamentary Constituency consists of four lakh voters another constituency has as many as 22 lakh voters. This large differences in terms of population must be done away with. Some of the constituencies are continued as reserved since the inception of the Constitution. The continued reservation of seats for specified castes has been a cause of complaint in some parts of the country. Reserved constituencies for certain castes and tribes could be rotated after each census on the basis of strength of their population. Such a step would possibly remove the grievances of the

general population of perpetually being denied representation in the legislature.

Reform is not single time effort but a continuous process. It would be appropriate if a standing committee, comprising members of parliament and experts in election laws, is constituted to go into the question, as and when it arises, and to suggest changes wherever necessary, in the election law to the government.

The success of the reform would depend upon the working of and adherence to, the system

on the part of electoral machinery at all levels, the political parties, the candidates and electorate. An independent press and enlightened public opinion have no substitute to push through reform. The participation of the youth in election plays a major role in restoring our faith in democracy. Finally, there should be proper mechanism, fully functional and fully equipped to fight with any triviality.

Siddhartha Dash lives at N4/205, IRC Village Bhubaneswar-751015.



Hon'ble Chief Minister Shri Naveen Patnaik felicitating Shri Bipin Bihari Rath on the occasion of 78th Birth Anniversary of Late Bhikari Ch. Panda at Sahid Bhavan, Cuttack on 22.12.2005. Shri Samir Dey, Minister, Higher Education, Public Grievances and Pension Administration is also present.

Solid Waste Management in Rourkela Municipality

Er.L.K. Bisoyi

Municipal Solid Waste(M.S.W) poses a difficult and complex problems for society. M.S.W. is largely generated in densely populated area where it's management is most constrained, with growth of population and constraint in resources. The improper management of solid waste has come back with vengeance gravely affecting the public health and degrading the environment. Although the city municipality remains a democratically elected body, the over involvement and interference of political parties have made the municipal authorities inefficient in taking autonomous decisions. Analysis across countries and over time reveals that generation of MSW is positively related to variation in per capita income and not with population size. At present in many large cities in developing countries, less than 70% MSW are collected and 50% households are helped.

Solid Waste Scenario

In India MSW or city garbage is a heterogeneous mixture of paper, plastic, cloth, metal, glass, earth, demolition materials, organic matter, biomedical waste etc. generated from households, industries, hospitals, commercial institutions etc. Solid waste is generated depending on it's size from 0.1 to 0.5 kg/ capita / day out of which recyclable content is 13-20% (Central Pollution Control Board(CPCB - 1995).

The growth rate of population, solid waste generation required, land fill area in Indian scenario is as given below :

	1947	2001	Growth %
Urban population (In million)	56.9	285	500
Waste generated (kg/capita/day)	0.295	0.56	190
Total waste generated (million tonne/year)	6.0	55.3	920
Land fill area (In ha)	0.12	23.3	19415

Source : CPCB, 2000

Policies and Procedure

The Government's consciousness in India has mostly been the reaction after UN Declaration and declaration by some developed countries. The laws for management of municipal solid waste since 1974 is enumerated below. Prior to this, certain laws at regional and national levels were there to punish the offenders for making nuisance in public places and polluting water bodies, but were either ineffective or not strictly enforced. Even the Environment Protection Act - 1986 (Umbrella Act) was silent on solid waste management.

Post Independence Period

1974 - Water (Prevention and control of pollution) Act amended in 1978 and 1988.

1981 - Air (Prevention and control of pollution) Act - amended in 1987.

1986 - Environment protection Act (Umbrella act) - Even was silent on MSW management.

1989- Hazardous waste management and handling rule.

1990- Govt. of India and Supreme Court instigated on the necessity of solid waste management.

1998- Bio-medical waste (management and handling) rules amended in 2000.

1999 - Recycled plastic manufacture and usage rules

1999 - Solid waste management in class-I cities in India - Guidelines by Supreme Court of India

2000- Municipal waste (Management and Handling Rules)

MSW in Rourkela Municipality :

Most Indian cities face the problem of unorganised and inefficient collection disposal procedure of the Municipality.

Rourkela Municipality at a Glance

Area	121.73 sq km
Population (2001)	2.3 lakhs
Population in slums (2001)	89,479
Slums pockets	114
No. of wards	32
No. of employees	985

Annual Budget (2001-2002)	784.12 lakhs
Waste Generation	0.5 kg/capita/day
Garbage generated/day	115 T
Garbage collected/day	70 T
Population covered with piped Water Supply	60%
Public toilets	16 seats + pay and use 32seats
No. of sweeper	429
Paved roads	416 km.
Population with access to sewage disposal	50%
Equipment	Short and long handle brooms

The waste collected by the sweepers during sweeping is brought by them to dustbin sites by wheeled barrows transportation

	fleet strength
Truck	5 nos
Tractor with trolley	2 nos.
Wheeled barrows	200 nos.
Landfill sites .. Balughat	10 Ac.(compost plant)
chend area	60 Ac. (sanitary landfill)

MSW Details of Rourkela Municipality

	1991	2001	2011
Population in lakhs	1.77	2.30	3.00
Total Solid Waste/day (leaving for recycling)	89 MT	115 MT	150 MT
Approx. volume (@ 450 kg/m ³)	197 cum	256 cum	333 cum
Total organic content (@ 20% of volume)	39 cum	51 cum	67 cum

Compostable materials/ day (@ 35% volume)	69 cum	90 cum	117 cum
Approximate community bins/required (1 bin/100)	1740 nos	2300 nos	3000 nos
Solid waste generated/ 100 population with alternate day cleaning	100 kg= 0.2 cum	100kg= 0.2 cum	100kg= 0.2 cum
Capacity of each community bin considering 50% extra volume	0.3 cum = 300 litr.	0.3 cum = 300 litr.	0.3 cum = 300 litr.
Growth in solid waste generated with respect to usage and demand for packed products	0.3 cum = 300 litr	0.5 cum =500litr	0.75 cum =750 litr

MSW Characteristics

Paper	-	1.9%
Cloth	-	4.2%
Polythene	-	7.2%
Stone	-	7.8%
Metal	-	1.2%
Sand & Grit	-	33.9%
Glass	-	1.2%
Leaves, Vegetables & organic waste	-	42.6%
Total -		100%

Biomedical Waste Generated in Rourkela:

No. of hospitals/ Nursing Homes & Clinics (Govt. hospital-2 nos., Public Sector Hospital-1 no., Nursing Homes & Clinics-15)	18
Waste generated - (considering- 1kg/patient/day)	
Biomedical	200kg/day
Domestic waste -	800kg/day

Financial out-lay :

Financial year	Total Exp. in lakhs in MSW	Total budget in lakh	% of total budget
1998-99	159	447.97	35.49%
2000-2001	165	563.52	29.28%
2001-2002	170	784.12	21.68%

Present Practice of Solid Waste Management

The Municipality is divided into 32 No. of Wards. As per present practice collection, carriage and disposal of Solid Waste is done by engaging 429 nos. of sweepers under supervision of 1 Health Officer, 8 Nos. of Sanitary Inspectors and 10 nos. of Sanitary Supervisors for collection and disposal of garbages. Around 200 nos. of wheel barrows, 2 nos. of tractors and 5 nos. of trucks are engaged daily for carriage of solid waste from transit /community bins to disposal sites. The dumped garbages are allowed to decompose and shrink at the spot, spreading and levelling are often done by dozor / excavators as and when required.

Development requirement of the Selected Site :

Out of 2 selected sites one is located in Balughat near Panposh. The site was previously a big earth pit of around 25ft deep from natural soil level. Earth from the site was removed for brick making purpose during early construction period of Rourkela Steel Plant. The ups and downs of the present natural soil level is required to be levelled before laying of garbage for proper drainage, levelling and leachate drainage. On high flood, river water is entering the low aging part of the site. Therefore provision for a sluice for prevention of flood water entry is provided in project estimate. As there was no proper road connected to the site, a *pucca* road of 3000 ft. length from National Highway has been

constructed. Compound wall to the site has been constructed for prevention of encroachment and entry of unwanted persons and cattle grazing. The 2nd site of 60 Ac needs improvement of approach road from main road and fencing to prevent encroachment and entry of unwanted person and cattle grazing.

It is imperative that an integrated management be developed based on economics, waste composition and local conditions. Waste management begins at the time of purchase of any goods by consumers and public awareness to reduce waste is the starting point of ISWM. The 3 R's of waste management i.e. reduce, reuse and recycle is one of the significant opportunities for public participation and part of waste management. The local bodies may opt appropriate waste treatment methods according to financial situation and finally, disposal of the residues in a land fill.

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Er. L.K. Bisoyi is the Executive Engineer of Rourkela Municipality, Rourkela.



Hon'ble Chief Minister Shri Naveen Patnaik inaugurating the IBAT School of Management new premises at KIIT, Bhubaneswar on 21.12.2005. Shri Biswabhusan Harichandan, Minister, Rural Development, Industries, Law and Shri Prasanna Kumar Patsani, M.P. are also present.

Direct-to-Home Service of Doordarshan

Baikuntha Nath Panigrahi

DTH or Direct-to Home is becoming a buzzword in the satellite broadcast industry due to the fact that DTH offers immense opportunities to both broadcasters and viewers. Thanks to the rapid development of digital technology, DTH broadcast operators worldwide have been able to introduce a large number of new interactive applications in the television market besides a large number of entertainment programmes over a single delivery platform. In addition, since digital technology permits a highly efficient exploitation of the frequency spectrum, the number of TV channels that can broadcast using digital technology is significantly higher than the analogue technology. The increased number of TV channels allow the operator to satisfy the demand of a number of rich markets with dedicated transmissions.

In general, DTH service is the one in which a large number of channels are digitally compressed, encrypted and beamed from very high power satellites. The programmes can be directly received at homes. This mode of reception facilitates the use of small receive dish antenna of 45 to 60 cm diameter installed at convenient locations in individual buildings without needing elaborate foundation/space etc. Also, DTH transmission eliminates local cable operator completely, since an individual user is directly connected to the service providers.

Transmission in KU band is most appropriate and widely used for the purpose. As mentioned above, all the encoded transmission signals are digital - thus providing higher resolution picture quality and better audio than traditional analogue signals. All the advantages of the digital transmission, as applicable to the terrestrial transmission are relevant in the satellite transmission also.

Doordarshan, the national broadcaster in India, at present has a network of more than 1400 transmitters spreading throughout the country and its signals are available to about 90% (DD1) and 43% (DD-News) population of our country. The prime duty of any national public service broadcaster is to make the programmes of national importance available to all its people and nationals. It was estimated that the coverage of remaining 10% population with terrestrial (single channel) broadcast would cost enormously. Besides that, setting up of terrestrial transmitters in the uncovered areas would have taken a number of years (10 to 15 years). Also, operation of terrestrial transmission would have required a huge manpower (a few thousand persons).

With the fast developments taking place in Satellite Broadcasting, it is but natural that Doordarshan has also come up with an alternative to get the required reach with an alternate technology option "Ku-band broadcasting" which

is envisaged for the coverage of remaining population. This is a much cheaper and economical option as compared to the coverage through terrestrial transmitters.

Ku-band transmission will provide coverage in all uncovered areas including remote, border, tribal, hilly and inaccessible areas in one go within a short time. With this coverage, the national broadcaster proposes to meet its obligation of covering the whole nation and its people not only with national channels, but also make available popular Doordarshan and some other free-to-air channels on its platform. In order to meet its obligations, it has also been decided that 10,000 receive systems (Dish and Set Top Box) would be provided free of cost at public institutions like Anganwadis, Schools, Public Health Centres, Panchayats, Youth Clubs, Co-operative Societies etc. in the uncovered areas.

Most of the DTH Systems, operating all over the world, provide Paid Service. The encrypted TV signals are received from the satellite on the Dish Antenna and transmitted to the DIGITAL DECODER. The customer is provided with a Viewing Card, which is inserted into a slot in the DIGITAL DECODER. The Viewing Card decrypts the TV signals chosen & paid for by the customer. A Viewing Card is a credit card sized smart card, which contains information about the channels that the customer has subscribed to. When inserted in the Decoder it enables viewing of the channels chosen by the subscriber. The subscription charges for viewing these channels are collected by the DTH operator.

However, DD Direct + (plus) would be totally different, as Doordarshan would not be charging any subscription fee from the viewers, making the system cheap and affordable for all.

Receive system of DD Direct + (plus) would be cheaper as compared to receive system

of other DTH operators as all the channels proposed under Doordarshan Project are Free To-Air and therefore SMS and CAS are not envisaged. No smart card/conditional access system is required at the uplinking or downlinking site .

Receive System includes a small satellite dish (which is an antenna for receiving a satellite broadcast signal); a digital integrated receiver/decoder (IRD) also called STB (Set Top Box), which separates each channel and decompresses and translates the digital signal for viewing over a television; and a remote control.

Investment on the part of subscriber for receiving DD-Direct Signal is only one time of receive system and no recurring monthly expenditure will have to be incurred by the viewer. As compared to other DTH systems, where a huge activation fee and a monthly subscription fee is charged, the DD Direct + (plus) can be received without payment of any activation fees. Price of a receive system is around Rs 3000 to Rs 3500/-.

Installation of the System is very easy and does not take much time. However the viewer has to take the services of skilled technical personnel to get the dish installed and oriented towards the Satellite which is required to be carried out before the system starts receiving the DD Direct + (plus) signals. Tuning/configuring the STB also is required to be done initially. Tuning procedure is normally supplied by the manufacturer along with the STB.

Some of the parameters which are required to be fed to the IRD are mentioned therein and are also given under the heading 'Satellite in Use'.

A powerful Satellite NSS 6 is being used to uplink the DD Direct + (plus) signal. Reception of the signal has been checked to be available throughout the country.

Salient features of the satellite are listed below:
Orbit type: Geosynchronous, Orbital location: 95° E

Service parameters of the bouquet of channels, which have been put into operation at present are as follows:

Transponder	Up/Down Pol.	Uplink freq. (MHZ)	Downlink freq. (MHZ)	Symbol Rate (MHZ)	FEC
C1 (36 MHz)	V/H	13778	12534	27.5	¾
C3 (36 MHz)	H/V	13891	12647	27.5	¾
C5 (36 MHz)	H/V	13973	12729	27.5	¾

Opportunities for DTH in India look great. Since cable has penetrated the Indian market in a big way with roughly 40 million C & S homes, it is imperative that in its first few years of operations, paid service of DTH will be focused on a niche market. This niche would basically constitute the rich segment from urban as well as rural areas due to the primary reason of high initial costs for DTH and the associated psychology of people. The most attractive part of the Doordarshan platform is its low initial cost and no recurring expenditure.

All in all, there exists a tremendous potential for direct to home broadcast in Indian market and it is projected that within three years, there would be around 2.5 million DTH subscribers in India. This figure is likely to increase due to the increase in TV and Cable households and also the growing multiple TV households, which would form a large percentage of the total subscriber base. Since India's population crossed the one billion mark, it is no surprise that satellite operators and programmers world-wide have set their eyes on the world's largest open market for DTH satellite TV services. The growing popularity of TV as a communication medium has resulted in the TV media sectors undergoing a rapid transformation.

Baikuntha Nath Panigrahi is the Director of Doordarshan Kendra, Raipur (Chhattisgarh).



His Excellency the Governor Shri Rameshwar Thakur inaugurating the International Seminar on Vision Mineral Development- 2020 at Bhubaneswar on 16.12.2005.

Empowerment of Indian Women: A Challenge of 21st Century

Dr. Dasarathi Bhuyan

Women's empowerment is a new phrase in the vocabulary of gender literature. The phrase is used in two broad senses i.e. general and specific. In a general sense, it refers to empowering women to be self-dependent by providing them access to all the freedoms and opportunities, which they were denied in the past only because of their being 'women'. In a specific sense, women empowerment refers to enhancing their position in the power structure of the society.

The word women empowerment essentially means that the women have the power or capacity to regulate their day-to-day lives in the social, political and economic terms - a power which enables them to move from the periphery to the centre stage.

The principle of gender equality is enshrined in the Indian Constitution in its preamble, fundamental rights, fundamental duties and directive principles. The Constitution not only grants equality to women but also empowers the state to adopt measures, a position; indiscriminate in favour of women. Within the framework of democratic polity, our laws, developmental policies, plans and programmes are aimed at women's advancement in different spheres. India has also ratified various international conventions to secure rights of women. The women's movement and a widespread network

of Non-Government Organisations (NGOs) having strong grass-root presence and deep insight into women's concerns have contributed in inspiring initiatives for the empowerment of women. Women today are trying to understand their position in the society. Women have become increasingly aware of sexual inequalities in every sphere of life and are seeking ways to fight them.

The Indian women have cast off their age-old shackles of serfdom and male domination. She has come to her own and started scaling the ladders of social advance with proud and dignity. Women of India are now uplifted and emancipated and granted equal status with men in all walks of life-political, social, domestic and educational. They have a franchise, they are free to join any service or follow any profession. Free India has, besides her woman prime minister, women ambassadors, women cabinet ministers, women legislators, women governors, women scientists, engineers-doctors-space researchers-giant IT specialists, women Generals, women public officers, judiciary officers and in many more responsible positions. No distinction is now made in matters of education between boys and girls. Their voice is now as forceful and important as that of men. They are becoming equal partners in making or dismissing of a government.

Hindu law has been changed and modified. Far-reaching changes have been introduced in the Hindu Marriage Act. Women have been given right to divorce in certain cases. Besides this, the Hindu Succession Act has given to the daughter; the right to the property of her parents. Our Constitution has given equal rights to women. No distinction has been made on the basis of caste, religion or sex. Their rights have thus been safeguarded. Thirdly, three percent reservation for women is apt to be enacted in the future.

Women Empowerment- still an illusion of reality:

Notwithstanding the remarkable changes in the position of women in free India, there is still a great divergence between the constitutional position and stark reality of deprivation and degradation. Whatever whiff of emancipation has blown in Indian society, has been inhaled and enjoyed by the urban women, their population belonging to the rural areas are still totally untouched by the wind of changes. They still have been living in miserable conditions, steeped in poverty, ignorance, superstition and slavery. There still exists a wide gulf between the goals enunciated in the Constitution, legislations, policies, plans, programmes and related mechanisms on the one hand and the situational reality on the status of women in India, on the other. The human rights scenario in the country continues to be dismal and depressing. Women are being brutalized, commodified, materialized and subjected to inhuman exploitation and discrimination.

Although, gender discrimination has been banned by the Constitution and women have been guaranteed political equality with men, yet there is a difference between the constitutional rights

and the rights enjoyed in reality by women. Even after half a century of independence, barring a few exceptions, women have mostly remained outside the domain of power and political authority. Although they constitute about half of the citizen and over the years their participation by way of voting has increased, yet their participation and representation in law making and law implementing bodies are not very satisfactory. No doubt the 73rd and 74th constitutional amendment acts have provided access to women in the decision making process at the grass-root level but their representation in the Parliament and state legislatures is woefully poor. Insecurity does not allow the women leaders to identify leadership at the grass-root level. In politics when a man proposes, they themselves depose. In reality women representatives are ornamental in nature and political consciousness is found lacking among them. They are affected by the caste and class divisions, feudal attitudes, patriarchal nature of the family and village-social, environmental, ethnic, religious separatism and the like. They are members on record only. Allegedly, they are not consulted while taking decision. Thus, women representatives are not free from male dominance in the village administration and no significant change in the power equal is observed in the villages.

In these days of scam-ridden politics, the increasing role of money and mafia in elections keeps most of the women away from politics. Increasing violence and vulgarity against them intimates women and consequently they prefer to stay out of politics.

What are the reasons for this sorry state of affairs ? Issues may be various and varied, however a few basic issues deserve specific mention :

Lack of awareness

Lack of social and economic empowerment

Lack of political will

Feebleness of accountability mechanisms

Lack of enforcement by the police force

Lack of gender culture

The question arises, how greater participation of women in politics can be achieved? Generally, the answer is suggested in the form of 'reservation'. However, mere reservation will not solve the problem unless and until women are given commensurate powers to function effectively and they themselves become more conscious and aware of their rights and duties.

More steps to be taken

There can not be any dramatic movement in the system just by including women members in Gram Panchayat. At the same time, it is also essential to shed certain stereotyped prevailing notions about role and importance of women in socio-economic development. Women should be encouraged to play a more active part. The male representatives have to establish a rapport with female representatives and give due respect and attention to their views. In the process of development and decision-making women have to operate along with men.

Of course, there is some awareness among women due to reservation for them in the Panchayati Raj Institutions (PRIs). But there is need for appropriate training and education relating to different aspects in functioning of Panchayats to make women members conscious enough about their effective role and representation in the Panchayat Samiti. This kind of training can be organized at the district or block level immediately following the election. We have to understand that

women representatives can play a vital role in the formulation and implementation of various women and child development programmes. This would increase the efficacy of such programmes. For instance, the women representatives and Gram Panchayat should have sufficient control over the primary education, primary health care and running of the public distribution system.

The state must pass and enforce legislation so that the status of women in society is brought to a respectable level through the long arms of the law. In 1985, a separate department of Women and Child Development was set up. In the Sixth Five Year plan, a separate chapter on "Women and Development" was included. The government had started and implemented major programmes like Support to Training-cum-Employment for Women (STEP), Mahilakosh, Women's Development Corporation, etc. However, legislations and efforts of the state have not made deeper in-roads into the rural and urban areas. For example, sex determination of foetus still continues in all the rural regions of the country despite the enforcement of legislation on Pre-natal Diagnostic Technique (Regulation and Prevention of Misuse) Act, which was passed in 1994. The women of India must oppose this sex determination of foetus, eve-teasing, bride burning, child marriage, exploitation in the offices, lower wages for labour etc. women from all walks of life must unite and must give priority to their education, growth and the prosperity of their families. Police should accept more female officers and constables so that they are able to deal with the female victims of our society. Female infanticide, female torture, Sati and dowry must be banned in the country.

Women must become literate, as education is beneficial for them as well as their families. The family web is woven around the women. She has

to be up to the mark and educated so that she could fend for herself and her family during the hour of crisis. The status of women would improve only if they educate themselves and grab every opportunity to become stronger and more powerful than before.

The discussion brings a major conclusion to light-the status of women could be improved by women themselves and nobody else. It is the modern era of satellites, achievements and technology-based gadget. Why should women be left behind ?

There should be a better and fuller understanding of the problems peculiar to woman, to make a solution of those problems possible. As these problems centre round the basic problem of inequality, steps should be taken to promote equality of treatment and full integration of woman in the total development effort of the country.

The main stress should be on equal work and elimination of discrimination in employment. One of the basic policy objectives should be universal education of woman, the lack of which tends to perpetuate the unequal status quo. The popular UNESCO slogan should come in handy: **“educate a man and you educate an individual; educate a woman and you educate a family.”**

Women will have to empower themselves ‘from below’ in order to compel the government to empower them ‘from above’. Further, there is

a need for a change of values and behaviour in the society, a need for positive socio-cultural and economic empowerment and above all the will power and strong determination of women to join politics. Education can play a vital role in bringing about the desirable behavioural changes among the women and make them well equipped in terms of knowledge, competence and capacity to deal with different political problems.

It may be concluded that women have shifted traditional assumptions about their roles and capabilities. There has been a marked change, and it has been for the better. Many of its benefits however have yet to touch the majority and all of us continue to experience various forms of gender discrimination. If laws designed to address the concerns of women are to have a dramatic and positive impact on women’s lives, they must be sensitive to the social, economic and political disempowerment of women throughout the world. The most important measure of their success should be the extent to which they enable woman to interpret, apply and enforce laws of their own making, incorporating their own voices, values and concerns.

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Land Use Pattern of Kalahandi District

Jagadish Prasad Sahu

Introduction

Land is very important natural resource because it provides all sorts of food to man as well as it provides basis of life to terrestrial and aquatic flora and fauna in one way or the other.

But in the past land was not so important because there was less population. When man entered into the first stage of civilization he totally depended upon the practice of hunting and food gathering. He began to use the land i.e. he began to dig the earth, sow the seeds and took utmost care to get the best out of a piece of land. From that day land became a resource and gradually the demand for land increased. Land use planning was first undertaken in England to plan the use of land in such a way that the same land can support more population.

History of Kalahandi

Kalahandi, with her glorious historical background, is today confronted with problems of poverty, hunger and persistent drought which had brought terrible suffering for the people here. If we look at the past of this region, we become conscious of the legacies and the heritage, which our ancestors have passed on to us over several thousand years. Archaeological evidences are suggesting that a great civilization flourished in the region since 4th century B.C. Now Kalahandi

from a state of plenty has been reduced to a state of poverty and starvation. It is on this background, a study of the past and present of Kalahandi is undertaken, with the twin objective of presenting its historical heritage as well as the present State of affairs.

The region of Kalahandi has a great antiquity. Starting from the Mahabharata, various literatures refer to this region in one geographical unit or the other. The Mahabharata mentions the region in the name of Kantara, meaning forest track or wilderness. Kautilya (4th century B.C.) in his Arthashastra mentions a place known as Indravana, which has been identified by historians with modern Kalahandi. Ashoka in his rock-edicts also mentions the place as Atavi or Atavika rajya, during 3rd century B.C. Samudragupta said to have defeated king Vyaghraraja of Mahakantara as revealed from Allahabad pillar inscription, during 4th century A.D.¹

The Mahakantara is identified with the modern region of Kalahandi district. After the downfall of Mahakantara, Kalahandi became a part and parcel of Nala rule of Podagarh for a brief period. However, with the rise of Sarbhapuriyans, in 5th century A.D., Kalahandi lost its political identity and became a part of South Kosala. By 9th - 10th century A.D., Kalahandi came under the Somavamsis and was reckoned

as Trikalinga.² The Somavamsis were some how supplemented by the Chindaka Nagas during 11th century A.D. It is in 12th century, under Gangas, this territory was identified with Kamala Mandala, which continued up to the Maratha period. The present Naga Dynasty substituted the Gangas during the 13th/14th Century A.D. with modern Junagarh, also known as Kalahandi Nagar as its capital. In 1940, the British Govt. recognised the Ex-king of Kalahandi as the Maharaja and ruler of Karonda State. With the merger of Princely States of India, the Maharaja of Kalahandi P.K. Deo signed the merger agreement in December 1947; the modern district of Kalahandi thus came into existence.³

Geographical Condition of Kalahandi

Kalahandi is one of the most backward district of the Orissa State, spreading over an area of 7920 sq kms, which is about 7.56% of the total area of the State. Out of the 30 districts of Orissa, it occupies 7th position in area. It is situated between 19° 8' N to 20° 25' N latitude and 82° 32' east and 83° 47' east longitude.⁴ It is located in the south-western part of Orissa. The district is bounded by Bolangir on the north, Phulbani on the east, Rayagada on the south-east, Koraput on the south, Nabarangpur and Raipur on the west and Nuapada district on the north-west.

There are 2 Sub-Divisions, 7 Tahasils, 13 Blocks, 1 Municipality, 2 NACs, 12 Police Stations, 273 Grampanchayats, 2068 villages and 137 uninhabited villages in Kalahandi district.

General information about the district.⁵

A. Physiography

Physiographically the district may be broadly divided into two different natural divisions, the hilly tracts and the plain country. The former chiefly comprises of the ranges of hills

which ran from the north-east to the south-west of the district and the later constitutes the river valleys of Tel and its tributaries, and the Jonk.

About eight kilometres south-east of Bhawanipatna, commences the mountain tracts called the Dongarla which cover a vast area of about 3665 sq km. on the eastern side of the district and south-wards to the Koraput border.⁶ These tracts vessel in a serious of precipitous hill ranges from the plains. The path by which the ascent on Karlapat side is made quite impracticable even for 'sagads' (solid wheeled carts) and many parts are inaccessible except by foot. The hillsides are covered with dense Sal (*shorea robusta*) forest, and it is not until the open valleys at the higher elevation are reached that cultivation is met with. These valleys are mostly fertile and are splendidly watered being intersected by perennial streams. Here and there patches of regular rice cultivation are met with and crops of wheat; but for the most part, the country is given over to 'Dahi Cultivation or Jhuming'. The hill tracts form a conspicuous land mark in the scenery and the wild precipitous ranges which mark their border, stand up from the plains like a vast wall and are visible for many miles. The principal plateau lands are the Karlapat, Thuamul Rampur ranges and the Baphilimali hill, a fine plateau on the district border near Madhupatna; these in parts each an elevation above sea level of 1220 metres and over. In these hills of the Dangarla area the splendid stream of the Indravati takes its rise near Thuamal. It makes its way through the hill range which forms the southern boundary of Kalahandi. Not far from the place where the Indravati flows south through this barrier the Hati river rises on the northern slopes and flows due north in exactly the opposite direction.

The principal hill ranges belong to Eastern Ghats. It covers almost the entire eastern and southern parts of the district. These ranges are named at different points differently after the village near their base. The main peaks in these ranges are Tangri Dongar (1229m), Karlapat (1213m) and Kattighara (953m).⁷

B. Drainage

The asymmetric pattern and the characteristics of the drainage system strongly reflect the character of relief and the climate differences. The Tel, Indravati and Jonk, which form tributaries of large rivers like the Mahanadi and Godavari, may be mentioned among the principal rivers of Kalahandi. Besides, the Tel receives a large number of effluents in the district. The scenery along the banks of these streams during their course through the hills specially on the Indravati and the Raul, a feeder of the Tel, is exceedingly fine and varies from wild raging torrents sweeping over bare rocks, to placid stretches of deep pools with the stream swirling in the eddies between rich meadow land, verdant with grass and banks overhung with willows.

Most of the hill streams of the district are perennial. The rivers in the open country seldom carry a large flow of water in the hot weather. The Tel, Sagada, Hati, Ret and Uttei are mostly reduced to tiny streams in their lower reaches from February to June. On the other hand, the Raul throughout its whole length, most of which lies inside the forest, holds a fair flow of water even in the month of May. The Sagada, Ret, Indravati, Bada Nala and many others carry a strong stream of perennial water in the upper and middle reaches and only lose it in their sandy beds when they descend to the plains.

Tel is the longest and most important river in the district, rising in the hills of Nabarangpur

and entering in Kalahandi district, a few kilometres west of Dharamgarh it flows through an alluvial tract. The important feeders on its right bank are the Motel, Hati, Sagada, Ret, Bulat and Raul. The Raul rising in the hills of Kandhamal district flows through the mountain tracts in the north-eastern part of Kalahandi district, enters Bolangir near Sikerkupa and joins the Tel a few kilometres from the borders of Kalahandi. It receives most of the drainage of Madanpur-Rampur area. The Uttei rises on the same hills and receives a few feeder in the fertile tract of M. Rampur area and joins the Tel on the border of Bolangir-Kalahandi districts near Belkhandi. It drains the wide plain between Madanpur Rampur and Narla. The Hati, a large tributary of the Tel, rises in the high hill ranges of Jaipatna and joins the Tel about 12 kms north of Junagarh. The Bulat rises at the southern end of Gundi Dangar about 12 kms south of Bhawanipatna and flows past the town in a north-western direction under the name of Pipal Nala before it turns northwards to join the Tel near Karlapada.⁸

Indravati is the largest river system of this area, which supply water to most parts of Jaipatna, Junagarh, Koksara, Thuamul Rampur, Dharamgarh and Kalampur Blocks for irrigation purpose. Tanks are found in almost every village. They are generally classified as Kata, Sagar, Bandh and Sara. The tanks are chiefly used for bathing, drinking, pisciculture and irrigation purposes. Phurlijharan, one of the most perennial waterfalls, about 15 kms from the Bhawanipatna township area is the most attractive place and picnic spot for the tourists.

C. Climate

The climate of this district is extreme and on an average it experiences monsoon variety of climate. Summer season is intensely hot and winter is very cold. The year is divided into four seasons.

The hot season from March to May followed by the south-west monsoon season from June to September. October and November constitute the post-monsoon season. The cold season is from December to February. The average annual rainfall is 1378.3 mm. The variation in the annual rainfall from year to year is not very large.⁹

Temperature

There is a meteorological observatory at Bhawanipatna which has started functioning very recently. According to the meteorological observation at Bhawanipatna, the hot season commences by about the beginning of March when temperatures begin to rise. May is the hottest month when the mean daily maximum temperature is about 41⁰C and mean daily minimum temperature is about 28⁰C. On individual day the maximum temperature was 49⁰C at Bhawanipatna on 23rd May 2002.¹⁰ December is the coldest month with the mean daily maximum at about 28⁰C and mean daily minimum at about 11⁰C. The temperature of coldest day was 2.5⁰C at Th. Rampur on the 29th December 2003.¹¹

Humidity

The relative humidities are high in the south-west monsoon and post-monsoon months. The air becomes gradually drier thereafter. The summer is the driest part of the year with the relative humidities particularly in the afternoon often-going down below 30%.¹²

D. Soil

Soil is a natural part of the earth's surface being characterised by layers paralleled to the earth's surface resulting from modification of parent materials by physical, chemical and biological processes operating under varying conditions. During varying period of time the

classification of soil in Kalahandi District is made after the scheme of U.S. soil conservation service by the survey of India in their district planning map series.¹³ It is done with a purpose for better soil management. The soil of Kalahandi district is an admixture of Red, Black and Sandy loam. The district has five different types of soil broadly classified as (i) Red Laterite (ii) Black clay (iii) Sandy Loam (iv) Clay and (v) Red Sandy loam.

The red Laterite soil which is deficient in Phosphorous and nitrogen is found all over the district, mostly at the foot hills and hillocks. In Bhawanipatna and Dharamgarh occurrence of heavy soil is common. It is rich in Potassium and Nitrogen but poor in Phosphorous. Sandy loam is seen in Lanjigarh and parts of Bhawanipatna Tahasils. The soil on the river banks of Tel, Udanti, Uttei and Sagada are alluvial, sandy and sandy loam. The fertility of soil in Dharamgarh and Jaipatna areas is high. The percentage occurrence of the major soil types are as follows :

- (i) Red soil - 31.63%
- (ii) Black soil - 15.93%
- (iii) Clay and sandy loam - 52.44%

E. Natural Vegetation

The geology, topography, climate and the soil all have a close bearing on the nature of vegetation. Above all, man's influence on the flora is no less important. The one time densely wooded tracts on the high hills of Kalahandi is reduced to mere bamboo and dry mixed scrub in no time through denudation brought about by shifting cultivation. The forest of this region fall into the following categories :

- (i) Sal Forest : The Sal (*Shorea robusta*) forest is of a moderate moist type. It corresponds more or less with champions moist peninsular Sal. The percentage of Sal is generally over 80% in these

forests. The common associates of Sal are Asan, Jamun, Kendu, Harida, Kusum, Mohul, Bija (pterocarpus morsupium), etc. These forests dominated over the areas of Karlapat, Lanjigarh and more especially in M. Rampur.

(ii) Dry Mixed Forest : The number of species which go to make up this community is too unwieldy to be mentioned in details. The principal among them are Asan, Dhaura, Bahara, Kasi, Jamun, Bija, Bandhan, Sisu, Haldu, Khari, etc.

(iii) Bamboo Forest : The only bamboo of any important is the *Salia bans*. Here and there it forms virtually pure patches in the hills. The most extensive areas under this type are to be found in M. Rampur and Lanjigarh.

(iv) Teak Forest : There was a time when it could have been said that there was considerable quantity of teak. Most of it short-boled and yielding little clean timber, situated in the village lands and the adjacent jungle in the valley of the Tel in the north and north-west of Kalahandi. Some few patches of good teak do still exist in the far north-west in the valley of the Udanti.

Table-1

Classification of forest area by legal status in Kalahandi as on the 31st December 1999¹⁴

Sl No.	Classification of forest	Area in Sq.Km
1.	Reserve forest	1449.03
2.	Demarcated protected forest	488.51
3.	Undemarcated forest	313.37
4.	Un-classified forest	0.54
5.	Other forest	286.56
Total		2535.01

Generally, timber is the major forest produce. Minor produces of the area are Kendu

leaf, Bamboo, Kusumi, Lac, Broom grass, Sabai grass and Sal seeds etc. These minor forest produces keep the local *adivasis* employed for nearly 4 months. Timber and Kendu Leaves are the main exportable forest products of the district.

F. Demography

The total population of Kalahandi district is 13,34,372. Pressure of population is not a static factor, it is highly dynamic population pressure varies with the degree of variability of fertility of soil, availability of water and other facilities. The density of population is 168 person per.Sq.Km and the sex ratio is about 990 in Kalahandi.

Table-2

**Provisional population 2001 census
District - Kalahandi¹⁵**

Sl No.	Name of the Blocks/Urban	Population		
		Male	Female	Total
1.	Bhawanipatna	69982	70465	140447
2.	Dharamgarh	58002	57259	115261
3.	Golamunda	48299	48353	96652
4.	Jaipatna	57312	58041	115353
5.	Junagarh	78817	79130	157947
6.	Kalampur	26008	26527	52535
7.	Karlamunda	24531	24377	48908
8.	Kesinga	48919	48922	97841
9.	Koksara	52277	52952	105229
10.	Lanjigarh	37037	38005	75042
11.	M. Rampur	33901	33803	67704
12.	Narla	51331	50978	102309
13.	Th. Rampur	32473	33253	65726
Urban				
1.	Bhawanipatna (M)	31630	29115	60745
2.	Junagarh (NAC)	8037	7722	15759
3.	Kesinga (NAC)	8570	8344	16914
4.	Mukhiguda (census town)	3737	3122	6859

Kalahandi as a Micro Level Planning Region

At the micro level, Kalahandi district has some unifying problems or interest as a core. It includes all territory tributaries to this core. The areas within Bhawanipatna are characterised by an absence of serious conflicting interest between them. Its population share certain basic attitudes, values, needs and desires. Thus this micro region is designed to present "Community of Interest", particularly with regard to dynamic types of production, market relationships and labour supply and demand. In this way Kalahandi district, contain the best possible combination of structural, organisational and functional factors. The blocks are intended to be suitable units for the formation of area development plans as they will be sufficiently close to the grass roots, affording opportunities for direct interaction between the citizens and the administration in deciding the key issues in area development.

Thus micro-region can be of three broad types:

1. There may be nodal regions consisting of urban centres and influence areas around them.
2. The micro-regions may also be primarily rural areas having a large number of minor nodes without any organisational hierarchy influencing the entire area.
3. It is also possible for micro-regions to be essentially problem area or backward area.

The Evolution of Land Use¹⁶

Rural communities have emerged as a part of our socio-economic system. The amount of land utilised by specific activities and their special distribution reflect the requirement of the system. In our communities however the existing arrangement of land use, though essentially functional is not a criterion of modern community design. The pattern is to a large extent a product

of past growth and activities, which do not represent the most efficient pattern.

Despite lack of proper planning in the early villages, the land use pattern that has evolved is essentially functional.

With the increasing population, the needs for inter re-arrangement of land use, and the more intensive use of land was felt.

Thus it is apparent that the land use pattern as well as the amount of land utilisation for a particular purpose and often the density of population are constantly undergoing changes. Indeed these changes reflect response to the changing needs of the community.

Basic Concepts of Land Use

Clawson has given the following major ideas or concepts about land :

1. Location or the relation of a specific parcel of land to the poles, equator and major Ocean and landmasses.
2. Activity on the land, for what purpose the piece of land or track is used.
3. Natural qualities of land including its surface characteristics and its vegetation cover.
4. Inter-relation between activities on the land and other economic and social activities.
5. Intensity of land use.

Characteristics of a Good Classification of Land Use

The six characteristics of a good category classification of land use as outlined by "Clawson" are as follows :

1. The classification should deal exclusively with activities. Non-activity data can be input at a later stage.
2. It should be feasible in detail.
3. It should be based on what is observed.

4. Field work should be based on the smallest unit, which can be differentiated.
5. It should be acceptable to machine processing.
6. The classification should be compatible with the existing system.

The term land use denotes the multiphase use of land in which we study to assess the use of the land. Land use refers to man's activity on land which are directly related to the land.

Land use and land cover are closely related and interchangeable. The purpose for which land is used is commonly associated with the type of cover whether they are agricultural, forested, residential or water area.

Land Use Planning

In acute shortage of land the importance of waste land is immense and the planners take it to determine the optimum use of every acre of land. Multiple use of land must be promoted where ever possible.

Land planning must start from the present position and should be based on a careful objective and detailed survey. There are various type of use of land by man which are food, shelter, work, recreation, movement and security.

Rural Land Use

Von Thunen in 1826 claimed that the land use around a city depends upon the rent of a land. The economic rent of an area is the return which can be obtained from land, which is at the margin of production. He argued that circular form of land use around a city would evolve from the periphery of the city.

Land use planning involves :

1. Land classification
2. Land use classification

3. Types of farming classification

1. **Land Classification** : - In England the spot committee in its 1942 Report divided the land of Britain into good 37.9%, medium 37.9%, poor 24.6% and residential 2.3%. Different tracks of land vary in their value for agricultural production and their suitability for different types of crops and livestock. With growing population pressure on more or less fixed supply of land, it is important that this variation in land quality should be studied and mapped in order to obtain the maximum return from this valuable resources. No country can be considered to be adequately mapped unless a land classification map of this kind on a sufficiently large scale is available.

2. **Land use Classification**: - Modern technique for classification land use and delimiting relatively small scale agriculture regions have stamped very largely from the work carried out by J.C. Weaver in 1950. Agricultural regions and crop combination regions were prepared by various geographers.

3. **Types of Farming Classification** : Farming can be divided into subsistence or commercial taking into account :

- A. Standard labour requirement
- B. Gross output value
- C. Gross marginal value

Taking into account the use of land, land use planning can be made rationally. Von Thunen's model is concerned with optimal pattern of land use within the constraints led down by various assumptions concerning production and transport cost and market demand. The economic principle underlying Thunen's model is worthy of study but the real world situation influences on production, irrational nature of decision making. So the optimal and ideal model is very hard to be found.

Need for Land Use

The available land resources of a country exercises a lasting effect on the economic life of the country because the production of raw material is dependent on the nature of landscape. In the hilly region agriculture and industry generally do not flourish. The space available to village people leaves a stamp on their socio-economic life. Thus the relation of life to the earth's area is a fundamental question of rural geography.

Land is a basic economic activity and the prime resource of a man. Since the beginning of human existence man has directed his activities with reference to earth's resources and he knows how to use this for his own benefit. At present there is a pressing need for planned land use of villages. Two factors are responsible for this trend.

Firstly population is increasing at a faster rate while the means of production are limited. They are unable to satisfy the increasing demand. Secondly with increasing population, food consumption is also increasing. Accordingly the land and water resources must be used to the greatest possible advantage so that the same land can support more population.

Types of Rural Land Use

By land use we mean the distribution of land in accordance with its use or in the study of village land, we are concerned with surface utilisation.

The concept of land use is a key concept for understanding rural land use. It includes many broad categories and their sub-division and level of management which may exist with certain defined types of land use. The present pattern of land use can be studied in the following ways :

1. **Forest :** Forest include all lands classed as forest under legal enactment dealing with forest or administered as forests, whether state owned or private, and whether wooded or maintained as potential forest land.
2. **Land under non-agricultural use :** This category include all lands occupied by buildings, roads and railways or under water. e.g. rivers and canal.
3. **Barren and uncultivable land :** This category covers all barren and uncultivable lands, including mountains, deserts etc. which cannot be brought under cultivation except at a high cost.
4. **Permanent pastures and other grazing land :** This category covers all grazing lands wheather they are permanent pastures or meadows.
5. **Miscellaneous tree crops and groves not included in the net area sown :** Under this class are included all cultivable land which are not included under the net area sown but are put to some agricultural use.
6. **Culturable waste land :** This category includes all lands available for cultivation or not taken up for cultivation even once, but not cultivated during the current years and last five years or more in succession.
7. **Current fallow :** This class comprises cropped areas which are kept fallow during the current years only.
8. **Net area sown :** This term denotes the net area sown under crops and orchards, counting areas sown more than once in the same year only once.

Table-3
Land Utilisation Pattern of Kalahandi District¹⁷

Sl. No.	Name of the Blocks	Forest area	Misc. tree, crops and groves not included	Permanent pasture and other grazing lands	Cultivable waste	Land put non-agril. used	Barren uncultivable land	Current fallows	Other fallows	Net area sown
1.	Bhawanipatna	8432	266	1808	3035	5868	3801	6526	4525	31697
2.	Dharamgarh	718	267	1464	729	3436	820	7575	449	22494
3.	Golamunda	3613	130	2349	2231	3586	1215	5755	1208	22696
4.	Jaipatna	1849	211	2775	2946	2748	798	3208	1776	24267
5.	Junagarh	4101	70	3156	1426	4564	149	6044	4121	26719
6.	Kalampur	451	15	164	743	1383	200	1136	137	11309
7.	Karlamunda	354	71	886	884	1882	245	3108	709	10878
8.	Kesinga	695	191	907	1823	3668	1027	6831	2349	20004
9.	Koksara	1711	287	1221	3019	2000	903	3875	2633	20591
10.	Lanjigarh	27636	229	2322	3234	2815	4928	2928	4301	17840
11.	M. Rampur	11386	155	1132	2074	2684	5354	2688	543	15100
12.	Narla	1548	138	1973	1574	4412	314	5387	1936	25972
13.	Th. Rampur	3199	216	1545	2791	2326	37207	3095	1976	9598

Table - 4

Table for wheel diagram to show land utilisation pattern of Kalahandi district¹⁸

Sl. No.	Name of the land utilisation	Area in Hect.	Degrees
1.	Forest area	64793	42
2.	Misc. tree, crops and groves not included in net area sown	2246	3
3.	Permanent pasture and other grazing lands	21702	14
4.	Cultivable waste	26509	17
5.	Land put to non-agricultural uses	41372	26
6.	Barren and uncultivable land	56961	37
7.	Current fallows	58156	37
8.	Other fallows	26659	17
9.	Net area sown	259165	167

The total area of Kalahandi district is 7920 sq kms out of which 2,12,800 hectares of land are cultivated area and out of this 1,83,000 hect. are paddy area. Out of the total area of the district 1,07,889 hect. of land are irrigated for Khariff and 61,521 hect. for Rabi crops.

The cultivated lands of the district are classified as Bahal, Berna, Mal, Att and Bhatta. Bahal and Berna lands are low lying area and are most fertile, and give better yield than the other lands. Most of the cultivable lands are used for double crops i.e. Khariff and Rabi. The Bahal lands are available for paddy and after that grams like Mung, Biri, Masur, Kulthi etc are cultivated. The medium paddy requires less amount of rainfall. Generally the Bhatta are used for cereal cultivation like Horsegram, Til, Mustard and Gurji.

Cropping Pattern

The outstanding features of the cropping pattern of India are the wide variety of crops and the preponderance of food grains over non-food crops. Paddy is the principal crop which alone accounts for 60% of the gross cropped area of Kalahandi district. Other major crops are Wheat, Jowar, Bajra, Maize, Ragi, and Pulses.¹⁹

Rice : Rice is the staple food of the people. There are three regulator rice crops namely Autumn, Winter and Summer and locally known as San dhan, Bad dhan, and Am dhan. Dubri, Jhilli, Puagi, Mahipal, Asamchuri etc. are the popular local varieties whereas Parijata, Ratna, Arnapurna, T-141, Swarna etc. are the high-yielding varieties of paddy gradually gaining popularity in this region.

Wheat : Wheat is the another important crop of this region which is cultivated under irrigated as well as non-irrigated conditions. Sonalika and Janak are two dominated high-yielding varieties of this region.

Maize : Vikram, Vijaya, Jawahar, Protina etc are the well known maize varieties of this region. Major maize growing areas are Thuamul Rampur, Karlamunda, Lanjigarh, Madanpur Rampur, Narla and Jaipatna.

Ragi : Ragi is cultivated during khariff season and the area covered in the Rabi season is negligible. The total production is 1323 metric tonnes in 2005. Improved varieties like Dibya Singha and AKP-2 have been introduced in the district.

Jowar : The cultivation of Jowar is mostly practised in khariff season by the tribal people in hill slopes and its cultivation is almost absent in the plains. Improved and high-yielding varieties have also been introduced in the district.

Til : Til is grown on high land or Bhatta both in Rabi and Khariff seasons. The khariff crop is sown in June, September, while the Rabi is sown in October and harvested in January.

Sugarcane : Sugarcane is cultivated in a limited scale in the district mainly in irrigated lands and in homestead lands. But gradually its cultivation is becoming popular among the local farmers. Out of total areas of district, it is grown in 6089 hectares. Improved varieties of cane have been introduced in the district. The yield rate of 72 quintals per hectare is more than the state average.

Coffee Plantation : The soil and climatic conditions of Thuamul Rampur area of the district is highly suitable for the plantation coffee plantation. The average elevation of the area varies between 2500 feet to 3000 feet (750 mt. - 900 mt.) which is suitable to the growth of coffee plants. At present coffee is grown in an area of around 320 hectares. Its plantation has been taken up as a soil conservation measure.

Table - 5
Different Crops and Their Productions
Kalahandi District

Name of the Crop	Production in MT.
Paddy	518176
Wheat	94
Maize	116
Ragi	1323
Mung	978
Biri	679
Kulthi	1004
Til	270
Groundnut	1539
Mustard	56
Potato	04
Sugarcane	50346

Problems and Conclusion

The people of Kalahandi District are facing with a lot of problems :- cultural, social and economic. Most of the people are neck-deep with the 'vicious circle of poverty'. The poor family may not have enough to eat. This leads to inadequate diet, poor health, illiteracy, low capacity to work, inefficiency which in turn result to low income and poverty. People of this district suffer from chronic water-borne diseases particularly during rainy season. They are easily susceptible to intestinal and skin diseases, diarrhoea, dysentery, cholera, tapeworm and tuberculosis which occur due to nutritional deficiency.

Because of shifting cultivation the densely wooded tracts of Kalahandi District have been reduced to mere forests of bamboo and dry mixed scrub Shifting cultivation usually leads to

soil erosion, which affects rainfall, destroys valuable forests and deprive people of the benefits of forest and it's products.

Most of the people in the interior rural village are illiterate. Though there are schools and colleges yet few people get education there because of lack of financial stability. The inhabitants of this district are conservative in nature. Most of the interior villages are deprived of social and economic privileges. Although town areas of Kalahandi district have gradually gained all facilities but still it is not adequate for the development of the district as a whole.

The government should take various measures for the improvements of the socio-economic life of the people. Steps should be taken to stop shifting cultivation and adopt settled type of farming practices. Government should provide better irrigation facilities, agricultural implements, High Yielding Variety seeds and fertilizers to raise the productivity of the land.

To sum up, it may be said that for development of this area emphasis should be given on creation of potential for development on one hand and optimum utilization of existing facilities on the other. Since major portion of the working population derives their livelihood from agriculture obviously this sector is to be chosen for a break through. Farmers are to be funded for development of land. Irrigation facilities are to be created. As land area is limited to increase productivity from unit area of land, intensive land based programmes should be taken-up to modernise farming business.

Various development programmes such as soil conservation, the spread of irrigation facilities and the adoption of improved agricultural practices are introduced as element of dynamism in the land-use and cropping pattern. It is necessary to adopt a planned approach to land utilization with the following objectives :-

1. The development of all arable land for agriculture keeping in view the requisite balance among farming, pastures and forestry.
2. The achievement of an apportionment of land between different uses and a combination of land with other factors which would help to produce the needed quantity and quality of different agricultural or forestry products at lowest possible cost.
3. Improvement in the quality of used land through irrigation and conservation of the fertility of land.
4. To facilitate such shifts in land-use as would increase the returns to the factors employed in agriculture.

For achieving these objectives, proper land-use planning is required. Before the land use planning is done, it is necessary to have a detailed classification of the country into agro-climatic regions and zones, based on the data on rainfall, temperature, humidity, soils, existing cropping pattern, irrigation, density of population, livestock etc. After such a classification is done, it would be necessary to work out the optimum land-use and cropping pattern for each area, consistent with the overall demands for agricultural commodities to satisfy the domestic and export requirement.

Agriculture is the backbone of our economy but agriculture in this region is mostly seasonal, which provide seasonal employment and the farmers have to sit idle for the rest of the season. Most of the agriculturists of this region live in discouraging cultural environment. Most of them are illiterate, ignorant conservative, fatalistic and custom-bound and do not have progressive speed. So the first and foremost duty of Govt. is to educate and train the people. From the land use survey we found that the west land is abundantly available. So proper measures should

be taken to increase the quality of waste land. Instead of using more and more of fertilisers, steps should be taken to produce compost for eco-farming manufacture. The productive soil on the land surface should be preserved by large-scale afforestation, contour bunding and regulation of land use. Agricultural research institution should be opened at the regional level to test the suitability of the soil and climatic conditions in different areas for growing different crops. Such institutions have to develop low cost technologies which would suit the needs of small and marginal farmers. Irrigation and fertilisers should be developed which opens up opportunity of the double and multiple cropping.

The imbalance in the occupational structure of this region need a time-bound programme. The pressure of population on land should be reduced by diversification of occupation. This would be possible if we encourage the development of labour-intensive industries. The tertiary sector needs development through creation of self-employment.

In order to remove the regional imbalance in Western India Sugar and Chemical Industry Projects were set up in Kalahandi district with a large investment project of 200 crores. By utilising the by-products like paper pulp, molasses and bagasses, many ancillary industries can be developed, for manufacturing variety of products like paper, spirit and alcohol. From the implementation stage WISCIL has initiated cane development activity but still now it has failed to achieve the desirable target because of lack of co-ordination amongvarious agencies.

The rapid spread of the co-operative marketing society should be encouraged to put the small farmers in a more advantageous position.

Kalahandi is rich in forest, water and human resources but we are not in a position to utilise

these resources. For achieving the goal of developing this region the following points need fast and foremost consideration :-

1. Sugarcane industries should be renovated to accommodate the vast potentials of Kalahandi to produce sugarcane which has very high sugar content.
2. Waste-land should be utilised for forestry.
3. Agricultural research institutes should be set-up.
4. Improved technologies transfer should be done in :
 - (a) Mushroom cultivation
 - (b) Poultry
 - (c) Fishing
 - (d) Horticulture
 - (e) Animal Husbandry
 - (f) Textile and handloom industries

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Biotechnology and Indian Economy

Dr. Subhransubala Mohanty

Introduction

Biotechnology is a subject, which was pioneered by US scientist Oswald Theodore Avery in 1943, has finally turned the global spotlight on itself. It is today one of the contenders for the New Economic Crown with a vast untapped potential. Often overshadowed by its more popular cousin - information technology; biotechnology has gradually caught the fancy of even developing countries like India. Unlike the information technology, the biotech sector have a downstream effect on industries as well. It is expected to generate more of what is known as “derived demand” leading to a huge demand for other industries of non-traditional sectors such as fine chemicals, semi-conductors, information technology, clinical health care and agricultural sector. Biotech scientists are now continuing their research to find new technologies to keep pace with the changing scenario in the agricultural sector. It is an emerging area where not only big companies but also small and medium enterprises can become globally competitive.

What is Biotechnology

Biotechnology is the product of interaction between science of biology and technology. According to British Biotechnologist - “It is the application of biological organism, system or

process to manufacturing and service industries.” Similarly, Japanese Biotechnologist defined it as “A technology using biological phenomena for copying and manufacturing various kinds of useful substances.” According to US National Science Foundation - “It is the controlled use of biological agents such as microorganisms or cellular components for beneficial use.” Thus biotechnology is an integrated application of knowledge and technique to draw benefits from properties and capacities of microorganisms and animals and plants.

Economics of Biotechnology

Biotechnology has potentiality to play a pivotal role in every sector of the economy. The contribution of biotechnology in agricultural sector is not comparable. The industrial sector, trade and business can flourish to any extent only by judicious use of biotechnology. In this context, the contribution of biotechnology to different sector may be analysed as follows.

Biotech and Agri-Sector

Agriculture is the backbone and the sheet anchor of Indian economy. It is also the nucleus of food supply, livelihood of majority of population and significant source of revenue and national income of the country. In spite of its formidable

role, it still remains outside the scope of economic reforms and faces lot of challenges in the days of globalisation and liberalisation. Indian agriculture has been witnessing slow average annual growth rate even in the reform period in comparison to international standard due to (i) feudal character of production, (ii) dualism in labour market, (iii) orthodox farming technique, (iv) sub-division and fragmentation of landholding, (v) cropping pattern, (vi) instability and fluctuations, (vii) absence of crop rotation (viii) agricultural indebtedness and (ix) lack of organised technique.

In this context, Biotechnology (BT) has been rightly called the technology of new millennium which can be applied in agro-sector. Through the process of plant-biotechnology, millions of plants may be grown in laboratory (in-vitro) within a short span of time by taking any part of the plant according to "totipotent theory". The different types of in-vitro cultures like Embryo culture, ather culture, ovary culture, plant tissue culture, cell culture, protoplast culture and somatic hybridization can generate large number of plants and solves all the problems of twenty first century like food scarcity, controlling pests with guaranteed yields and innovative products. Thus, efficiency of BT can be judged from following grounds.

- (i) Shortening of breeding cycle of some plants.
- (ii) Improvement of crops and ornamentals.
- (iii) Large-scale plant clonal propagation.
- (iv) Production of genetically variable crops.
- (v) Production of virus-free plants
- (vi) Regeneration of forests (teak, eucalyptus, sandalwood, tamarind, rubber and oil palm by Forest Development Corporation of Maharastra.)

- (vii) Production of secondary metabolites like alkaloids, steroids, phenolics and flavonoids.
- (viii) Production of disease resistant varieties.
- (ix) Production of herbi-resistant plants.
- (x) Production of environmentally tolerant species.
- (xi) Creation of new plant varieties.
- (xii) Insect-pest resistant plants.
- (xiii) Production of transgenic plant, a plant of modified variety developed genetically to improve the quality of the plants.

Biotechnology in Industrial Sector

Production of secondary metabolites have a wide range of applications in the pharmaceuticals, chemical and food industries. Commercial production of these high cost secondary metabolites by plant tissue culture attracts greater attention of pharma industries like Mitsui Pharmaceuticals Industries of Japan have started producing shikonin, a red pigment, a safe red dye which is now marketed as "bio-lipstics". Similarly Research Laboratory, Maryland, USA is producing phosphodiesterase and berberin from tobacco tissue cultures which may be used against stomach distress. Further, diosgenin, a major raw material for manufacture of steroid contraceptives can be obtained from yam using tissue-culture technique.

Organic farming is another achievement of biotechnology in agro-industry sector. In view of growing concerns from the non-judicious use of agricultural chemicals, emphasis has been given to use organic input. Because those chemicals has not only resulted in environmental pollution but also developed resistance to several pests.

Residues of DDT, aldrine, lindane etc. have been found in different food samples. In this context, emphasis has been given to use organic inputs like green manure, crop residues, farm yard manure, biogas slurry, animal and human excreta, compost, vermicompost, biofertiliser and many other indigenous nutrient management practices. It is estimated that 1000 million tonnes of animal dung is produced in India, which yields about 500 million tonnes farm manure, which is excellent resource of plant nutrient. An application of 10 tonnes well rotten FYM/ha can add 50-60 kg.N., 15-20kg P₂O₅ and 50-60 kg K₂O. Similarly 300 million tonnes crop residues, 285 million tonnes rural compost, 14 million tons city refuse, 28 million tonnes Biogas slurry available in the country may be utilised widely as plant nutrient resources. Apart from it, microorganisms like Rhizobium, Azotobacter, Azospirillum, Bluegreen algee and Azolla are contained in the biofertiliser. Now a days vermicompost with the technology of earthworm rearing is explored as another excellent source of plant nutrient and large number of units have been established in different parts of the country for its production and distribution.

Biometrics

Biometrics is another gift of biotechnology. It is the automated use of physiological or behavioural characteristics to determine and verify identity. Physiological biometrics is based on measurement of a part of human body, finger scans, hand scan, iris-scan, facial scan and retina scan are examples of physiological biometrics. Biotechindustry, software company, stock market and brisk businessmen are now taking a sound breath due to the biometrics which would enable security agencies to watch people more closely by examining what people are carrying in briefcases and purses through scanners. It is a

significant contribution of BT to trading and business sector.

Bio-Informatics

It is a new emerging branch of BT which has tremendous impact upon every sector of the economy. It involves the use of computer software to collect database information developed by experienced biotechnologists. It is applicable in the areas of genomic, combinatory chemistry and in the process of drug discovery. It requires knowledge of both IT and BT. In India, the Indian Institute of Science, Bangalore is a prominent institute to undertake research in bio-informatics.

Bio-fuel (Bio-Diesel and Fuel-Alcohol)

Biodiesel is the most economic achievement of biotechnology. Any vegetable oil can be converted into bio-diesel. But there is no scope of conversion as it is in deficit. Similarly, the situation of non-edible oil is precarious. It has been reported that total non-edible oil in India is 0.1 million tonnes only. So attempt was made for producing bio-diesel from Karanja tree which can be grown in unutilised land like degraded forest land, land along railway track and national highway. It has a high oil content, does not require high rainfall or good soil, provides crops twice a year and does not require each year plantation.

The economic consequences of the speedy increase in oil prices in 1970s were most severe in oil importing countries of the third world. Brazil's biotechnology programme started to convert alcohol from sugar through yeasts. Some also prefer to use mixture of petrol and alcohol popularly known as "gasohol". Ambitious projects aimed at substituting alcohol for petrol and fuel alcohol and installations are in progress in countries like Zambia, Zimbabwe, Nicaragua and Paraguay.

Profile of BT in India

India is the first country in the world to create a separate Department of Biotechnology (DBT) to propagate research in transgenic plants and its cultivation in India. Under the Ministry of Environment and Forests (MOEF), there are different departments having in charge of laboratory and field experiment. Review Committee on Genetic Manipulation (RCGM) and genetic Engineering Approval Committee (GEAC) approve the open field test with the concerned State Government's Biotechnology Coordination Committee (SBCC).

Pattern of Investment

The government's investment in biotech in India is very negligible and amounts to just about 0.5% of that in the US. Economic analysts in the US have expected high returns from BT sector in a year for the investor. Fortunately, a handful of Indian biotechnologists with education and experience in foreign countries are coming back to start their own business in India. The BT sector is projected to attract fresh investments to the tune of 1000 crores, leading to large scale import substitution, augmentation of local production and introduction of some new products in the global markets. The expected investments may be in segments including human and animal health production, agriculture and industrial applications. Investment of 30 to 40 crore is required for production of animal and poultry vaccines of DPT with hepatitis B, Tetanus toxoids with hepatitis B, hepatitis A with B and so on. Similarly investments in the antibiotics area may be required to meet the demand for diagnostic products and speciality plastics.

Efforts of Central Government and State Government

In India, infrastructure are really available in 29 agriculture universities, 204 central and State

universities and 500 national laboratories and research institutions. Government is planning to develop a BT Fund of 100 crore with the collaboration of Small Industries Development Bank of India, a company managed by IDBI, Biotech Consortium India Ltd. for propagation of BT in India. The study of NCPAR and ICAR shows a positive trend in new sector due to good steps taken by Tamilnadu, Andhra Pradesh, Haryana and Karnatak. Haryana Government has set-up a separate department to monitor the projects of BT besides creating a chain of research laboratories in the state. Andhra Pradesh is one step ahead by setting up an exclusive biotechnology park and also genome valley around Hyderabad. In Tamilnadu, biotech policy is based on the recommendations of the M.S. Swaminathan Committee. The policy has focused on four segments of biotechnology medical, agriculture and environmental and industrial products. The focus areas like diagnostics, vaccines, therapeutics like insulin and veterinary drugs are under medical biotechnology. In agriculture the focus will be on germ plasma. The bio-pesticides and bio-fertilisers are also under agricultural section. Environmental biotech deals with bio-sensors and waste management. In industrial sector, the key areas include food and industrial enzymes, fermentation products and biopolymers. Further, for a smooth operation, the state has provided single window facilitation for enterprises to obtain clearances from the various central agencies.

Problems and Prospects of BT in Indian Economy

The problems of BT in context of India are as follows :

- (i) The main bottlenecks is poor understanding of the project.

- (ii) Long gestation period of projects, high cost of investment, lack of skilled and trained personnel and lack of awareness among the end users are the shortcomings of biotech industry.
- (iii) Scientists working on those industries have no commercial expertise and further government support is also minimal.
- (iv) Creation of common awareness among the public about the benefit of genetically modified products is necessary.
- (v) Funding is a problem for bio-tech industries of India.
- (vi) Lack of adequate research and placement of bio-tech scientists is another problem in India.

To promote the industry into desired level some suggestions are made in this paper.

- (i) "Lab to land" is necessary to reap the benefit of biotechnology.
- (ii) Liberal tax policy is necessary to mobilise the funds through endowments and donations - particularly from NRI.
- (iii) Government could look at subsidizing various inputs like power, chemicals and materials being used. Reduction of import duty on high cost machine and equipment is necessary to create incentive on the part of private investor to invest in BT sector.
- (iv) Pharma industry should be motivated to make investment into biotech sector as they have both man power and financial muscle.
- (v) Development of appropriate generic system is necessary to protect plant

breeding based on novelty, distinctiveness, uniformity and stability.

- (vi) There is need for a market pool for biotech products in India.
- (vii) All out efforts would be needed for Indian biotech products to confirm various quality standards set by recognised bodies like the European Union and the US Food and Drug Administration Department.
- (ix) Crop propagation through BT requires proper marketing. Establishment of agri-export zones, cold chains and other essential infrastructure besides improvement of transport efficiency, is of critical importance.
- (x) The technology of developing transgenic and marketing them will be commercialised only when government is satisfied on the safety aspect.

Conclusion

Biotech scientists are lauding with beauty and harmony of biotechnology. But critics have some reservations against it. Because, science can make or mar the whole mankind within a second. In this context, BT should be handled carefully to harness the beneficial use of it. Biotech scientists can enter to the uncharted realms of reality only when they can handle it properly. Therefore, mankind is in threshold of anxiety waiting to face the new challenges that may emerge from the BT. It has potential, but do not rush into it blindly and suddenly. Since it is a capital intensive technology, government should encourage private corporate sector to step into it.

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Hon'ble Chief Minister Shri Naveen Patnaik paying floral tribute to Late Biju Patnaik on the Samadhi Pitha at Puri on 1.1.2006. Hon'ble Speaker Shri Maheswar Mohanty, Orissa Legislative Assembly, Shri Prasanna Kumar Patasani, M.P. and other dignitaries are also present.

e-grama The Rural Information Gateway of Orissa

(The Community Based Information Technology for Rural Mass)

*R.K. Dash
Nabin K. Naik*

Introduction

Electronic Governance is the application of Information Technology to the processes of Government functioning to bring about Simple, Moral, Accountable, Responsive and Transparent Governance. The e-grama project implemented at Ganjam district, the first of its kind in Orissa was conceived as a pilot project to bring the benefits of Information and Communication Technology (ICT) to all the common people of the District and different Government offices situated at Block, Sub-division and District level.

"e-grama" is basically an Intranet Portal, having some static and dynamic pages with Intranet e-mailing facility among different users of the Intranet. It not only makes the administrative process smoother but also brings the common people of the district closer to the official information and helps themselves in the field of decision making. It brings in transparency, accountability as both micro and macro results are accessible at district level in easier operable forms. It brings in both efficiency and effectiveness in managing day to day development affairs including dealing with false scandalizing reports which is very common in present day politics or otherwise, against block or subdivision or district authorities. In addition to benefiting District

Collector and others, it benefits citizens immensely as these information are put on intranet website. An individual can visit the village kiosk and see for himself. The secrecy is succeeded by transparency. Information on projects are accessible for everyone to see and comment. Duplicacy is removed as village-wise database are continuously updated. This brings in preventive vigilance through e-grama. Anybody can see any information anywhere. We have noticed that many concepts of governance have automatically come in with computerization, networking and storing vast information step by step. The e-grama project is unique for its simplicity and easy operational procedure. The hardware is already in place and operational. The software for the said project has been indigenously developed virtually for no cost, within a period of six months. The software and hardware alongwith the creation of human resources at end-user level were created by in-house professionals. A data warehouse has been created storing more than 4 lakh records on various schemes related to block and villages by our own block staffs by providing them appropriate training.

The e-governance is a new phenomenon as we believe on evolutionary process, as per our experience. Governance is undoubtedly seen to be improved by using IT. Our Government takes

adequate care to improve the standard of living of common people with a sole objective to eradicate poverty. But unfortunately the objectives of different poverty alleviation schemes introduced by both central and state Government are not properly disseminated to the common mass. The Indira Awas Yajona (IAY) beneficiaries of the villages are not able to know the exact amount received from the Government at a particular time and the amount due to receive. The villagers are not aware, who are the actual beneficiaries of different social security programmes. Even the villagers are not aware of the formats for applying different development schemes. For all these small things they have to run to the District or Block Head quarters. It generally takes lot of time for sending information from G.Ps to Blocks, Blocks to Sub-division and District Head quarters for compilation and decision making. To resolve some of these issues "e-grama" was conceived.

Different groups were formed to visit villages to discuss with the villagers regarding their information needs. The schemes were then finalized, for which information would be available on the Intranet. The information which will be used by the villagers are given in the local language "Oriya" and information generally used by different Government offices are given in English. It was decided to go for Intranet based application instead of Internet. The existing cost effective OFC lines were tested for e-connectivity at different locations. Computer training programmes were arranged at district level, for training adequate number of Government Officials to create key resource persons for computer training. These key resource persons organised different computer training programmes at Block and G.P. level for creating several computer literates in different

offices and different villages. Neheru Yuva Kendra Sangathan (NYKS) volunteers organized training programmes in villages through their ITRY centres to create computer awareness among the rural mass.

Introduction About NYK & NIC

Nehru Yuva Kendra Sangathan is an autonomous body under the Ministry of Youth Affairs, Govt. of India. The principal function of the NYK is to establish and encourage activities of the youth groups of the rural areas to bring them to the mainstream of National development through the programmes like health, education, training, organisation of sports and cultural programme, pollution control, drug abuse, HIV/AIDS awareness and self employment programme through vocational training and SHG etc.

National Informatics Centre (NIC) is a premier S & T organisation of the Government of India in the field of Informatics Services and Information Technology (IT) applications, and has been instrumental in steering Information and Communication Technology (ICT) applications in Government Departments at Central, State and Districts in Government Services, wider transparency in Government functions, and improvement in decentralised planning and management. To facilitate this, NIC has established a nationwide ICT Network - NICNet - with gateway nodes in Central Government Departments, 35 State / UT Secretariats, and in almost all 602 District Collectorates for providing IT services. The Government has designated the nationwide Computer-Communication Network, -NICNET, as the Government Network. NIC was set up with the objective to promote economic, social, scientific and technological activities, and also for macro-economic

adjustment programme of the Government, through the applications of IT.

Hardware Used for the Portal

Server Configuration : Pentium III 1.6 Mhz, 512 MB RAM, 36 GB dual hard disk, 1.44 FDD, 24 GB DAT drive and 42X CD writer for data back-up. The server has Windows 2000 server as its operating system with SQL-2000 RDBMS.

Client Configuration : Pentium-IV 1.5 Mhz, 256 MB RAM, 40 GB HDD, 1.44 MB FDD, CD writer for Data backup, 4 USB ports, 56.6 Kbps external Modem and equipped with multimedia facilities. The client end has Windows 98 as its operating system.

There are 22 clients provided at Block level Kiosks, 3 nos of clients at Sub-division level Kiosk, 10 no of clients at Tahasil Level and 70 no. clients at Village level Kiosks which are running with the help of NYKS. In addition to this 19 no. of clients at DRDA Chhatrapur, 15 clients at different sections of Collectorate, 8 no of clients at Revenue Divisional Commisisoner Office are connected to the "e-grama" network.

Remote Access Server (RAS) :

I. There are three RAS with 9 Ports connected to the 16 port switch, which is in turn connected to the CISCO 800 Router, which is connected to the 128 KBPS DAMA VSAT at NIC Berhampur. Six telephones are presently connected with the RAS for dial-up connection.

II. There are two number of RAS with 6 Ports connected to the 48 port switch at DRDA Chhatrapur. Four telephones are presently connected with the RAS for dial-up connection.

Software Used for the Portal

"e-grama" is designed using HTML, DHTML, ASP, JS, MS-Access and MS-SQL-2000.

The 'e-grama' Virtual Network

The "e-grama" project revolves around a network of computers and people, which we term as the "e-grama" virtual network.

Cost Analysis

The entire expenditure for the "e-grama" is given from available DRDA and Block funds for monitoring. Since the project is utilizing the existing computers at district and Tahasil level, the total cost for the new hardware of the project was 30 Lakh rupees only.

The cost involved in customized software and training is zero, as everything was done in house. The important aspect of the project is self-financing of all "e-grama" IT Kiosks.

At each "e-grama" Kiosk, there is a P.C. Client machine with Windows 2000 or above OS, one printer, one Modem and one telephone. The total cost of the hardware is about Rs.50,000/ . The cost of the hardware is borne by the youth clubs in villages/ voluntary organizations working in the villages, ITRY centres run by NYKS at villages and in some villages by individuals also. All the "e-grama" KIOSKS are run by computer qualified or trained unemployed youths of the local village.

Item	Cost
Cost for initial site preparation, electrification, furniture, telephone, computer and peripheral equipment (All e-grama Kiosks have their own available buildings)	Rs.50000/-
"e-grama" software provided "free of Cost" developed by NIC, Berhampur	Free
Training, Literacy Certificate & Technical support provided by Nehru Yuva Kendra & NIC Berhampur	Free

Monthly Income & Expenditure of e-grama IT KIOSK

<u>Expenditure</u>		<u>Income</u>		
1.	Electricity charge	Rs.300/-	1. Computer Literacy Training to the local Youth, Employees, Business man, SHG members etc. @ of Rs.50/- to Rs.200/-	Rs.3,500/-
2.	Telephone bill	Rs.300/-	2. Selling of Forms and different services information on Govt. schemes & others as per the chart given bellow	Rs.1000/-
3.	Honorarium of IT Volunteer	Rs.1500/-	3. Job typing & Data Processing	Rs.1000/-
4.	Printing & Paper Cost	Rs.800/-	4. Income from Internet use	Rs.100/-
Total		Rs.2900/-	Total :	Rs.5600/-

Average Monthly Income : Rs.5600 - Rs.2900 = Rs.2700/-

For economic viability of the Kiosks, they are provided with a rate chart for selling different forms to the villagers and for providing various services to the villagers. Computer training on fundamentals of computer and MS-Word, MS-Excel, MS-Powerpoint is provided to the villagers at a low cost for which certificate is awarded by NYKS at the village KIOSK. For generating more revenue, the KIOSKS are undertaking DTP and data entry work.

Price Chart

Sl.No.	Service Name	Retail Tariff (In Rupees)	Processing Time
1.	Grievance Redressal	5	7 days
2.	Govt. Application Forms	2 per page in DMP 5 per page in laser	Immediate
3.	Village Information	2	Immediate
4.	Guidelines	2 per page in DMP	Immediate
5.	BPL List	5 per page	2 days
6.	Internet use	30 per hour Minimum 15 per hour	
7.	Other services	5	Immediate

Data Management

To start with, each "e-grama" KIOSK is provided a Compact Disk (CD) from NIC Berhampur, containing the "e-grama" portal. All are given adequate training, sponsored by NYKS Berhampur, on how to copy the CD and configure

the IIS for running "e-grama" portal at their local machine. Every month, one updated CD is provided to the KIOSKS through the computer operator of the block offices. Whenever they need the latest information or want to send e-mail to officials of district administration or below, they

connect to the "e-grama" intranet portal through modem, which is ported on a server at NIC Berhampur and DRDA Chhatrapur. They are provided authenticated user ID and password to access the intranet portal.

Presently seventy plus Kiosks are working and are evenly distributed on the geographical area of the District. Each Kiosk is meant for catering the services for three to four surrounding G.Ps. There are 475 G.Ps in the district. It is proposed to have around 150 Kiosks in the district.

Services Provided at the "e-grama" Kiosks

- * Different Govt. forms in Oriya and English are sold.
- * Detail Household survey information of all the villages of the district.
- * KIOSK helps the villagers to know about the various developmental programmes and schemes that are undertaken in their village with Financial and Physical parameters.
- * Villagers come to know about the eligibility requirement and some frequently asked questions about OAP, NOAP, ODP and SGSY schemes. It displays the names of the villagers who are receiving the benefits of the above schemes.
- * It facilitates the display of all the necessary guidelines and action plan of the district on the intranet for use of common people.
- * Villagers could know vital and basic village wise land schedules which give the details of village wise irrigated, non-irrigated land, non-agricultural land and category wise Government land (Gochara, Communal lands, Abada Jogy Anabadi (AJA) and Abada Ajogy Anabadi (AAA) etc.
- * Villagers can exchange e-mail between DRDA, Collectorate, Sub-Collectors and block/tahasils from village KIOSKS for sending their grievances and their redressal.
- * Villagers can watch regular important news and events which are flashed on the intranet web page.
- * The information of products / services provided by Self Help Groups (SHG) are kept on internet / intranet for better market price.
- * Prevailing Government rates of important agricultural produces are provided for knowledge of the farmers for better market price.
- * The detail village amenities are provided through VICS database.
- * Village-wise list of beneficiaries for schemes like Annapurna, Antodya Anna Yojana, TPDS, APL and BPL are provided.
- * Details of targeted Public Distribution System (GP-Wise) and distribution of rice and sugar are provided.
- * Details of retail centres, Sub-wholesaler of Kerosene oil and its Storage Agents is provided.
- * The village wise resources as well as assets created through different Government schemes are kept on the site for ready reference.
- * All the guidelines and booklets prepared by Govt. for different programmes in Oriya like Agriculture, Health, Education, Sanitary Programme, Drinking Water etc are provided at the KIOSK.
- * Information regarding use of Indian System of Medicine, using common herbs and roots available in the village are provided.

Additional Services to be Provided at the "e-grama" KIOSKS :

- * Schemes for different youth clubs and NGOs will be made available in the portal.
- * Documents related to Land Records may be provided on the spot at KIOSKS at minimum cost, once the KIOSKS are allowed to access the Land Record Data.
- * Caste certificates and other related certificates may be provided using the Land Record Data.
- * List of BPL/APL families will be provided once the cut off mark for BPL is announced by Govt.
- * Registration of Birth & Death.
- * Teachers' Provident Fund
- * Pension
- * Land Valuation & Registration Information.
- * Subsidy on Fertilisers / Pesticides and Cropping Pattern.
- * Can be used as a Help Line during Elections (Voter lists, Identity cards, Polling Booths etc.)

Bridging the Digital Divide

It is reported by most of the "e-grama" IT KIOSK, that the e-learning package of "e-grama" is running very successfully at villages, as the cost of each course is Rs.100/- per month and the certificate is provided by NYKS, Berhampur. We are in touch with IGNOU and DOEACC for declaring our "e-grama" IT KIOSKS as their study centre for providing "Computer fundamental" courses, for which they have provisionally agreed.

Vision

The "e-grama" IT KIOSKS concept will be replicated in all the 30 districts of Orissa. Each block will be covered having one KIOSK in every 3 to 4 panchayats. It will help large number of rural educated youths to become e-literates as well as self-employed through this venture. The IT KIOSKS will act as a Information Centre for the common man and unemployed youths in rural areas.

R.K. Das is the Technical Director, Department of I.T., Government of India, NIC, Berhampur.

Nabin K. Naik is the Regional Co-ordinator, Min Y & AS, Government of India, NYKS, Berhampur.



Hon'ble Chief Minister Shri Naveen Patnaik witnessing Pata Chitra at Raghurajpur on 1.1.2006. Shri Debasis Nayak, Minister, Information & Public Relations, Sports & Youth Services is also present.

A Reflection of Budhi-Garh, Madanpur

(A Unique Urban Civilization of India in the District of Kalahandi, Orissa)

Mihirendra Pratap Sing Deo

Introduction :

Archaeologically as well as historically Madanpur-Rampur is the most important zone in the District of Kalahandi, Orissa. So far as archaeology is concerned, there is no other significant zone like Madanpur-Rampur in the District of Kalahandi as well as in the State of Orissa. It may not be wrong to say that it is most important archaeological zone of India. But still it is being neglected by the district authority as well as State Archaeology. Madanpur-Rampur is situated between two rivers namely river Uttei and river Rahul. River Uttei of Rampur is a perennial one and river Rahul of Madanpur is not a perennial one. It is a river valley civilization. Madanpur was the ancient capital of Madanpur-Rampur Kingdom. It has been observed that within a radius of 30 K.Ms. from Madanpur-Rampur, archaeological remains of unique deposits dated back 3000 B.C. to Medieval period are found. Close to Madanpur-Rampur, the places of Archaeological importance are Budhi-garh at Madanpur, 12 K.Ms. in the North direction beside the main road; Shakush-garh, 18 KMs in the East direction; Mohangiri, 30 KMs. in the North-East direction; Ashur-garh 30 KMs in the South-West direction in between Narla-Road and Rupra-Road; Belkhandi, 30 KMs in the North-West direction at the confluence of the rivers Tel and Uttei; Amath-garh 30 KMs. in the West

direction at the bank of river Tel. The archaeological sites are so interesting that, it attracts the research scholars even from European countries. Three years back an illegal excavation was done at Madanpur Budhi-garh archaeological site by some research scholars from Germany as one research scholar from Deccan University misguided the research scholars from Germany that he had got authorized permission for the excavation of Budhi-garh, but, in fact the date had been expired. Hence, this writer had interfered with the illegal excavation and stopped the same within a week. As because, they were taking away archaeological objects with them this writer protested to preserve the same in our local museum.

Culture of Madanpur-Rampur :

The ruins of Shiva Temples of Madanpur-Rampur, Amatngarh, Mohangiri, shakushgarh, Belkhandi etc. reflect that this zone was prosperous with urban civilization where Shaivism had flourished in ancient period. It would not be wrong to say that Madanpur-Rampur civilization was a civilization of temples. The recent discovery of stone idols of Lord Jagannath, Subhadra and Balabhadra at Tentulikhunti in the bank of river Tel reflects Vaishnavism of 9th to 10th century during the reign of Somavamsi King who had ousted the Gangas. For which the Gangas sought

help from the Naga-Dynasty of Chhotangpur to dethrone the Somavamsis from Kalinga. Kalinga was restored to the Gangas by the Nagas and the Naga-Dynasty settled at Tri-Kalinga with its Capital at Madanpur and at Bastar-Chakrakota with its capital at Chhindakgarh. Thus Madanpur was ruled by the Naga-Dynasty from 11th century to 20th century for about one thousand years.

Belkhandi, which is situated at the confluence of river Tel and Uttei was the main centre of trade and fair, because the river route was the main source of communication by that time. Shivaratri festival was the main festival of Belkhandi. Salt and other items were being transported through the river route. The people of Madanpur-Rampur were mainly agrarian in nature and peace loving. The deities being worshipped at Madanpur are Patta-Maheswaree, Patta-khanda, Chhatra-Bahutee, Veeru, Bhima and Duarhsni and at Rampur the main deities are Manikeswaree, Dukree, Chhatra-Bahutee, Lankeswaree, Jal-Matee, Jena Dashmatee and Mangalaa. Both in Madanpur & Rampur Ganga Devi is being worshipped. Dushera is the main festival of this locality.

Characteristics of Budhi, Madanpur :

Madanpur is situated at the bank of river Rahul, a tributary of river Tel. It has an unique ancient urban civilization for a long period, i.e. from Microlith period to the Medieval period. The Archaeological deposit is locally known as "Budhi-garh" or "Garh Area", which is an area of 1000 Mtr. in length and 5000 Mtr. in width and a height of around 25 feet from the lower level of mound. Budhi-garh reflects the five phases of the civilization. Phase-1 is Microlith (Mesolith) phase because in the lowest level of rain cut area small, polished quartzite axe with sharp edge are available. Phase-II is Neolithic phase. The burnt potteries have thick and coarse texture and fabric

without slip. Phase III is Chalcolithic phase dated around 2,500 B.C. to 200 B.C. or later. The burnt potteries have both fine and coarse texture and fabric of different colours such as red-grey, black polish and grey with graffiti in it. There are iron pot and copper bangles etc. are also available. Phase-IV is ancient phase or Golden phase, where gold and silver coin of ancient period are found at Budhigarh. The last phase is Phase-V belong to the Medieval period. One silver coin of Sultanate period was found. But so far as the history of Madanpur is concerned, Madanpur was never under the Sultanate of Delhi nor under the Mughol. During the Medieval period Naga-Dynasty kings were ruling over Madanpur or Karunda. Hence, the Sultanate coin might have come from the adjacent Kingdom during trade-fare.

Structural Remains :

At around 15 feet below the mound of Budhi-garh, there is a structure of big burnt bricks and a cross joint well which indicates the partition of rooms. The walls are 32 inches in wide. The bricks are mixed with rice chaps. The size of the bricks is 15" long, 10" inches wide and 2.8 inches or 7cm thick. The brick walls were filled up by mud to joint the brick. Such type of bricks are also found in Asurgarh, M. Rampur, Mohangiri and Amathgarh of Kalahandi District. At around 20 feet height from the low level of the mound there is a circular solid brick structure of 20 feet diameter. It may be a brick tower or a gate of Budhigarh Fort. Because "Budhi-garh" means the old fort. The circular brick structure is of height equal to that of the mound at a distance of around 100 feet from the main mound. That circular structure might have been used as the grain mills like that of Harappa. " The Miller stood on brick platforms. Using wooden pestles, they crushed the grain in mortars, also made of wood, placed in the centre of the circle. Grains of wild barley

and wheat have been discovered on the site". (Louis Frederic)

Excavation Site :

The archaeological site which was illegally excavated by the above mentioned research scholars is 12'x12' in size. It was probably excavated up to 6' deep, now half of it is filled up. The upper layer is a thick hard red crust of one foot consisting of brick pebbles and sand. Just after the thick hard red crust there is a burnt black layer of one inch. Under the black burnt layer there is soft soil consisting of fragments of broken potteries. During excavation, the research scholars had found a copper bangle, base of knobbed potteries, arrows, iron chains which were being used to close the door of the house. These information have been collected from the labourers who were working during the excavation of the mound. The burnt layer indicate that. May be the Budhigarh civilization was attacked by the enemy and it was burnt to ashes or fire might have engulfed the Budhi-garh accidentally. After which the civilization was again restored by repairing the damage which is indicated by the thick hard brick pebbles crust in upper layer of the mound just above the burnt layer.

Antiquities :

For the last thirty years many research scholars have been visiting the archaeological site of Budhi-garh and many archaeological objects have been shifted or taken away or damaged by the local people. To protect such archaeological objects this writer has collected them from the upper layer of the mound and from the local people for a mini museum at the palace, Madanpur-Rampur, in the District of Kalahandi, Orissa. Though the museum is a small one, valuable collections such as gold and silver coins, one seal of red Jaspur, one rust free Tabiz of iron cup,

ivory comb, black polished wares, red polish fine ware, fragments of potteries with graffiti of sun, quartzite polished white circular stone looking like marble stone and small quartzite polished stone having sharp edge are stored in it. Thus, these antiquities can be divided into three broad categories, viz. stone, terra-cotta and metal objects.

Stone Objects :

Different shapes and sizes of stone objects are found on the upper and lower level surface of Budhi-garh mound. These stone objects are brown, grey and white in colour and the stone used was granite, quartzite and sand stone. The stone objects which are collected from the surface of the mound are : ring-stone, stone bill, stone chisel, concave-cylindrical stone, grinder-stone, small flat circular stones and small stone axe, etc.

Ring- Stone :

Ring-stones found in the low level surface of rain cut area are brown in colour. The shape of ring-stones is different in size. The smallest circular ring- stone found is 2.3 inches in diameter with a hole in the centre. The second one is semi- curved triangle, 3.6 inches in diameter with a circular hole in the centre. The third one is half broken with a length of 5 inches. These ring-stones are made of sand-stone. The bottom is little bit flat in shape than the other side of the stone with an axial hole which is narrow circular in the centre portion of the ring-stone. Each ring stone has a rough surface and blunt edges. In Dwaraka and Somnath also different sizes and shapes of ring-stones are found. "The raw material used for this category is basal & are heavy. The basic features are low height, flat bottom, semi-curved top with an axial hole; diameter of the hole is same at both ends". (Puratattva 32 ; 132, 2002).

Stone- ball :

The stone ball is round in shape like a ball. White in colour, might be made of sand-stone and 2.5 inches in diameter. Most probably these stones were being used as the grinder stone because the stone ball has a polished surface.

Chisel stone :

A Chisel shape stone of brown colour with rough surface of granite stone. The upper portion is narrow square in size of one inch with a flat sharp edge of 1.2 inches in wide.

Concave-cylindrical stone :

Concave-cylindrical stone is white in colour, made of sand stone, with a length of 5 inches and a circumference of 7 inches. Both the end are semi-curved and middle portion of the cylinder is concave in shape. It may be used as grinder stone.

Grinder- stone :

Groinder-stone is of sand-stone, polished and white in colour. The bottom portion is thick, round, semi-curve of 2.3 inches in wide and the upper portion is narrow, long & thickness of one inch. Today in modern times also such type of grinder-stone is being used by people.

Small Flat Circular Stone :

Different sizes of small flat circular stone of sand-stone are found with a thickness of ½" and diameter of 1.6", 1.5" and 1.3". Accordingly the weight of the stone also vary. Such type of stones were also found in Mohenjo-Daro which were being used as weight (V. Smith)

Small Stone Axe :

Small stone axe are grey in colour, polished quartzite stone with a sharp edge of 1.8" width, 2.2" length and the shape is just like an axe of microlith age.

White Quartzite Polished Lid :

The white quartzite polished lid is of 3.5 cm. long and 2.9 cm. wide having circular polished smooth edge of 0.04 cm. thickness. The edge portion is little bit sharp to fit an object to keep the pot air tight. The upper portion looks like a marble stone where as the bottom portion is a polished transparent quartz. It looks as if both stone have stuck to each other like a doublet.

Terracotta Objects :

Budhi-garh is enriched with fragments of Terracotta objects like wares of different colours, shapes and sizes ; toys of doll, bull, horse and elephant etc. The upper lid portion of a smoking pipe (Hooka), a decorative piece, is also found. The black, polished knobbed pottery is the special attraction of Budhi-garh. Graffiti marks are found in some of the fragments of the pottery and the potteries are of wheel thrown.

Black Polished Knobbed Ware :

Two fragments of black knobbed ware were also discovered, one (BGH 02) has half of a bowl with a radius of 5.05 cm. The height of the knob is 1.03 cm. The base of a knob is wider than the top portion. At the bottom portion there is graffite mark of a cross. One arm of cross has extended longer than the other arms. Another bowl (BGH-01) is one third in shape with rim and a height of 5.03cm. from interior base. The radius of the circumference of the rim of the bowl is 5cm. There are wavy circular rings around the knob in both the black knobbed wares. It's a black slipped ware with fine and medium texture in the interior and exterior respectively. Putting a knob at the centre of the ware was might be done to make the base of the ware stronger to protect the ware from break and shock. According to Glover (1989) the knobbed vessels were not of every day use but used only.

Black Polished Ware :

There are fragments of Black Polished Ware of fine fabric with fine texture. Made of fine clay those are wheel thrown, slipped in black colour and have lustrous surface. This is well baked under perfect temperature. The clay looks grey, but due to black coating in the exterior surface it looks more black, polished and lustrous. It is as lustrous as the Northern Black Polished Ware.

Black-Tan Ware :

The Black-Tan Ware are found in rough, coarse fabric. The exterior rim and interior surface are black in colour as black slipped is used. And the exterior surface is tan in colour as Tan slipped is used. But due to continuous use of ware the surface looks rough. It's a thick in shape.

Grey-Black-Tan Ware :

The ware is made of fine clay and it looks grey in colour and of fine fabric. The interior surface is grey in colour. And the exterior low surface is tan in colour. It is a smooth, fine fabric of thin soapy, fine texture.

Fine Red Ware:

Fine Red Ware is made of fine clay and it looks grey in colour. Both the exterior and interior are painted with red slipped. It is having fine texture and lustrous surface of fine fabric.

Fine Grey Ware :

The fine grey ware is made of fine clay. It is a fragment of dish with fine fabric and soapy texture. The surface of both exterior and interior are very smooth and slippery, grey in colour. It seems like fragment a soap stone pot fragment. which is the of medium ware.

Black-Brown Ware :

Black-Brown Ware are made of coarse clay with coarse texture. The interior surface is

without slipped with rough surface and the exterior surface is of medium texture without slipped. But exposed to fire properly for which the upper portion of the exterior surface looks black and the interior surface looks brown in colour.

Graffiti Mark :

One sun graffiti mark is seen in a fragment of black thick ware. Both interior and exterior have coarse texture. Another graffiti mark of cross was found in the base portion of a knobbed pottery.

Terracotta Flat Circular Object :

Like that of stone there are terracotta flat circular object with thin shape, which might have been used as weight like that of stone weight. But those are lighter than the stone weight.

Metal Objects

The artisan of Budhi-garh were expert in science of alloy of metal. A pendant has been discovered which is neither silver nor iron. The metal looks like iron, but it is rust free. Hence, the alloy technique was much advance. The metal which were used in Budhi-garh were gold, silver, copper and iron.

Gold :

The gold was used as ornaments, coin and in some decorative small box. In the upper surface and in rain cut drain small ornament moulds are found.

Silver :

Four punch-marked coins and one circular coin of sultanate period are found. The punch-marked coins are square in size having weight of 2 gram, 2.300 mg. (two coins) & 1.900 mg. (one coin). The coins are made of pure silver of different sizes and shapes of 1cm x 1.3cm or little bit smaller. But some Asurgarh punch-marked coins

are copper- made coated with silver. In the reverse portion of Asurgarh punch-marked coin the little portion of copper is visible. The marks on the coin are not clearly visible. Such coins were issued by the "Janapadas" and "Mahajanapadas" (small and big states).

Copper :

In the surface of the mound copper bangles and beads are found. I think, copper was very less in used. The copper bangles and beads are in corroded condition.

Seal :

The seal of Budhi-garh are unique in shape, made of red Jasper, measuring 3.02 cm. of height. The bottom portion is wider of 1.08 cm. than upper portion of 1 cm. The bottom portion of the seal is 1.08 cms x 1.02 cm. where one inscription is engraved. The seal content two symbols. One is a cross box with a vertical line on the middle of the box which is curved and symbol of a trident. Another one has two triangles in shape triangles attached side by side with a vertical line in the middle which has formed a circle on the top of the vertical line. The seal is dated back to 1st to 2nd century A.D. In the middle of the seal there are two parallel lines around the seal. On the top portion of the seal there is a long hole of 0.09cm. and wide of 0.03cm. The hole in the top of the seal might have been made to hang the seal in the neck like pendant during official tour. Another seal is smaller in size having Brahmi script in it. It has been taken away by Shri P.K. Mohanty, a research scholar of Deccan College, Pune.

Beads :

Semi-precious beads of different sizes and shapes are found in the upper surface of the

mound. Green glass beads of diamond shape are also found. Hence glass was used in Budhigarh also.

The findings of Budhi-garh archaeological site reveal that, it was one of the oldest river valley civilizations having link with important trade centres of India in the ancient period. The potteries and wares which have the fine fabric and texture are not made of local clay. Hence, definitely such wares were being imported from the other part of the country for luxury use. Bones and fossils are encountered in surface of the mound. One broken fossil of deer horn is found. Thus Budhi-garh archaeological site is one of the most important archaeological sites of India which needs to be protected for further study and research to shed light on the forgotten chapters of history.

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Mihirendra Pratap Sing Deo is the President of Indian Cultural Heritage Society (ICHHS), Madanpur-Rampur, Kalahandi.



Hon'ble Chief Minister Shri Naveen Patnaik paying tribute to Dr. H K Mahatab on the occasion of his 19th Death Anniversary at the Orissa Legislative Assembly premises in Bhubaneswar on 2.1.2006. Hon'ble Speaker, Orissa Legislative Assembly, Shri Maheswar Mohanty, Shri Prafulla chandra Ghadai, Minister Finance, Shri Biswabhusan Harichandan, Minister, Rural Development, Industries, Law, Shri Surendranath Naik, Agriculture and Smt. Surama Padhy, Minister, Co-operation are also present.



Hon'ble Chief Minister Shri Naveen Patnaik going round the photo exhibition on Dr. H.K. Mahatab on the occasion of Freedom Fighters' Mohatsov at Swadinata Sangrami Bhavan in Bhubaneswar on 2-1-2006. Shri Biswabhusan Harichandan, Minister, Rural Development, Industries, Law is also present.



Hon'ble Chief Minister Shri Naveen Patnaik at the Annual function of the Student's Union at BJB College, Bhubaneswar on 2.1.2006. Shri Braja Kishore Tripathy, M.P. is also present.



Hon'ble Chief Minister Shri Naveen Patnaik releasing the Souvenir on the occasion of Freedom Fighters' Mahotsav at Swadhinata Sangrami Bhavan at Bhubaneswar on 2.1.2006. Shri Biswabhusan Harichandan, Minister, Rural Development, Industries, Law, Shri Bhartruhari Mahatab, M.P. and Shri Prasanna Acharya, M.P. are also present.

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EDITORIAL



India is the largest and the strongest democracy in the world. The democratic values envisioned by our great Constitution makers have been meticulously followed by all citizens, rich and poor alike, crossing the barriers of caste, creed, sect, religion etc. which make our country great and unique among democratic nations of the globe. We have become ideals for the Afro-Asians and all followers of non-alignment and people struggling all over the world for their democratic rights.

Now India in the 21st century has emerged as a front runner in the socio-economic scenario, giving inspiration to many small countries of the world. In fighting out terrorism our country is harping upon the very principle that a peaceful environment has become an imperative need of the hour by which all people of the world can live harmoniously. This sense of universal brotherhood has been shown by our countrymen since the time of the Ahimsa Andolan led by Father of the Nation, Mahatma Gandhi. Republic Day celebration is the auspicious moment to rededicate ourselves to uphold the democratic values and institutions, which our fore-fathers and great sons of the soil fought for.

Orissa Review in this Republic Day issue has tried to present some of these impressions which will hopefully be appreciated by our esteemed readers.

Rasankar Sekhar Panda



Message of
SHRI RAMESHWAR THAKUR
HIS EXCELLENCY
THE GOVERNOR OF ORISSA
ON THE OCCASION OF
THE REPUBLIC DAY - 2006

On the auspicious occasion of the 56th anniversary of the Republic Day, I extend my warm greetings and felicitations to the brothers and sisters of Orissa.

The great freedom fighters of our country waged a relentless struggle against the British Raj under the leadership of Mahatma Gandhi, the Father of our Nation and secured freedom for our country. Many of them laid down their lives during the struggle for independence. We pay our respectful homage to those valiant fighters for their supreme sacrifice, indomitable spirit of freedom and immense love for motherland.

The Indian Constitution has been unique in the world, remarkable in upholding the fundamental rights of the citizens of our country. The functioning of Indian democracy essentially hinges upon the parameters of our Constitution. We pay our respect to those great men who conceptualized the basic ideals enshrined in Indian Constitution which came into force on this day in 1950.

Orissa, as you know, had a glorious past. The people of Orissa were excellent navigators who excelled in maritime trade and made Orissa affluent. The people of Kalinga sailed across to different countries in South-East Asia and the vestiges of Orissan culture is still found in these countries.

Orissa has a rich cultural heritage emanating from the cult of Lord Jagannath which propagates love, peace and universal brotherhood transcending all barriers of caste, creed and community. The philosophy of Ahimsa was also transformed into a reality from this very land by Emperor Ashoka after the Kalinga War, some 23 centuries ago.

Orissa is richly endowed with vast natural resources. It has abundant mineral, forest, water and human resources. The people of Orissa are industrious and diligent. My Government has embarked upon a massive programme for industrialization which envisages use of our mineral resources to generate employment for the youth and resources for the State exchequer. As many as 43 MoUs have been

signed to set up new industries in steel and aluminium sectors. All these projects when completed are expected to generate substantial revenue to the State and Central exchequer and provide employment, both direct and indirect, to our youth. The process of industrialization will address the environmental concerns and due importance will be given to the environment.

Presently, under our rehabilitation and resettlement policy one member from each displaced family is to be provided with employment either in the industry or its ancillary units. Members of displaced families if not provided with job will be assisted in self-employment through allotment of shops, service premises or other activities in the company's township or otherwise. Roads, community centres, school buildings, water supply facilities, electricity facilities, dispensary etc. for a model colony will be provided. Appropriate training facilities to the nominated persons of the displaced families will be provided to acquire skill for employment. My Government is concerned about the recent unfortunate happenings arising out of the implementation of the Kalinga Nagar acquisition of land and related issues resulting in death of 12 tribals and a policeman. In order to resolve the situation amicably and draw out a long-term Resettlement and Rehabilitation Policy of tribals and other land issues, my Government has constituted a Committee of Group of Ministers to have a thorough look into the existing policy and make suggestions for a comprehensive policy after broad-based consultations.

My Government accords top priority to the development of the Adivasis who constitute about 23% of our population. Right from the very beginning, Government have launched specific programmes to augment income of tribal house-holds. Control over 60 minor forest produce and Non-Timber Forest Produce (NTFP) which account for a substantial part of their house-hold income has been transferred to the Gram Panchayats. Orissa Tribal Empowerment and Livelihood Programme (OTELP) has been launched in 30 very backward blocks with assistance from international development funding agencies for a period of 10 years for integrated development of these tribal areas. A large number of minor forest cases against the tribals have been withdrawn. All weather roads will be provided to tribal habitations of 500 population and tribal hamlets will be treated as habitations for rehabilitation packages. Tribal villages are being electrified on priority basis. New initiatives have been taken to provide employment opportunities and create self-employment avenues for ST youths through skill upgradation training in Industrial Training Institutes (ITIs) and polytechnics. Collectors in tribal districts have been instructed to tour extensively in tribal areas and make night halts and hold camp courts to settle their land problems and other problems. Due emphasis is being given for restoration of alienated tribal land to its rightful owners and regularization of pre-1980 forest habitations.

Collection of sal seeds has been entrusted to public agencies and procured direct from primary gatherers and bamboo collection discontinued since 2000 has been revived.

"Kendu Leaves" is an important non-timber forest produce of our State and is an important source of livelihood for large number of primary collectors in agricultural off-seasons and provides substantial employment opportunities in processing and binding which is unique to the State. My Government is sincerely trying for welfare of Kendu Leaves pluckers.

My Government is evincing keen interest on social sector development too. It has specific programmes to address the problems of our farmers, wage-earners, tribals, harijans and women. The National Rural Employment Guarantee Scheme is going to be launched very shortly which will provide hundred days of employment to every rural household. My Government has put in place a Mission known as Employment Mission under the Chairmanship of the Chief Minister. This Mission is exploring various ways to generate self-employment opportunities for our youth.

My Government has been able to constitute 13254 Pani Panchayats covering 10.36 lakh hectares irrigated areas and given the responsibility of maintenance and operation of irrigation systems to farmers through such Pani Panchayats. My Government has given legal rights by enforcing the Pani Panchayat Act, 2002 and the Pani Panchayat Rules, 2003. 11434 Pani Panchayats have taken maintenance of canal management in 7.77 lakhs hectares irrigated areas.

In keeping with its promise to provide water to farmers, my Government has decided to set up 50,000 tube-wells, both of shallow and deep types in the coming three years. The funds for this purpose will be provided through the RIDF scheme for which NABARD will provide the necessary funds. My Government will provide assistance to farmers under the Biju Krushak Vikash Yojana. The farming community will be provided assistance as a group to set up tube-wells under the scheme with a subsidy upto 90 per cent.

My Government has decided to create 12 new Rural Water and Sanitation Divisions in the State, to look after rural drinking water supply projects, centrally-sponsored Swajal Dhara Yojana, total sanitation programme, etc. in the jurisdiction of the 12 new divisions. The newly created divisions are Nayagarh, Angul, Jagatsinghpur, Bhadrak, Rairangpur, Jharsuguda, Deogarh, Sonepur, Gajapati, Boudh, Malkangiri and Nuapada. This will help in increasing administrative efficiency and expeditious implementation of various schemes relating to drinking water supply and sanitation.

To encourage attendance of girl students of our State, Government has decided to distribute free uniform to about 25 lakh girl students who are continuing their studies from Standard I to Standard VII

through Village Education Committee. Mahatma Gandhi had once said that the progress of the society remains incomplete without education of women. If a girl child becomes educated then the entire family become educated. Keeping this in view, my Government has chalked out a policy to bring all girl students within the age group of 5 to 13 to formal school and this uniform distribution will certainly encourage the girl students to prosecute their studies.

My Government is sincerely implementing the Right to Information Act, 2005 in the State from 12th October, 2005. This is an Act which provides for setting out the practical regime of Right to Information for citizens to secure access to information under the control of public authorities in order to promote transparency and accountability in the working of every public authority. For the speedy implementation of Right to Information Act, the State Information Commission has been constituted and the Chief Information Commissioner and State Information Commissioner have already been appointed.

An amount of Rs.20 crore has been allocated under 12th Finance Commission Awards for developmental activities to be undertaken in different Universities during 2006-07. It is a good news that around 45,000 students have been enrolled under N.C.C. Uniform dress code has been introduced in all Autonomous Colleges, Government and Non-Government aided colleges from the academic session 2005-06. More fund is being sanctioned under Loan Stipend Scheme for covering higher number of students in the field of higher education.

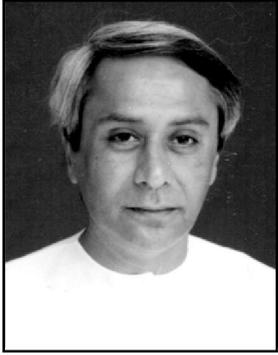
My Government conducting a census on children. So far 1,06,58,473 children in 50,52,506 families under the age group of 0-14 years in the State have been surveyed. Infant Mortality Rate in the State has also been reduced to 83 as per 1000 children against 97 per 1000 children in 2000.

My Government is laying emphasis on Information Technology and tourism sectors which have the potential generate lot of employment. My Government has taken initiatives to computerize land records to help our farmers. Distribution of Land Pass Book is being started from today.

The Central Government headed by our Prime Minister is very sympathetic and concerned about the all-round development of Orissa. The State is set to make great strides in its development efforts with the initiative of the State Government duly supported by the Central Government.

My Government has a clear vision to build Orissa as a prosperous State and on this auspicious occasion, let us all take a solemn pledge to develop Orissa as an advanced State in our country.

JAI HIND



Message of
SHRI NAVEEN PATNAIK
HON'BLE CHIEF MINISTER
ON THE OCCASION OF
REPUBLIC DAY - 2006

Dear Brothers and Sisters,

On the auspicious occasion of celebration of Republic Day, I extend my warm greetings and felicitations to you all.

Republic Day is an important occasion for all of us. The Constitution of our country came into force on this day in 1950. The great sons of our country who drafted the Constitution are no more with us. I offer my tributes to them.

I also pay my homage to the great heroes of our country who joined the struggle for Independence and fought against the British Raj.

After Independence, our country has registered significant progress in various fields and has occupied a pride of place in the whole world. We too are continuing sustained efforts to transform Orissa into prosperous State.

By setting up new industries, we can generate more revenue for our State and jobs for our youth. While setting up new industries, the interest of our people will be taken due care of. The tragic incident which took place in Kalinga Nagar in the recent past has shocked all of us. I have always laid stress on the suitable rehabilitation of the people who lose their land and houses for industries. A committee of group of Ministers has been constituted to prepare an ideal rehabilitation policy for our State. This policy will be announced very soon.

Peace is essential for development. Orissa is known to be a peaceful State. The cult of Lord Jagannath signifies peace, love and unity. The development of our State can be expedited, if peace is maintained.

I have always been according top priority to the development of Adivasis. Soon after assuming office, the Minor Forest Produce Policy was adopted. We have enhanced the price of Kendu leaves and lifted restrictions on collection of bamboos to help our Adivasis. A large number of small forest cases against the Adivasis has been withdrawn. Schools, hospitals, drinking water and electricity facilities, good communication network are being provided in the scheduled areas on priority basis. Steps are being taken to dig a well in the farm land of each tribal house-hold in tribal districts.

As you all know, the people of our State mostly depend on agriculture. Therefore we are laying stress on the development of agriculture and the farming community. Our farmers can earn more profit by growing vegetables, fruits and flowers. The farmers will be assisted through Horticulture Mission for these activities. We have been endeavouring to increase our irrigation potential. A master plan is being prepared to irrigate atleast 35% of agricultural land in each block. Biju Krushak Bikas Yojana and Pani Panchayat have attracted and benefited the farmers. The Land Pass Books are being distributed from today to help the farmers. Strong steps have been taken to prevent distress sale.

Our State is richly endowed with natural resources. Still then, we are considered to be poor. Our children are without jobs. Therefore we are laying emphasis on development of industries, IT and Tourism which will generate revenue to the State exchequer and jobs for our youth. Employment Mission has been launched to help our youth to avail opportunities of self-employment.

I aim at over all development of our rural areas. Provision of potable water and all weather connectivity in rural areas are going on vigorously. A new consciousness among the women has been generated through the Mission Shaki programmes. Infant Mortality has come down through the intervention of Infant Mortality Reduction Mission.

I am making sincere efforts to build a prosperous Orissa for which I need your help and cooperation. On this auspicious occasion, let us redeem a solemn pledge to put Orissa on a faster path of development.

JAI HIND



Message of
SHRI DEBASIS NAYAK
MINISTER, INFORMATION & PUBLIC RELATIONS,
SPORTS & YOUTH SERVICES
ON THE OCCASION OF
THE REPUBLIC DAY - 2006

On the historic occasion of the 57th Republic Day, I extend my heartiest greetings and felicitations to the sisters and brothers of the state.

You must all be aware that 42nd amendment of the Constitution came into force from December 18, 1976 as a result India became a Sovereign, Socialist, Secular, Democratic Republic. The unity and integrity of the nation has also been underlined in this amendment. In the 42nd amendment of the Constitution 10 fundamental duties have been enshrined in the Constitution for the citizens of our country. Among these rights the first fundamental duty of the citizen is to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem.

On this sacred occasion, let us pay our humble tribute to those for whose indomitable courage and sincerity, the Constitution could be framed. Among them are Dr. B.R. Ambedkar, Chairman of the Drafting Committee, Dr. Rajendra Prasad, Pandit Jawaharlal Nehru and other members of the Constituent Assembly like N. Gopalaswami Ayyangar, Alladi Krishna Swami Ayyar, K.M.Munshi, Saiyad Md. Sadulla, N. Madhav Rao and D.P. Khaitan.

Fifty-six years have passed in the meantime. We have scrupulously followed the path shown by our great leaders. Further, in offering respect to the Constitution we have to abide by 10 fundamental duties enshrined in our Constitution.

In harnessing our vast natural, mineral, and human resources our state can easily attain pinnacle of progress.

Many welfare programmes are being implemented for the development of our state. Our Government is according priority in providing pucca road to each village, drinking water, electricity, education and health facilities.

Besides, to provide employment to unemployed youth and make them self-dependent, the State Employment Policy, 2005 has been framed and incentives are being provided through Employment Mission. The Government has signed MOUs with 43 Mega Industrial Organisations to set up Steel and Aluminium based industries in the state. As a result many unemployed youth will be employed.

In order to effect transparency in Government and to ensure rights to access information, our Government has implemented Right to Information Act, 2005 in the State with effect from 12 October 2005. The World Bank has agreed to provide Rs.1642 crores for the Road Development Project in the State with an objective to improve road connectivity and development of roads.

In a bid to improve the agriculture sector 13254 Pani Panchayats have been formed in 10.36 lakh hectares of irrigated land. 11434 Pani Panchayats have taken the responsibility of management and maintenance of canals in 7.77 lakh hectare of irrigated areas.

The State Government has given legislative rights to Pani Panchayats by enforcing Pani Panchayat Act- 2002 and Pani Panchayat Rules- 2003.

In a bid to encourage girl students to go to school and reduce drop-outs 24,84,164 girl students have been provided with school dresses free of cost from class I to class VII from January 20, 2006. In a bid to create consumer awareness at district level, the Government is providing Rs.5.00 lakh to each district. The Government has decided in principle to distribute 5 litres of kerosene to each family.

The State Government has decided to set up 50,000 tube wells to provide irrigation facilities for the farmers. Steps are being taken by the Government to create twelve new Rural Water Supply Divisions under Rural Water and Sanitation Programme.

All villages of the State will be electrified by the year 2009. This will mitigate the problem of water supply. Mission Shakti, Basundhara Yojana, reduction of infant mortality, development of Dhamra and Gopalpur ports and development of sports and many other programmes are being implemented in the State.

On this auspicious occasion, let us resolve ourselves to rise over narrowness and petty personal interests and build a united India as well as prosperous Orissa so that Orissa will be transformed into an advanced State in India.

Jai Hind