

Relevance of Gandhian Ideas for Human Rights and Empowerment of Women

Dr. (Mrs.) Bina Kumari Sarma

Gandhian philosophy and his thoughts relating women's rights and empowerment are highly relevant today than what it was during his time i.e., during the pre-independence period. Sixty two years have passed since independence, but women still continue to suffer from disabilities and miseries afflicted on them by centuries old vicious customs and beliefs. They are still considered as the weaker sex, still face subtle discrimination in almost all fields of life; still are denied equal opportunity and rights. In fact despite the passage of the Universal Declaration of Human Rights and the Convention for Elimination of Discrimination against women, the traditional denigration of women and underestimation of their potentialities, capacities and talents still continues.

Twentieth century was hailed as the 'People's Century' and 2001 was earmarked as the year for 'Women Empowerment'. The aim of empowerment is to enable women to realize her

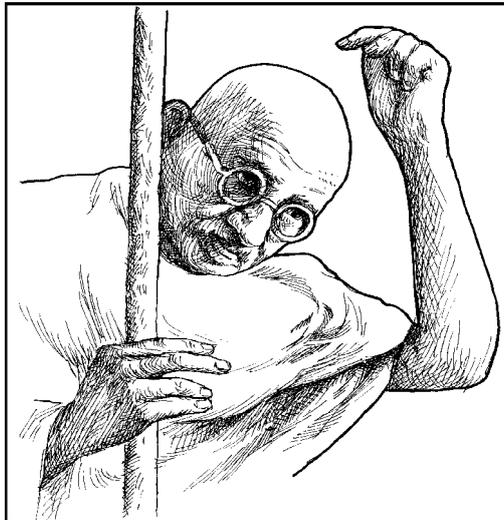
worth and also acknowledge that the key to our national development is empowerment of women. Women need to be empowered so that they can work and think independently, prove their worth and genius, cope with oppression and injustice and become capable of taking part in public affairs,

viewed in the Indian context women empowerment is both a social necessity and a constitutional obligation.

Human Rights include rights of both the sexes without any discrimination on the grounds of sex, race, religion, colour, language, mortality, birth status etc. Women's rights can also be termed as Human Rights for the mere fact that they are also human beings. However, it is a million dollar question whether

women enjoy human rights and are they empowered in its true sense ?

It is in this context that the ideas and ideals of Gandhi is worthwhile to remember and practice, because he championed the cause of women's rights and empowerment in its totality



through out his life. It was he who first realized the truth that for the progress of humankind in this world for a better tomorrow, women is as important for men. In fact Gandhi was well ahead of time in his thinking about the worth and importance of women in family, society and the nation in general. He was emphatic on the issue of equality and empowerment of women as integral to the founding of a just society as well as for the progress of the nation and expressed this feeling way back during the late 19th century when women were treated as mere chattels.

For Gandhi the question of women's empowerment was nothing else than a human rights issue. And it is a well known fact that he was a strong advocate of women's rights from the day he assumed leadership of the nationalist movement. His advocacy of women's rights was a step forward from his predecessors who championed the cause of women's liberation. No reformer or national leader prior to him had expressed so much concern or questioned the fundamental inequality and injustice done to women in Indian society by denying them basic human rights.

From the very beginning of his political career he worked relentlessly to improve the lot of women socially, politically and economically and restore them back their genuine rights and privileges. In his political programme, on priority basis he worked for the depressed and the deprived and women were the biggest block of this segment. As he believed in the concept of 'Sarvodaya', meaning comprehensive progress of both men and women, he said "womenhood is not restricted to the kitchen . . . only when the women is liberated from the slavery of kitchen that her true spirit may be discovered." In view of that as a first step towards it, he gave them a clarion call during the freedom movement to come

out of their restricted domestic boundaries. It was indeed his first attempt not only to place women at par with men but also to empower them. In this context he said to Mridula Sarabhai, a prominent woman freedom fighter : "I have brought the Indian women out of the kitchen, it is up to you (the women activists) to see that they do not go back."

Women in India are still at cross-roads. In spite of government enacting a series of legislations, the trend of crimes against women are in continuous increase. One of the hardest truth of the most visible sign of this fact is the declining sex ratio of girls to boys. Though the concept of non-discrimination is central to all theories relating to women's rights, yet we find that gender discrimination has become a global phenomenon and it is visible in every aspect of women's life.

Therefore we have to look back again to Gandhi and value his words and works for guidance to achieve success in our mission of empowering women. He indeed has indicated the path to reach the goal in an effective manner.

Gandhi held very radical views about the emancipation and empowerment of women. Regeneration of women was an important aspect of his constructive programme, where women were accorded special consideration. He had dynamic vision on the various issues and problems relating to women, which has often been reflected in his numerous writings and speeches. He raised his voice against female foeticide, infanticide, child marriage, widowhood, sexual harassment of women, domestic violence against women, discrimination against girl child, denial of education to women, dowry system etc. i.e., almost all the touching problems and issues relating to women of the contemporary world. His experiences and

experiments, his researches and hypotheses while analyzing the causes of women's degeneration led him to conclude that something is radically wrong with the people both men and women against which the society should be sensitized and changed. He tried to improve the status of women through equal rights and empowerment by creating public awareness. At the outset he criticized the prejudices and the biases of Indian social structure, particularly men against women. He maintained : "the point for us to consider is the degeneration of our women relatively to our men and man has not always been fair and indiscriminate in performing that self-appointed task". He was very critical in his condemnation of men's ill-treatment of women and in that context he said : "of all the evils for which man has made himself responsible, none is so degrading, so shocking or so brutal as his abuse of the better half of the humanity". Further he said: "by sheer force of a vicious custom, even the most ignorant and worthless men have been enjoying superiority over women, which they do not deserve and ought not to have." By such statements he tried to make men realize, the crime they have done against women and also to realize the loss they have done to society as a result of keeping women inside the four walls of house and public sphere.

As he had utmost faith in the inherent talents and capacities of women, he wanted the society to make full use of their potentialities and not just to think them fit only as homemakers. His view of equal rights of woman and his high esteem of women is evident from the following statement: "woman is the companion of man gifted with equal mental capacities. She has the right to participate in the minutest details of the activities of man and she has the same right of freedom and liberty as he. She is entitled to a supreme place in her own

sphere of activity as man is in his." Further he explained: "to me the female sex is not the weaker sex, she is the embodiment of sacrifice, silent suffering humility, faith and knowledge". However he regretted that her services and contributions towards his family and society has never been recognized. In view of this he wanted men to realize that the empowerment of women is not a threat but a way to improve families and societies. Moreover he was very clear in his mindset that the empowerment of women is not only a moral imperative but a prerequisite for strengthening democratic tradition and fighting against injustice and oppression. And for achieving that he insisted on equal rights and opportunities to be given to women. As early as 1919, addressing a women's gathering at Bombay he expressed his feelings: "So long as women in India do not take equal part with men in the affairs of the world and in religious and political matters, we shall not see India's star rising. Further he explained the point by giving an example: "Men who suffer from paralysis of one side of the body can do no work. Similarly if women do not share in men's tasks, the country is bound to remain in a wretched state." All that he wanted was the peaceful co-existence of man and woman. He wanted changed attitudes, values, beliefs and behaviours in favour of women at par with men.

Although Indian women got voting rights along with men, they are yet to get equal representation in Parliament and State Legislatures. In this regard way back in 1931 in the Second Round Table Conference in London Gandhi categorically demanding proper representation for women had said : "I would boycott that legislature which will not have a proper share to women members". Gandhi in fact was a votary of women's political rights and believed in giving equal representation to women in politics.

Gandhi strongly believed that only women should head organizations devoted to the cause of women empowerment. That is because his experiences had confirmed him that real advancement of women can come only through their own efforts. It is well-known that violation of women's Human Rights is often neglected in debates, discussions and decisions relating the issue due to the absence of women in such bodies and organisations. This problem already Gandhi had anticipated long back and therefore he always insisted on women's role in decision-making process. In one of his earliest public pronouncements in the meeting of *Bhagini Samaj* in 1919 (where the President was a man) he said ".... I really feel your President should be a woman, though you may seek man's help or advice. . . The Samaj is dedicated to the noble aim of women's regeneration... men cannot bring out the regeneration of women..., it is only through self help that an individual or a race can rise." Further in this matter challenging the question of women's capability in holding public responsibilities he asked: "if she is so incapable of decision making and dependent on the male, how is she running a home, feeding everyone and

holding the family together on her slender shoulders?"

Today the biggest challenge before humanity is the question of women's progress and development it will not be wrong to say that the marginalization of women has not been taken up seriously either by public or government and the programme of Women Empowerment and Human Rights of women has remained in pen and paper. It is high time we have to remember and follow the golden words of wisdom of Gandhi relating Human Rights and Empowerment of Women for it to really become meaningful. The principle of non-violence is his greatest contribution to world civilization and if this principle is strictly followed by all nations, in every society and family then there will be no discrimination against women and where there is no discrimination, there is no need of empowering women; automatically there will be a just society based on equality and justice. There lies the relevance of Gandhian ideas and thoughts.

Dr. (Mrs.) Bina Kumari Sarma is a Professor of History, Berhampur University, Berhampur.



Shri Prafulla Samal, Minister for Panchayati Raj and Information & Public Relations inaugurating the State Level Work Shop on TRIPTI at Secretariat Conference Hall on 2.9.2009.

Gandhian Vision About Higher Education and Its Relevance in the 21st Century

Dr. Dinabandhu Dehury

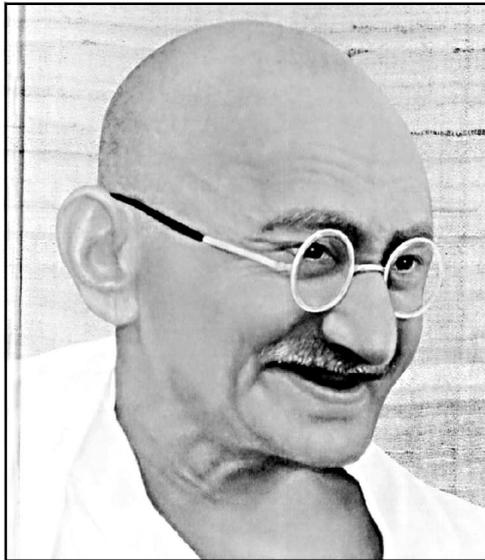
Gandhiji was not opposed to literary training, physical exercise or religious instruction. But he opposed literary training without vocational training, physical exercises without spiritual development and religious instruction without practical social service.

About College education he had this to say "College education is largely an urban proposition. I would not say it is an unmitigated failure as Primary education certainly is, but the results are fairly disappointing. Why should anyone of the graduates have to be unemployed?"

Mahatma Gandhi was not a Master of Education, but he made more sense than most of today's educators when he said that true learning could be imparted only through doing. He also believed that education for self-aggrandisement was an anti-social education. Only that which served society, especially the poorest of the poor could be termed as true education. Looking at the educational scene not only in India but the whole world, he said that

education through practical, physical or manual work is essential since true development of the mind and the heart, according to him, could be achieved only through manual labour.

Like Illich and Freire, Gandhiji believed that the modern world had to unlearn all it had learnt in the past. The generation which Gandhiji



influenced consisting of renowned educationist such as Zakir Hussain, Aryanaayamkam, K.G. Saiyidain, Vinoba Bhave, J.C. Kumarappa, Kaka Saheb Kalekar, K.T. Shah, Syed Mohamed and Asha Devi who firmly believed that the then existing system of education had to be replaced by a more constructive and human system which was better integrated with the needs of national life, especially the pressing demands for

improvement in the rural areas.

It goes to the credit of the UGC that it has recognized the importance of vocationalising higher education. But by merely adding a

vocational subject to the list of subjects now taught in the conventional manner, Gandhiji's vision of vocationalisation would not become a reality.

Gandhiji's vision was to create an India where all citizens would attain "a keen sense of personal worth, dignity and efficiency", through an educational system that would "strengthen in them the desire for self-improvement and social service in a co-operative community".

The biggest criticism that Gandhiji had about higher education of his time was that it, like primary and secondary education, was unconnected with the socio-economic realities existing in the country and hence was of no benefit to the country. "To be based on realities is to be based on national, that is state requirements", he said. He also believed that education should lead to a harmonious blending of the life and work of the educated. He wanted not only the brain but the fingers to think, and he firmly believed that manual work was equal to mental work. A person could worship God through work with the hand. Dignity of labour was thus given a very high place, even a spiritual place, in his scheme of things, for it was a labour of love for humanity, for the creation of a better world for fellow-beings.

In defence of Gandhiji's emphasis on the need for a combination of hand culture and mind culture, one could cite the present condition of the educated unemployed in India today. We turn out thousands of graduates from our colleges and universities every year, the majority of whom are not only unemployed but unemployable. They are also unwilling to go for many jobs involving manual labour because of their educational upbringing in caste-ridden society where for several centuries the norm has been self-exclusion of a large number from many socially and economically gainful occupations

or the assignment of certain types of jobs to certain castes. Gandhiji's idea was to break this caste-barrier as far as occupations were concerned.

What are we doing today? We are still following the pattern of liberal education introduced during the colonial period, although the proponents of that pattern have themselves abandoned it in their own countries: In Europe and America, the Public Schools train all pupils in many useful crafts. Workshops attached to every school give an orientation to the students to the real industrial business worlds outside the four walls of the school.

All students are not equally endowed with the faculties for higher education. Some will excel in work that entails besides basic knowledge of language, mathematics, elementary physical and biological sciences, accounting etc. a knowledge of their own history, geography, ethics, civics and cultural heritage, plus a particular job-oriented craft or practical work such as carpentry, smithy, lathe operation, printing, computers, fruit-canning, fish-processing, road surveying and construction, or any other work that is essential for the betterment of living and working conditions of the people in the localities, in the State or in the country as a whole. After obtaining such an education at the secondary level, most students go for gainful employment and a few go for higher education. Thus even those who obtain higher education at the college level are able to utilize their practical knowledge already acquired at the school level though theoretical knowledge gained at the college level. Even if they may not get any job where their higher learning is applicable, they still can put to good use the practical knowledge gained earlier and continue to be productive in society. Thus they become useful to themselves

and to society instead of becoming burdens to themselves, their families and the society at large.

Gandhiji's criticism that higher education of his time was unrelated to the then social realities is applicable to our own modern Indian society. Gandhiji was criticized by many, and he is still being criticized by many in India, that he was denying opportunities for all pupils to go for higher education, and that he was biased in favour of the higher castes and classes. The facts are otherwise. He was not opposed to universal higher education, but he was a realist and a keen observer of social phenomena. In his own time, much money and efforts were wasted on unproductive education. And today the situation is much worse.

The present efforts to decentralize administration through devolution of powers to the Panchayats in India are on the right track but unless each Panchayat succeeds in fulfilling the basic needs of the people through appropriate restructuring of local priorities in education, employment generation, housing, drainage and sanitation, health protection and above all vocationalisation of education from the lower levels. Those efforts will serve only to strengthen the divisions in society.

Our Panchayats will transform our society provided the people of the Panchayats are awakened from their 'culture of silence' a phrase used by Paulo Freire and 'Conscientised' about the emancipatory role of education. If Freire recognized the essential role of education in transforming society through destroying its dehumanizing structure. Gandhi looked upon education as a means of liberation from two kinds of slavery - slavery imposed by exploiters from outside, and the slavery of the individual to artificial needs created by exploiters within the nation. Through education, freedom from both

kinds of domination and exploitation must emerge.

What we need today is a revamping of education not only at the higher levels but at all levels by making a dedicated effort to an education of the intellect which can come only through a proper exercise and training of the hands, feet, eyes, ears and nose, at the lower levels and then inspiring the educated to do the right thing in matters, social, political, economic or cultural in a manly manner. If India today lacks leaders with calibre, it is because our educational system is not providing the essential ingredients for the creation of such leadership.

Gandhian vision about education in modern India was iconoclastic. Gandhiji was so revolutionary in his outlook that he even advocated the abolition of formal educational institutions. He once said that it was superstition to suppose that knowledge could be obtained only by going to Schools and Colleges. "The world produced brilliant students before Schools and Colleges came into being. There is nothing so ennobling or lasting as self-study. I do not wish to decry Schools and Colleges as such. They have their use, but we are making altogether too much of them. They are but one of the many means of gaining knowledge", he pointed out.

This iconoclastic vision about educational institutions is quite relevant to the present context in India. More and more people are thronging at the gates of colleges and returning disappointed. All applicants can not be accommodated. And the number of applicants seeking higher learning is bound to increase by leaps and bounds in the decades to come. No amount of money expended on higher educational institutions will ever suffice. Self-study, study from nature and life's experiences,

wherever possible, through an open-learning system-open schools and universities will be the solution to this problem in the 21st century. Such a system alone can meet the rising demand for higher education in countries such as India with very huge population.

A review of Gandhian thoughts on education and the situation in the present and future decades will enable us to draw some basic lessons beneficial to the next century.

They are :

1. Craft of vocation - centred education at the primary and secondary levels is a must in the place of the present literary type of liberal education started in the colonial period. But craft or vocation is only the means to an end, the end being the building of citizens with character and courage of convictions since the individual was the one supreme consideration to Gandhiji.
2. Education while serving to build citizenry with character should also make the citizens aware of the need for reconciling the claims of the individual with those of the society. "Extreme individualism means the negation of community and of all claims upon independence".
3. While Primary and Secondary education with emphasis on vocational training and character building must be state-aided, higher education must be left to private initiative and based on the needs of the nation as a whole. Higher education must also aim at creating those conditions conducive to the promotion of such projections and production of such goods that will help fulfill the basic needs of the nation—removal of poverty, provision of employment and healthy living conditions and a general atmosphere where everyone will have enough for his need but not for his greed, all will live in peace.
4. An educated person is one who is aware of his rights as well as his responsibilities; one is willing to fight for his as well as others basic human rights for the common good of society; one who conscientiously works for the creation of living conditions where every citizen has equal rights and no one tries to destroy general peace and healthy environment for amassing wealth for himself and his family.
5. Higher education should never be denied to anyone who has the mental equipment for it even when he does not have the physical and economic means to attain it.
6. Men and Women must have equal opportunity for education and they must be free to pursue courses of instruction in which they are specially interested for the sake of the betterment of society.
7. Education must always be an ennobling experience that helps men and women to discover the best in themselves and use all their capabilities for the sake of others in society, especially those who are less fortunate than themselves in social, economic and natural capabilities.
8. There ought to be emphasis in the curricula of education at all levels on human dignity, dignity of labour, equality of all human beings, human rights and responsibilities, equality between men and women, freedom from morally unsupportable activities, freedom from actions that destroy nature, and a strict adherence to non-violence and truth.
9. Higher education must be supported by private initiative.

10. Specialised higher technical education should be supported by government and industry whenever such education had definite use for specific government projects and industrial activities beneficial to society.

11. Vast amount of the so-called education in the arts, given in our colleges, is sheer waste and has resulted in unemployment among the educated classes. This type of education has destroyed the health, both mental and physical of those who have gone through it.

12. The products of higher education in free India should meet the requirements of the country. They should by strenuous efforts, emancipate themselves from the educational, economic, social and political bondage, imposed by centuries of foreign domination.

To sum up, let us quote Gandhiji himself from an article in his views paper, Harijan, of 9th July, 1938.

"I am not an enemy of higher education. But I am an enemy of higher education as it is given (now). Under my scheme there will be more and better libraries Laboratories research institution. Under it we should have

an array of chemists, engineers and other experts who would be real servants of the nation, and answer the varied and growing requirements of a people who are becoming increasingly conscious of their rights and wants. And all these experts will speak, not a foreign language, but the language of the people. The knowledge gained by them will be the common property of the people. There will be truly original work instead of mere imitation. And the cost will be evenly and justly distributed.

The relevance of Gandhiji's views on education in free India will never dwindle but will only increase as the years go by since even after 60 years of freedom from foreign rule, India has not been able to realize even a tenth of his dream.

Dinabandhu Dehury is a Ph.D. Scholar in the P.G. Department of History, Utkal University, Vani Vihar, Bhubaneswar.



Hon'ble Chief Minister Shri Naveen Patnaik addressing the National Workshop on "Equity, Accountability and Quality in NRHM" at Hotel Mayfair Lagoon on 4.9.2009

Gandhiji and Sarvodaya

Rabindra Kumar Behuria

Genesis

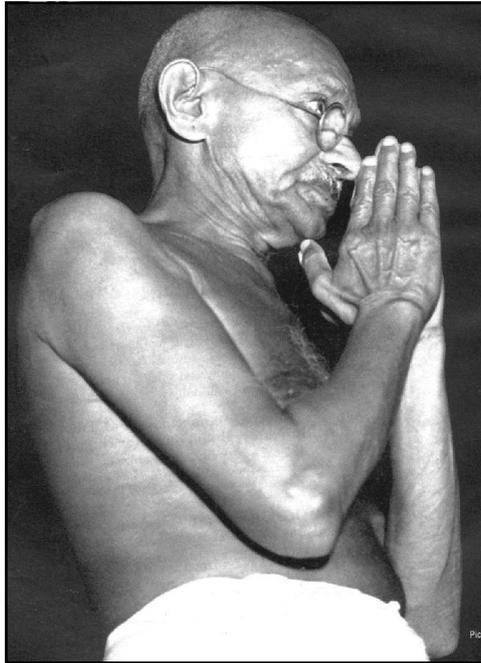
Mahatma Gandhi is the unquestioned 20th century prophet of the world. His great concern for all the oppressed and depressed made him committed to serve these through his motherland.

His immediate task was to release India from the foreign yoke and to safeguard the freedom thus won through the implementation of his constructive programmes. He started a good number of institutions to be manned by his chosen experts in their fields and gave them the perennial message of wiping every tear from every eye. He desired to establish "Sarvodaya Samaj" through granting power to the people at the grassroots so that they could enjoy Gram swaraj for ever. He wanted every individual to contribute to the total welfare of the community through practising his Ekadasa Vratas.

Gandhi was a many splendoured personality - a person who kept the highest

standards of morality in politics; a great political strategist who evolved and practised politics of the capture of state power through a prolonged mass movement, an orthodox religious believer who stood for the social liberation of women, the ending caste oppression and discrimination, and,

in general, application of reason to all aspects of social life; a person who had the vision of a world where all conflicts would be settled without the use of violence. His method of approach is an eye opener for all to go deep into the root of the problem, negotiate with the contending parties and settle the issues amicably with rancour and favour. Thus he proved that he was pragmatic philosopher par excellence, an outstanding example 'Karma Yogi' of this modern era.



Concept of Sarvodaya

The 'Sarvodaya' is the combination of two words 'Sarba' and 'Udaya'. It denotes the meaning uplift of all. Its philosophical ideas devotes the

meaning uplift and development in all aspects in the life of individual. It also gives the meaning 'good of all', service to all and welfare to all, etc. Sarvodaya, as an ideal, seeks to build a new society on the foundation of the old spiritual and moral values of India. Its philosophy is integral and synthetic in character. It takes up the Gandhian synthesis of the ideas of Vedanta, Buddhism, Christianity, Ruskin, Tolstoy, Thoreau and tries to incorporate his ideas at more critical and analytical levels. Besides Gandhism, it has also taken some of its ideas from the socialist philosophy. Thus, Sarvodaya represents a synthesis of Gandhian and socialist philosophy, a synthesis of theoretical abstractions and political and economic generalisations. Vinoba, a true Gandhian and J.P. Narayan, a true socialist are the two main leaders associated with Sarvodaya movement.

The fundamental concept in Sarvodaya philosophy is the primary and ultimateness of the spirit. Gandhiji's main ambition was to realise God. His political, economic and social programme were oriented towards progressive enlargement of the human consciousness through the service of the poor. Gandhiji had since faith in divine being. The overwhelming belief in the supremacy of the spirit provided the first philosophical foundation of the movement of Sarvodaya. J.P. Narayan said, "This movement is based on the principle of change of heart. It is being conducted in the belief that man is amenable to change. That is so because all of us are essentially one fragment of the same almighty father." He further said, "I feel convinced that man must go beyond the material to find the incentive in goodness. As a corollary I further feel that the task of social reconstruction can not succeed under the inspiration of materialistic philosophy."

Feature

- (i) Sarvodaya is a strong ideology for prevention of socio-economic ills of the society.
- (ii) It is based on 'Advaita Vedanta' doctrine. The main aim is to reconcile the systems of egoism and altruism.
- (iii) It stands for creating high moral character in the society. It is only possible by truth, non-violence, self-sacrifice and purity, etc. In short, it stands for the supremacy and absoluteness of moral values. As J.P. Narayan said, "Sarvodaya represents the highest socialist values. It takes a balanced or whole view of life. It is naturally opposed to capitalism and stands for decentralisation of the forces of production."
- (iv) It aims at adopting self-sacrifice for the sake of others. Taking and giving, to others. It is the best principle in Sarvodaya.
- (v) Sarvodaya pleads for self-sufficient village communities. It claims to establish a society of producers. Bhoodan, 'Sampattidan', and 'Gramdan' are some of the basic techniques of Sarvodaya. Bhoodan and Gramdan are techniques of agrarian revolution based on moral forces, sampattidan is a technique of transforming Capitalism into a Sarvodaya society. The two movements of Bhoodan and Gramdan visualise village ownership of land as well as individual cultivation by the villagers. They will promote among the villagers a sense of community, strength, cohesiveness and initiative. The villages will be self-sufficient and self-reliant. It pleads for what may be termed, 'villagisation'. To the philosophy of village reconstruction, it has added the gospel of the ownership of all lands of village in the village community and the erection of decentralised village commonwealth.
- (vi) Truth and non-violence are the two main points of Sarvodaya. If everybody practises these

two principles, the social corruptions and irregularities will be checked.

(vii) It is one non-political ideology. It is rather a socio-religious creed. It stands for self-limitations of human wants.

(viii) It stands for national unity and solidarity. It condemns provincialism and regionalism.

Gandhiji's View :

Gandhiji's Sarvodaya has its roots in the Vedantic concept of spiritual unity of existence and the Gita. The idealism of Sarvodaya is opposed to the concept majoritarianism, concept of class racial struggle and the principle of 'greatest good of the greatest numbers.'

The ethics of idealism of Gandhi is propounded by his philosophy Sarvodaya. Gandhi condemned the state as an organisation of violence and force. Being an apostle of non-violence he was repelled by the coercive character of the state.

Sarvodaya is concerned with Gandhiji's social ideas and ideal of a community. In the words of Gandhiji, it is casteless and classless society.

In the introducing, it can be noted here that to overcome the difficulties of the problems of caste, communal evils, economic inequalities and social divisions, Gandhiji had propounded the philosophy of Sarvodaya. He desired a classless society and partyless democracy.

Freedom, equity, justice and fraternity form the basic part of Sarvodaya. It emphasises upon stateless society. Thus the philosophy of Sarvodaya is hostile to the state. According to Gandhiji for Swaraj, Sarvodaya is necessary.

In Sarvodaya, there is no space of politics of Power. Rather it is the base for politics of cooperation.

Sarvodaya is the realisation of the happiness and elevation of all. There are two techniques for stabilisation of power of the people (i) constant propaganda and publicity and (ii) Decentralisation of power. The aim is to change the heart of the people.

Sarvodaya opposes to the ideas of egoism and wealth. There is no scope for class struggle in Sarvodaya. Social good, rationality and communal harmony are basic principles of Sarvodaya. Therefore, Sarvodaya accepts the universalisation of self-government.

Thus, the political philosophy of Sarvodaya is a powerful intellectual attempt to build a plan of political and social reconstruction on the basis of metaphysical idealism.

Critical Evaluation

(i) Sarvodaya is a theory of ethical justice. It would like to use the external goods for the satisfaction of the human spirit. It would regard them as means and not as an end in themselves. Sarvodaya philosophy opposed to an outlook of life that feels insatiable hunger for material goods. Thus, it may be noted that Sarvodaya philosophy is not negativistic in its approach. It does not negate the importance of material goods; however, it refuses to regard them as the dominant goal of all human endeavour. Thus, whereas socialism is materialistic in its approach, Sarvodaya is spiritual.

(ii) Secondly, whereas the main technique of socialism is nationalisation, that of Sarvodaya is villagisation.

(iii) In the third place, the radical type of socialism i.e. communism believes violence as a proper technique of destroying the existing capitalistic structure. But Sarvodaya has no place for violence in its philosophy and technique. On the contrary, it believes in the nobility and purity of means and holds that only non-violence can

be the foundation of society free from exploitation and injustice. Vinoba and Jayaprakash Narayan mercilessly criticised the totalitarian technique of Russian politics.

(iv) To conclude, Sarvodaya is a philosophy based on moral approach to the problems of mankind. It believes in a regeneration of human heart and mind. That is the main idea behind Vinoba's movements of Gramdan and Sampattidan. It wants to perfect the mechanism of representative democracy by utilising moral idealism. Its approach is not institutional but valuational.

Conclusion

Gandhi propounded the theory of Sarvodaya and applied it in the context of particular time, place and situation. Each age and each problem needs a solution of its own and techniques of its own to resolve the problem. Those who appears to follow in the footprints of Gandhi how to evolve techniques different from the one that Gandhi, evolved. In the words of

Evikson, "Gandhiji's instrument in itself once innovated by one of the rarest of men under specific culture and historical conditions, now exists in the images, impulses and ritualisations of many who have become aware of it by, what we may call ritual diffusion. It now calls for leaders who will renovate it elsewhere, sharing, no doubt, some of the personal or historical motivation of the first leader, the first followers of those first led, but recombining its motivation with totally new elements."

Selected Bibliography :

1. Das, G. History of Social Thought, New Delhi, FBD, 1994, p.267-69.
2. Nanda, B. Indian Political Traditions, Cuttack, Banirupa, 1989, p.142-45.
3. Verma, S.P. Modern Political Theory, New Delhi, Vikas, 1996, p.392.

Rabindra Kumar Behuria lives at Chandbali, Bhadrak-756133.



A child presenting a photograph of Dr. S. Radhakrishnan to Hon'ble Chief Minister Shri Naveen Patnaik on the occasion of Guru Divas Celebration at Bhubaneswar on 5.9.2009.

Challenges of 21st Century and Gandhian Alternative

Dayanidhi Parida

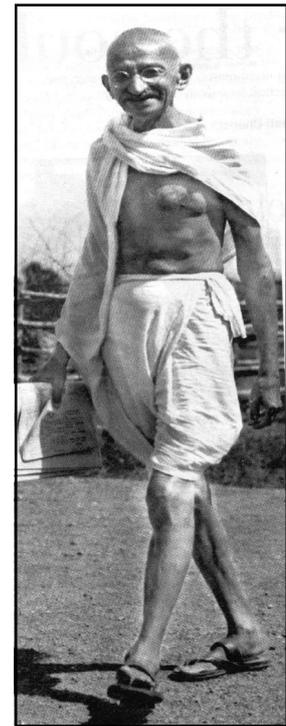
In the history of mankind, many great men have come and left their imprints on the sands of time. But as a man of thought and action, industry and acumen, conviction and commitment, Gandhi was unique. For his crusade against injustice and exploitation, firm faith in the principles of truth and non-violence, Gandhi could be the symbol of Indian ethos and World Peace.

While leading the movements for Independence and innovating programmes for socio-economic changes, he seldom ignored his mission of India's moral regeneration. Attached to the village Republic, he dreamt of a global village. A man of highest commitment and integrity, he himself tried his best to experiment his philosophical ideas. Einstein rightly said that "generation to come will scarcely believe that such a one as this ever in flesh and blood, walked upon this earth." Paying homage to Gandhi, Sir Stafford Cripps observed, "I know of no other man of any time or indeed recent history, who has so forcefully and convincingly demonstrated the power of spirit over material things.

In this context, I would try to highlight my thoughts on challenges of 21st century and Gandhian alternative. The 21st century man with all his eccentricity, lust of power, science, technology of modern warfare laugh at the basic postulates of Gandhism. But for this the present

generation is not to be blamed Nathuram Godse, no doubt killed Gandhi, but his successors killed Gandhism for ever. Any concept of ideology, if not reinterpreted becomes invalid for the present. This happened in case of Gandhism. The post independence era marked a complete departure from Gandhian ideas and was dominated by Nehruvian model of political and economic development.

But, Gandhism can never die. As we enter into twenty-first century, we face the problem of pollution, ecological decay, poverty due to industrialisation and high technology. There is also a growing threat of arms race and terrorism pushing the entire mankind to a state of unrest. Gandhiji has unmistakably foreseen this predicament the incoming disaster as early as 1909 in his "Hindi Swaraj". Throughout his life,



he continued to warn against it and showed the way to avert it through truth and non-violence. He had characterized modern civilisation as a disease. Two weeks before his death, he had made a prophetic statement that, "this modern civilization is such that one has only human wants still holds the key to the removal of poverty and economic hazards from the society. The present day statesman also emphasizes austerity measures which are all reflection of Gandhian model. Gandhiji was not opposed to industrialization. What he wanted was use of simple machinery in villages and decentralization of industries. Otherwise machinery and industrialization would be instruments of exploitation. He also suggested state ownership of industries, so that industries would work for the benefit of mankind. Thus socialists and Marxists bow down before Gandhi, so far as the economic programmes are concerned.

His emphasis on political freedom of minority, decentralization of political power have been accepted in the form of protection of minority rights and Panchayat Raj. Gandhiji's concept of Satyagraha, non-co-operation, Civil Disobedience even today have proved to be successful as a non-violent struggle against colonialism, racialism and exploitation. The success struggle of Nelson Mandela in South Africa bears of testing the Gandhian doctrine.

Gandhi strongly favoured decentralization of power and authority with patience and it will be self destroying. Taking into consideration the present World scenario, beginning from the threat of nuclear warfare down to environmental pollution, one must find the validity of Gandhi's statement. Gandhiji had talked about peaceful co-existence of nations and establishment of internationalism. Everyone of us is striving today to reach that Gandhian goal.

The most important concept of Gandhiji namely Swadeshi finds its revival today in Indian Polity especially after the incoming of multi-nationals and monopolization of the entire Industrial Products. People in the country talk of Swadeshi. Of course the modern name of Swadeshi would be 'self-reliance'. The new spirit of Swadeshi is to fight against new colonialism with increasing grip over Indian economy and creating cultural erosion. It is a reflection of Gandhian Swadeshi. Because Gandhiji has developed this concept first as a weapon of economic independence and then as political independence.

In the economic field Gandhiji's emphasis on small-scale Industry as a source of employment generation, economic decentralization leading to self-reliant villages and limiting autonomy to village republics. Now-a-days the villages get utmost priority in Government plans and programmes. All modern states are welfare states because the need of the day is welfarism. This is nothing but the other name of Gandhian Sarvodayas. His concept of Swaraj and democracy quite agree with the modern liberal ideas which are the call of today. He was strongly against dowry which is felt more today. His advocacy of prohibition, disapproval of child marriage are also widely accepted in the 21st century.

Thus, Gandhism can not be taken as a model in a strict sense. It can be taken as a beacon. At present, we have the task of revalidating Gandhian ideas by new interpretation of his thought and action. The entire mankind will be immensely benefited if Gandhian thought is followed in the right perspective. Gandhi is dead, but long live Gandhism.

Dayanidhi Parida is a Sr. Lecture at Aska Science College, Aska, Ganjam.

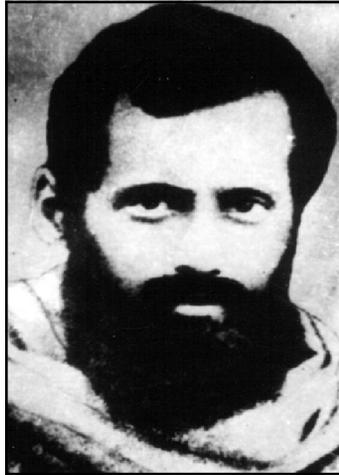
Utkalmani Gopabandhu - The Pride of Orissa

Dr. Surya Narayan Misra

Orissa is the land of Lord Jagannath. The people of the State are culturally integrated with other linguistic and religious communities. Since time immemorial this land has given birth to several personalities whom the people of Orissa today and afterwards cannot forget. Utkalmani Gopabandhu Das is one among them. His life style, mission and vision and the sacrifices had justifiably decorated him as the 'Jewel of Orissa' (Utkal Mani). This title was given to him by Sri Prafulla Chandra Roy of the then Calcutta.

Gopabandhu Das who is known to every Oriya family was born on 9th October 1877 in a small village called Suando in the Satyabadi police station area of Puri district. The village is situated on the bank of river Bhargavi, a sacred river for the people of coastal Orissa. He was the son of Sri Daitari Das and his third wife Srimati Swarnamayee Devi. Sri Narayan Das was his elder brother.

Suando was a small village comprising of about forty families belonging to Brahmin, farming class, weavers and Harijans. The total population was around two hundred and fifty. In that village, Gopabandhu belonged to a middle class family.



His father was a Mukhtiar who had a reasonable practice in the locality. Gopabandhu had early childhood education in the village pathsala where he was taught about reading, writing and arithmetic which was helpful for the living of the villagers. He had an early exposure to Jagannath Das's 'Bhagabat'. The language and style of presentation of this great book influenced him a lot. At the age of twelve, he married a young girl Apti. Of course the marriage did not stand in the way of his education.

After completion of upper primary education, Gopabandhu had to join middle vernacular school at a nearby village called Rupadeipur. By that time he had lost his mother. The Head Pandit of the school could appreciate Gopabandhu's knowledge on literature. The young boy also found in the teacher a true guardian. The regular interaction between the two was beneficial to both. Gopabandhu later joined Puri Zila School in 1893.

While at Puri Gopabandhu came in contact with Mukhtiar Ramachandra Das who was not only generous but was a nationalist and had compassion for the distressed. This association had a deep impact upon young Gopabandhu.

Mukhtiar Das was also guardian of one Basudev. Every day, both the young students could learn about western and eastern education and their differences from their new guardian. While he was a student at Zilla School, Gopabandhu evinced interest in organising meetings and societies through which young mind could learn about cooperation. This work generated in him an element of leadership and created abilities for team work. As a student he could dare to help the victims of dreaded disease cholera, a post-car festival outbreak in the holy city. The authorities were not alert and the response was poor. This led young Gopabandhu to form a voluntary corps 'Puri Seva Samiti' through which the volunteers helped the victims and cremated the corpses. During this great service to the community, Gopabandhu got the valuable support of Harihara Das, later called Acharya Harihara. During this service, an ugly incident occurred relating to the maladministration and unresponsive activities of the English Surgeon Dr. Charles Beck. Gopabandhu's handling of the situation spread information about his conflict management abilities and love for nation.

As a student Gopabandhu's literary fervour was excellent. During those days the literary world was divided between the Ancient and the Modernists. He regularly wrote in local magazines - *The Indradhanu* and *The Bijuli*. While the *Indradhanu* supported those who advocated the cause of old literature, the later stood with modernists like Radhanath Roy, the then Inspector of Schools for Orissa. But Gopabandhu was a great balancer. He realised that a nation as well as its literature live by their tradition. He could not appreciate the thinking of contemporary writers and their views. In the opinion of a great scholar, Gopabandhu like Edmund Burke believed that a national superstructure of the present can endure only if it is based upon the

solid foundations of the past heritage. He also wrote a satirical poem in 'The Indradhanu'. This led to an ugly incident and also punishment meted out by the angry Inspector of schools for such satirical poem. He refused to apologise for such writing in lieu of punishment.

Gopabandhu graduated from Cuttack. He lost his father before joining Ravenshaw College. He took time to adjust to the new environment. His personality attracted friends. He formed a 'Kartavya Bodhini Samiti' to engage his friends in discussion on social, economic and political problems. During his Ravenshaw days, he along with Acharya Harihara and Braja Sundar Das engaged himself in helping the flood victims. During his studentship at Cuttack he lost a newly born son. Further his social service affected his educational pursuit. Due to this he was failed in B.A examination and he got this degree in the second attempt. Later he went to Calcutta where he did both M.A. and LL.B.

While pursuing higher studies at Calcutta, classroom attracted him the least. Because he never thought to lead a lucrative career after the completion of education, his preoccupation was to acquaint himself with the life and problems of Oriya population at Calcutta. Since he believed in unity and sharing of the problems through cooperative living, he took steps to open night schools to teach the Oriya coolies and cooks living at Calcutta.

During his Calcutta days, he came in contact with Bande Mataram group. This initiated Swadeshi spirit in him. His new mission was to reform the society and to develop education. Through these activities he had the vision of social service. When he was only twenty-eight, he lost his wife. By that time he had lost all his three sons and he had two daughters whom he left with his elder brother alongwith the share of his property

in the village. This proved that he had no love for leading a family life and for that he refused to remarry even at a marriageable age. He was not an ordinary man and that is why he did not attach much importance to worldly life. This spirit was evident when he left his son on the death bed to serve flood marooned people despite requests by friends and associates.

Gopabandhu's political exposure begun when he was at Cuttack. He attended Utkal Union Conference, at Paralakhimedi in 1903. At 1903 conference his ideas were different from Madhu Babu who wanted amalgamation of Oriya speaking tracts under Bengal province as against Gopabandhu's suggestion of amalgamation under central province. This was because the former's suggestion would have led to Bengali domination over Oriyas.

After completion of educational career Gopabandhu faced a puzzle as to whether lead an independent life with social service or to involve in educational upliftment of his people. He was impressed with the profile of the Deccan Education Society. After long consultation with his friends and associates, he, being a well to do legal practitioner at Cuttack and also the state pleader of Mayurbhanja, devoted his energy for educational experiment at Satyabadi on the model of Deccan Education Society. He named the new experiment as 'Universal Education League'. The popular name was Satyabadi Bakul Bana Vidyalaya and it was built on the 'Gurukula' tradition. Simplicity and austerities were two major inputs on the students. Great sons of the soil like Nilakantha, Harihara, Krupasindhu and Godavarish were associated in this noble venture. The institution was neither local or sectarian. Its basic ideal was to impart liberal education to the society. This experiment also received opposition from orthodox Brahmins. Several problems were created. But it did not affect the spirit of

Gopabandhu and his associates. This institution spreaded idealism, patriotism, nationalism and intellectual pursuits among its clientels. The students received good training in self-discipline, democratic management and life based on cooperation. The curricular and co-curricular activities were planned to make its students good citizens.

Orissa was separated from Bengal and in 1912, Bihar and Orissa was made a separate province. Under Morley - Minto Reforms Act, 1909 a Legislative council was constituted. Madhusudan Das could prevail upon Gopabandhu who had no love for political career to contest for an additional membership representing local self-governments. A reluctant Gopabandhu ultimately elected as MLC in 1917.

According to a noted political analyst, Gopabandhu as a Legislator had concentrated his attention on four major problems - (1) amalgamation of Oriya speaking tracts of Bengal, Central Province, Madras and Bihar and Orissa under one common administration, (2) permanent measures for eradication of flood and famine in Orissa (3) Restoration of Oriya's right to manufacture salt free from excise duty, and (4) Spread of education on Satyabadi model. In this regard he devoted his time and energy sincerely. He was critical of Government for its inaction at the time of calamities. During one of its great drought, Gopabandhu's statement moved the then Lieutenant Governor, Sir Edward Gait who paid a visit to marooned areas and saw that people were forced to live on leaves of wild plants. The report of Mr. Grunning, the then Commissioner of Orissa was anti-people and fabricated which was earlier said by Gopabandhu and this was verified to be a mischievous one by the Lieutenant Governor.

Because of Gopabandhu's demand, MA in English and B.L. classes were opened at Ravenshaw College and an Engineering School at Cuttack and a Sanskrit College at Puri could be possible also. He also demanded for filtered drinking water supply at Puri to help the pilgrims. He led the cooperative movement in the state to revive the moribund cottage industries. The democratic spirit of Gopabandhu was revealed when through his efforts the District Boards of Orissa could get non-official chairpersons in place of the District Magistrates being ex-officio chairpersons. Through his strong pleading there was relaxation in the rigidity of forest rules. It was his legislative acumen which convinced the government in converting middle vernacular schools into Middle English Schools. As a non-party legislator Gopabandhu impressed all hue and cry, through his advocacy of the cause of the downtrodden. Even one of the senior British officer compared Gopabandhu with A J Balfour, one time British Prime Minister.

Before Gandhi's emergence, the Indian National Congress was an organisation of the middle class intellectuals. Gandhi's programme of non-cooperation metamorphosed the organisation into a mass based organisation. Gopabandhu had attended the Calcutta AICC and later the Nagpur session. He persuaded Gandhi to accept the question of the formation of linguistic provinces in the Congress programme of reorganisation. A resolution in support of this mission was passed at Nagpur. This very resolution being the major objective of the Utkal Union Conference, Gopabandhu advocated merger of the conference with the Congress. It would make Oriya movement a part of Indian National Movement.

At the Chakradharpur session of the Conference, most progressive and favourable resolutions were moved by Gopabandhu and

Krushna Chandra Acharya and supported by Chandrasekhar Behera and Nilakantha Das. The resolution expressed unity of purpose between conference and Congress. Thus Oriya nationalism was indistinguishable from that of Indian nationalism. The Utkal Union Conference became a part of the Indian National Congress and Gopabandhu became a Congressman.

Including, his inclination towards Gandhi, Gopabandhu was also quite impressed with another personality - Lala Lajpat Rai. He met Lalaji for the first time in the special session of the Congress in September, 1920. During Lala's visit to Puri, Gopabandhu could know in detail about servants of the people society and the Hindu Mahasabha. Gopabandhu was persuaded by Lalaji to join servants of the people society. The Samaj, the newspaper which was published under his leadership maintained its independence but acted as a mouth-piece of the society. The society enhanced the relief profile and Orissa Relief Fund was established. Later Gopabandhu became the All India Vice-President of the society in April, 1928. During his visit to Lahore to attend society's meeting he fell ill from which he could never recover. He breathed his last in the evening of seventeenth of June nineteen hundred and twentyeight. It was on the Nabajauban Darshan of Lord Jagannath on the eve of Car festival of that year. Thus came the end of one of the most celebrated life of Orissa. The father of modern Utkal died at the age of fifty-one. Though, he is dead, yet his memory remains in the hearts of millions of people.

Dr. Surya Narayan Mishra is a Professor in the Department of political Science, Utkal University, Bhubaneswar.

Jayee Rajguru - The First Martyr of Orissa

Jayanti Rath

The name of Jayee Rajguru is an inspiring theme in the history of Orissa. This very name stands for indomitable courage and invincible confidence. He appeared at a time when utter confusion engulfed the political ambience of Orissa.

The Mughals had left, but they were followed by the marathas. Their frequent attacks devastated the economic condition of the land. The royal house was in a state of peril. Khurda remained no more a vast kingdom extended from Mahanadi to the border of Khimedi in Ganjam.¹ It was confined only to the killa of Khurda, the praganas of Rahang, Serai, Chabiskud and Lembai including Puri or Purusottama kshetra. Raja's command over "Zamindar of Hindu Sirdars"

containing one hundred and twenty nine killas had become a theme of the past. After 1760, Raja Birakishore Dev had to cede the above four praganas along with the management of Jagannath temple on the basis of an agreement.² The Raja remained in possession of Khurda only.

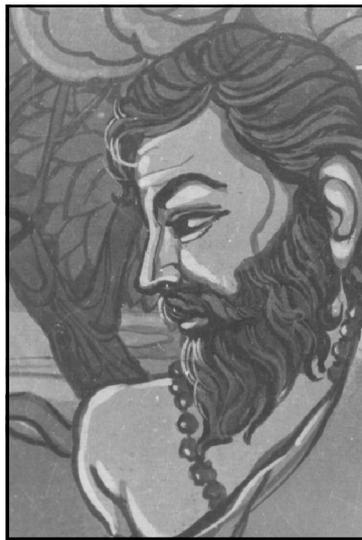
A kingdom turned into a tiny principality. Gajapati Birakishore Dev was succeeded by Divyasimha Dev. Gajapati Divyasimha Dev died

on 1798 leaving behind him his son Mukunda Dev-II, who was a child by that time. There was chaos everywhere. The brother of the belated king tried his best to possess the throne. Rajguru

Jayakrusna Mohapatra, fondly called as Jayee Rajguru, being the Bebartha or Minister of the new king had to play a vital role in this challenging situation. He made up his mind to save the interest of the king at any cost. No interest was greater for him than the interest of his motherland. He relinquished all the personal pleasures for this cause. It would not be out of place to mention that he remained an out and out celibate to perform his moral obligation. No obstacles, no limitations could deter him from his determination.

During the occupation of Orissa, Colonel Harcourt had made certain agreement with the Raja of Khurda. According to the agreement, the Raja would detach himself from the Maratha interest, he would afford a clear passage and provide men and supplies for the British troops.³

In stead, he would be given one lakh of rupees. The Raja's wakil agreed to the proposal,



but strongly represented that the restoration of the four Mahals should be treated as an essential condition for the fulfilment of the agreement. Harcourt did not accept this. But the Raja was so desperate to get back the lost territories that he thought the denial might turn to approval in future. For this make belief, he had to pay heavily afterwards.

After the occupation of Orissa, Rs.50,000 out of the promised one lakh had been paid to the Raja. It disturbed the Raja immensely. Acting on behalf of Raja, Jayee Rajguru, proceeded to Cuttack in March, 1804 accompanied by 2,000 armed men. He had an audience with Harcourt when he submitted a petition requesting the restoration of the four Mahals, urging payment of the balance of the stipulated amount. He further desired the reduction of the annual peshkash to the British which had already been reduced to ten percent. Regarding the money demanded, the British agreed to pay a further amount of Rs.20,000; the rest, it was promised, would be paid at some future date. Regarding the second claim, Harcourt observed that not a span of land could be given up. He also rejected the proposal for further reduction in the peshkash.⁴

The frustrated Rajguru distributed the received amount of money among the paiks for their dues and returned from Cuttack expressing his despair before the Raja, he said, "I at first warned you from forming an alliance with the commander of the company's troops and from affording him a safe passage. Now colonel Harcourt has not given up the Mahals and has also intension of taking from you what hereditary country remains in your possession." This emphatic assertion of Jayee Rajguru speaks volumes of his foresight and uncompromising anti-colonial attitude.

Harcourt's obstinate approach made the Raja disappointed. He assumed a hostile policy towards the British Government. In the meantime, the British Government had prepared agreement defining in liberal terms its relations with tributary Rajas. These agreements were redily accepted and signed by all except the Raja of Khurda. The Raja made delays on various pretexts consequently the commissioner at Cuttack set one of their native officers to explain to the Raja the nature of the term proposed. He was also instructed to warn him of the impropriety of his conduct and the danger of its continuance.⁵

The discontent and detection of the Raja and the Rajguru ultimately led towards a rebellion.

The game of hide and seek to sign the agreement lingered for nine weeks at Khurda in 1803. In November 1804, the vakil of Khurda was withdrawn from Cuttack,⁶ and thereby, the Raja closed the scope of further discussion. The arrogance and impertinence of Raja made Harcourt upset. He was also very much angry with the Rajguru. He was confirmed that behind this act of insubordination the key role was being played by the Rajguru. In one of his letters (dated 23rd, October, 1804), he said, "It appears the Raja himself is not inimical to us, but his Dewan is extremely so and he controls everybody and everything at Khurda."⁷

At the outset, the Raja had induced other tributary chiefs to unite in common cause with him against the British. Sambhu Bharati, an influential gosain (religious mendicant), who was disaffected with the new British revenue system was engaged by the Raja for this purpose. A triple alliance, offensive and defensive, was formed among the Raja of Khurda, Kanika and Kutanga.⁸ The Zamindars of Bishenpur, Harishpur and Marichipur also joined the confederacy. Antaji Naik and Kannoji Naik, two officers of the Raja

of Berar, met the Raja of Khurda and promised to help him in his fight against the British. The intrigue was confirmed by Elphinstone, the resident of Nagpur. And the Raja could not get any help from Berar at the hour of need.

However, he was determined to assert his right by force. In July 1804, he appointed persons to collect rents from those disputed praganas. In October 1804, the troops of Khurda raided some villages in that area. He also made attempts to take over the management of the temple of Lord Jagannath.⁹

Such hostile attitude of the Raja compelled the British authorities to take stern action. Harcourt tried to bring the Raja to his senses by conciliatory measures but without success. He observed, "Our moderation has been construed into weakness, our silence into ignorance and our endeavours to conciliate into apprehension and fear."¹⁰ Again, he wrote "I do think the Raja of Khurda must be exterminated."¹¹

To suppress the rising, the British targeted the Rajguru at first instance. He was considered to be at the root of trouble.¹² So, they demanded his removal from the office. The Raja did not pay any heed to this demand. Sambhu Bharati was arrested. Further, the Dalbeheras of Rameshwar and Panchgarh, the Khandaits of Mendhasal, the Khandaits and the zamindars of Garh Haladia and the rebels of Dandimahal were directed by the British not to help the Raja of Khurda. In November 1804, military operations were undertaken against the Raja. By a proclamation issued on 7, December, 1804, the Raja of Khurda was deposed and his territories were annexed to the British Government.¹³

The British troops which proceeded to occupy Khurda were resisted at several places by the Paiks of Raja, but the superior arms of the British easily overcame the resistance. They

marched steadily and finally surrounded." The fort of Khurda near the Barunai Hill in the first week of December 1804. Major Robert Fletcher occupied the fort without much difficulty, and the Raja fled to the deep jungle near by. From the jungle the Raja sent his wakil to Harcourt for negotiation. But the wakil was arrested. Then Jayee Rajguru who came to negotiate, was also arrested. At last on 3 January, 1805 the Raja was captured.¹⁴ Others who opposed the British, surrendered quickly. Balabhadra Bhanja, the Raja of Kanika, was taken as a prisoner and sent to Midnapur in July 1805.¹⁵ Chandradhwaja Sendha, the Raja of Kujanga, was dethroned and his elder brother Madhusudan Sendha was recognised as the New Raja. Jayee Rajguru, the indomitable Bebartha was given the capital punishment in 1806.¹⁶ The Raja of Khurda was sent to Midnapur as a state prisoner.¹⁷ His petition for clemency to the company Government was considered leniently. He put all the blame on Rajguru. Nothing could be more ironical than this matter at that time. A statement of blatant lie and heinous ingratitude overshadowed the truth. It would be appropriate to evaluate the contribution of Jayee Rajguru by quoting two lines from the petition of the Raja. When Colonel Harcourt asked him (Rajguru), whether he had caused those disturbances on his own accord or at instigation of the Raja (the petitioner), he answered that - "the Raja was a child and that what had been done, had been done by himself."¹⁸ This is an unparalleled illustration of the supreme sacrifice of the man, who unhesitatingly entered into the gallows for the cause of motherland.

The Raja was released from the Jail in 1807, but the estate of Khurda was not restored to him.¹⁹ The rebellion witnessed a tragic end.

The history of India is eloquent about the bravery of Tipu Sultan who fought against the

British Authority for his own kingdom, his own crown. But it remains silent about the greatness of Jayee Rajguru, who had the courage to raise the banner of protest against the British without having enough means and man power. He had the knowledge, he had the vision, the will-power, that he inherited from his great forefathers. That was his strength. He had no belongings of his own. He had left nothing except the saga of his valour and patriotism. He truly deserves the honour of being the first martyr of Orissa in the alter of anti-colonial movement.

References :

1. Astirling - An account (Geographical, Statistical and Historical) of Orissa proper or Cuttack, Calcutta, 1904, p.66.
2. Orissan Records, Vol.II, W. Trower to J.P. Ward 23 Ma 817, p.19.
3. Bengal Secret and Political Consultations - Board's collections, Vol.318, 7224, p.2.
4. Ibid, Vol.318, 7224, p.4.
5. Bengal Secret and Political Consultation, 4, April, 1805, No.1.
6. Dr. B.C. Roy Foundation of British Orissa, New Student's Store, Cuttack, 1959.

7. Ibid.
8. S. Toynbee, A sketch of the History of Orissa from (1803 to 1828), Calcutta, 1873, p.5.
9. Ibid.
10. Dr. B.C. Roy, Foundation of British Orissa.
11. Ibid.
12. Orissa Revenue Records, Vol.VII, commissioner of Cuttack to Raja of Khurda, 1, October, 1804.
13. Ibid, Vol.I, circular-1, T. Fortesque to All Collectors, 15, December, 1804.
14. Dr. B.C. Roy, Foundation of British Orissa.
15. Ibid.
16. Madalapanji - edited by A.B. Mohanty, p.82 and p.107 and Kedarnath Mohapatra, Khurudhara Itishas, Bhubaneswar, 1969, p.293.
17. Orissa Revenue Record - Vol.9.
18. Accession No.296, Board Proceeding, Judicial, OSA.
19. ORR, Vol.X, 806.

Jayanti Rath is the Curator-in-Charge, Numismatics Section, Orissa State Museum, Bhubaneswar.



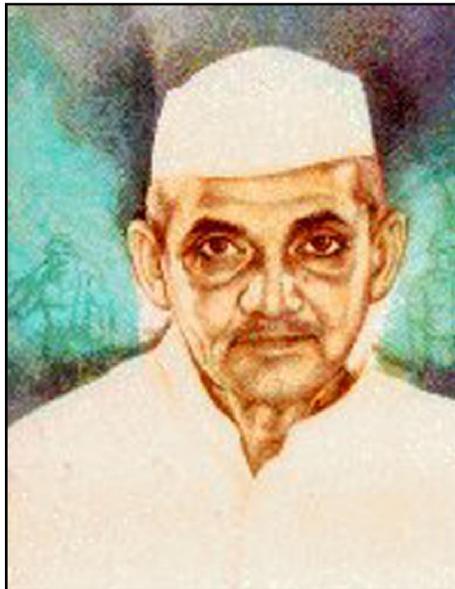
Hon'ble Chief Minister Shri Naveen Patnaik visiting Sisupalgarh on 6.9.2009.

Lal Bahadur Shastri : A Messiah of Peace

Manas Ranjan Khuntia

Born of humble parents, bereft of any advantage of birth, parental position of power, Lal Bahadur Shastri rose to the pinnacle of fame and glory through long years of unostentatious and self-less service. His rise from humble beginnings to the height of authority and responsibility is a manifestation of the deep roots that democracy has taken in India, where the humblest has equal opportunities with the highest.

Shastriji was born in a poor family at Mughal Sarai on October 2, 1904. His father, Sharada Prasad, died in 1906 leaving his mother, two daughters and the infant son with almost nothing to live on. Thus Lal Bahadur began his life under the thick shadow of poverty. His uncle however, took care of him and sent him to a school at Varanasi when he passed his sixth standard from his village school. He was a brilliant student. But when he was only 16, he left the school to join the Non-Cooperation Movement started by Gandhiji. He was arrested but later let off with a warning. He returned to his studies at Harischandra High School in Varanasi.



Later he joined Kashi Vidyapith and was conferred with the degree of "Shastri" which means "the learned one".

Shastriji's diligence and sincerity in work soon won him wide admiration, popularity and love. He became intimately connected with the "Servants of the people's society", and was made the President of the organization before long. He remained an active member of the society till end of his days.

Shastriji married Lalita Devi in 1927. He was such an ideal man that he refused to accept a single pie towards dowry. When pressed, He reluctantly agreed to receive a spinning wheel and a few yards of Khadi that his father-in-law offered out of affection.

Shastriji's dedication to his work was so impressive that he was inducted into Congress soon and subsequently in 1952 when Jawaharlal Nehru was the Congress President, Shastriji was chosen to be its General Secretary. For his part,

in the struggle for emancipation of the country he had to suffer a total of 9 years in prison. He bore those years with his usual calm and stoicism.

In free India, Shastriji, being elected in the general election, became a member of the U.P. Assembly and then appointed as a Cabinet Minister of the State. His calibre and capacity, honesty and integrity, performance and perseverance were duly rewarded and from 1952 onwards, he was chosen, in succession, as a Minister in the Central Cabinet for Transport & Railways, Transport & Communications, Commerce & Home, Minister without portfolio, and finally on June 9, 1964, after the death of Jawaharlal Nehru, was elected as Prime Minister of India. He assumed office by consensus and ruled by consensus. The transition was smooth—a tribute to our genuine and stable democracy. His rise to the Prime Ministership is a tribute no less to his personality than to the strength of our democratic institutions. He appeared to the ordinary people of this country of the same stuff as they were made of and they gave him their willing allegiance and he gave them leadership of a kind which still set the standard for his successors. But he was no ordinary man. Perhaps no one who is able to rise to his high office can be.

Shastriji was a man of noble thoughts and his heart bled for the poor. His main concern throughout his life was to bring about a social order in which the weaker and poorer sections of the society were assured of a proper place. His was pre-eminently a life of hard work and unremitting toil in the cause of national freedom, first political and later economic. His sweet and simple modesty, deep humility, right judgment, discerning detachment, disinterested devotion to duty, extreme considerateness, decisiveness, sensitivity, firmness, endurance and above all, quite courage made him the idol of the people. Rising from

among the poorest ranks, Shastriji did not forget his humble past even for a moment and from his high position, he glanced again and again towards those who struggled for existence in the dark pit of poverty and shared their weal and woe. He mirrored the common man's desires and aspirations. Vanity, arrogance, intolerance and sense of infallibility were alien to his nature. He had the humility and wisdom to accept good ideas. He was a man of impeccable and blemishless character. He had the unmistakable stamp of strong and steady leadership backed by the united will of the whole nation—the vision and capacity to snatch opportunity out of trouble. He was a visionary with a difference. While his eyes were fixed on the objectives of his dream, his approach was realistic and down-to-earth starting with the immediate present and its realities. This pragmatic approach to human and political problems and issues of national interest restored the country's self-confidence, reactivated our will to be self-reliant and helped him to reach the zenith of power and glory. Jawarhalal Neheru studied Lal Bahadur well. He always regarded him as his closest colleague, true friend, philosopher and guide.

As Prime Minister, Shastriji inherited a legacy of host of unsolved problems—food shortage, rising prices, language, the Punjabi Sabha, internal dissensions and lastly, the problem of restoration, on a stable basis, of normal friendly relations with neighbours based on the renunciation of force for the settlement of international disputes, so that the resources spent on senseless fighting could be diverted for the economic betterment of the masses.

Responsibility brought out the best in Shastriji. He proved equal to the challenge, handled all these problems with singular fitness and consummate skill in circumstances of

unimaginable difficulty. His courage and self-confidence rose higher and higher as the tide of trouble swelled. He steered the country through internal difficulties and external aggression. Overestimating her strength and capacity as superior to that of India, Pakistan declared war against India foolishly, crossing international border in Chhamb area on September 1, 1965 when Shastriji was the Prime Minister of India. But though he was small and diminutive to look at, he stood bold, firm and determined for retaliation. The high inspiring words of Shastriji “Jay Jawan, Jay Kishan” worked like the most charming song and it produced miraculous echo throughout the country right from Kashmir to Kanyakumari. The Indian Army marched ahead towards Lahore on September 6 and crossed Jammu-West Pakistan border. Pakistan had to bow down, retreat and sign a pact at Tashkent on January 10, 1966 through the mediatorship of Russian leaders. Under Shastriji’s leadership the country emerged as never before, united and strong, willing and capable of defending its own integrity, freedom and sovereignty and also the cause of freedom and peace the world over. After his historic decision on September 6, 1965, to march ahead boldly, he emerged as a national hero—a leader acclaimed by one and all. He won victory for the Indian Army and added a glorious chapter to the military history of India. He saved the light of freedom, secularism and democracy from being extinguished in Asia and other parts of the world.

Within his frail and diminutive exterior, he possessed the will and nerve of steel. He stood unruffled in a crisis. He was not downcast by adversity nor carried off his feet by victory. He had a genius for striking a balance. Starting without any experience in international affairs, he bore himself with dignity and made a deep impression by his sincerity and goodness on world leaders

he met. His words were simple, direct and sincere. He was decisive. Diminutive in physical stature, he was a colossus in the world arena.

There never was a good war, or a bad peace’. Shastriji’s thoughts were akin to Benjamin Franklin. Lal Bahadur was essentially a man of peace and a staunch believer in democracy and socialism. A believer also in consensus, a patient listener and ever prepared for accommodation if it was in the best interest of the country, he did not let things drift beyond limit. He had the gift of distinguishing between what is practicable from what is desirable. His prompt decision to accept the ceasefire and his quick positive response to the Soviet Prime Minister Kosygen’s invitation to meet General Ayub Khan, the President of Pakistan at Tashkent were evident of a clear, decisive and firm mind’s quest for peace, which brought about the historic meet at Tashkent, the historic Tashkent Declaration and his greatest hour of triumph in the pursuit of peace in Asia and the world. Without sparing his strength Shastriji did everything to consolidate peace in Asia, to find ways to end the conflict between India and Pakistan and to establish good neighbourly relations between them, displaying astute statesmanship. It was to the solution of this task that his efforts were directed during the Tashkent meeting with the President of Pakistan, as a result of which an agreement was reached as expressed in the historic Tashkent Declaration. This was his last and greatest gift to India, Pakistan and the world.

It was most unfortunate for India that, in the great hour of triumph and height of glory in the pursuit of peace and understanding in Asia and the world and even before the ink in the historic pact-document was dry, Shastriji passed away on January 11, 1966 at 1.30 AM at Tashkent, Capital of the Soviet Republic of

Uzbekistan. The man who had worked indefatigably for peace and succeeded in creating a conducive climate and paving the way for it, breathed his last striving for peace and could not see the new chapter that was to open in the relations between India and Pakistan.

The Tashkent Declaration is a deed of historic importance to the Sub-Continent, and, in fact, to the entire world. President Radhakrishnan has said that the pledge Shastri took-with his life at Tashkent can and must be redeemed by all his countrymen, who have been left behind to carry his will and behest. Shastriji was convinced that “the people of India and Pakistan, at one with the other peoples of the world, will meet with satisfaction the results of the Tashkent meeting”.

*“Peace, hath her victories
No less renowned than war”.*

The Tashkent Declaration expressed the aspirations of all those who treasure peace on

earth. It meets the vital interests of people of India and Pakistan. It is a triumph of goodwill and the innate desire of all to settle disputes, not on the field of battle but at the Conference table. It is now for the people concerned to ensure that this Tashkent spirit prevails and that light is not dimmed by any unilateral acts of omission and commission.

At Tashkent, it has been truly said that humanity won a battle of peace, but lost a hero. Lal Bahadur Shastri, a Messiah of Peace, died a martyr in the cause of peace. To the very end of his life he stood and strove for peace not only between India and Pakistan but among all nations of the world.

Manas Ranjan Khuntia is working as Assistant Production Officer in the Information & Public Relations Department, Bhubaneswar.



*Hon'ble Chief Minister Shri Naveen Patnaik visiting Biju Patnaik Park
on 9.9.2009.*

Remembering Lokanayak Jaya Prakash Narayan



Smt. Chhabi Mohanty

Eminent freedom fighter, one of the spokesperson of socialist ideology, dynamic politician, the initiator of Total Revolution thought, the committed statesman for high idealism and social justice has influenced deeply the social fabric of India. His fight against injustice and exploitation has assigned a special place for him in the modern Indian history.

Some 80 (eight) kilometer from the historic Patna city, close to the banks of rivers Ganga and Ghagara, in the village Sitabadiara (now situated in Balia District of Uttar Pradesh) he was born on 11th October 1902 in an aristocratic family to father is Harsa Dayal and mother Phul Rani.

He was a student of Patna Collegiate School. After passing matriculation he studied in Suena College of Patna. He left his studies responding to the clarion call of non-cooperation movement of Mahatma Gandhi. Later on he passed I.Sc. examination from Bihar Vidyapitha. In 1920 he married Pravabati, the daughter of prominent lawyer Brajakishore, who was fighting for the interest of indigo farmers of Champaran.

In 1922 Jayprakash went to America for prosecuting higher studies. He got higher education there from Chicago, Wisconsin, California and Ohio. He had well understood the dignity of labour and during his stay at America he earned some money by casually working in

fruit gardens and restaurants. During his stay in America he studied the essays of world famous philosopher Karl Marx and was influenced by Marxist thoughts.

He returned in 1929 from America and worked as a Lecturer in Sociology in Banaras Hindu University. During that time in the political arena the appearance of Mahatma Gandhi opened a new chapter in the freedom struggle of India. He gave up Lecturership and participated in the freedom struggle. The 'Purna Swarajya' proposal was passed and accepted in Lahore Session of Indian National Congress on 31st December 1929. In 1930 Salt Satyagraha was started, when most of the Indian leaders were arrested by British Government. During this period, Jayprakash associated himself with secret organizations to keep intact the freedom struggle.

Jayprakash had profound regards towards Gandhiji but in some spheres he had differences with Gandhiji. In 1931 when Gandhi-Irwin Accord was signed, Jayprakash was not happy to postpone the non-cooperation movement by Gandhiji's decision. He was imprisoned several times during the freedom struggle in jails. Once, while going to Bombay from Madras he was arrested. While he was in Nasik Prison he came in contact with Achyut Pattabardhan and Minoo Masani. After release from the jail he and Acharya Narendra Dev

established All India Congress Socialist Party. Ideal and popular leaders like Ram Manohar Lohia, Kamala Devi Chattopadhyaya and Minoo Masani were his close associates.

Jayaprakash was an embodiment of indomitable courage and firm mind. He was arrested during the Second World War. First he was kept in Bombay Prison and later on transferred to Delhi and Hajaribag Prisons. Once he and his five associates absconded from the jail by scaling and the jail boundary by jumping from it. British Government announced awards to capture him. Jayaprakash was arrested from Nepal and again escaped from jail. Later on he was arrested from Delhi.

In the post-Indian election politics, Jayaprakash's Socialist Party could not achieve spectacular success. Jayaprakash was enquiring what could have been the alternative means of violence for the establishment of socialist ideology in India. He had actively participated in Sarvodaya movement pronounced by Vinoba Bhave and was endeavouring most for the financial development of innumerable landless people through Bhoodan movement.

One of the aims of Jayaprakash was to bring transformation in lives of hardcore criminals, who had deviated from the path of non-violence. He had realized to bring back those people to the national mainstream. Due to his sincere efforts the Decoits of Chambal Valley surrendered and hardcore decoit Sardar Madho Singh repented for his misdeeds. This affair is rare in modern world.

Jayaprakash had profound faith in self independence and democratic values. In 1975 the internal emergency situation shocked his mind. There were student movements in Gujarat and Bihar. During this period Jayaprakash gave the clarion call for 'Total Revolution' and was arrested

and fell ill. He was then admitted to Jaslok Hospital at Bombay.

In 1977, General Election to Lok Sabha was declared. Jayaprakash gave the call to all opposition parties to be united and to contest from one platform against Congress Party. Due to his sincere efforts all political parties combined and formed Janata Party. Due to his blessings this party achieved majority in 1977 General Election and came to power.

For the propagation of Socialist ideology and Bhoodan movement, Jayaprakash visited Orissa so many times. In 1939 he visited Orissa to preside over Provincial Youth Conference. In 1975 he visited Jharasuguda, Sambalpur, Angul, Dhenkanal, Cuttack and Bhubaneswar and addressed massive gatherings. Personalities like eminent leaders Gopabandhu Choudhury, Rama Devi, Manmohan Choudhury, Surendra Nath Dwivedy, Harekrushna Mahatab, Biju Patnaik and Rabi Ray were close associates of Jayaprakash.

Lok Nayak Jayaprakash breathed his last on 8th October 1979. The end came quietly and peacefully in the early hours of the morning at his modest home Kadamkuari, owned by the Mahila Charakha Samiti, which his wife Prabhavati helped to organize.

A fearless and indiscriminate society was the dream of Jayaprakash. Jayaprakash will be remembered for his Socialist idealism and fight to establish a society free from corruption.

Shrimati Chhabi Mohanty resides at the residence of late advocate N.C. Mohanty at Anandpur Town P.O.-Anandpur Dist. Keonjhar, Orissa.

Sadasiba Tripathy - A Gentle Colossus

Dr. Radhanath Behera

He was born with a proverbial silver spoon in his baby mouth, brought up in the lap of relative plenty, shed his life of ease for a great cause, shouldered a heavy mantle with a high degree of complacency and passed away in apparent ignominy.

Sadasiba Tripathy had his modest schooling in Nawarangpur and Jeypore and completed his teachers' training in Berhampur. Back home he began his career as a teacher in an elementary school and did the job, as his students recalled later, with deep satisfaction. His soul was stirred by the clarion call for the Swadeshi Movement, resigned the job and plunged into the great struggle for independence, unsure of its outcome. He was one of the trio, the other two being Radha Mohan Sahu and Radhakrishna Biswasray hailing from Jeypore. They spearheaded the agitation, led masses of men from rural pockets of the whole of Koraput and made Gandhi their icon. Post Orissa formation made him contest successfully in a Congress ticket for the State Assembly in 1937. Self Rule was



granted and again he was elected in 1946. He was drafted to the Ministry in 1948 and continued under different leadership as a Minister till 1956, after being elected in 1952. He was again sent to the State Assembly in 1961 (Umerkote Constituency) and 1967 (Nowrangpur Constituency).

In this context it may be mentioned that he was averse to the formation of coalition

Government with their political adversary, the Ganatantra Parishad, under the leadership of Dr. H.K. Mahtab. He saw only opportunism in this compromise. This dispensation hurt him deeply. He resolved to dissociate himself by resigning from the Assembly and even from the primary membership of the party. His contemporaries in Nawarangpur saw him donning the holy *gerua*-symbol of renunciation a step towards *sanyas* from the active political life. The emergence of the indomitable Biju Patnaik on the political scene change his course of life and he reconciled himself to join the haralding of another era. He sprang up

with renewed vigour, joined the Ministry and continued till he reached the pinnacle of success that any politician could dream of - to be the head of Government.

Sadasiba Babu had already garnered a reputation as an able administrator having spent quite a good number of years as a guiding star of Revenue, Excise, Forest, Civil Supplies and Transport depts. But the quintessence of his leadership was found in the Revenue Department where he proved himself worthy of it in his long stint. He had been born in an agriculturist family and had acquainted himself with the vagaries of nature—from heavy down pour to scanty rain fall, their impact on the rain-fed land and the much dependant tribal poors where the half clad tribals to survive on debt thrust by the money-lenders and at a soaring interest-rate. When clearing the debt became too stupendous, they had to dispose the patch of land and to court bonded labourship for generations. The relic of the pre-independence era still persisted thereby reducing most villagers and tribals to penury. Such inhuman exploitation was unbearable on his part. Since it might take years to train them to alleviate their lot, he devised an Act-Regulation 2 of Orissa 1956, which explicitly retained the right of ownership of a tribal, which forbade him to dispose off his land even in direst stringency. This Act was heavenly-sent and through it the tribals are now able to protect their land from the rapacious urban landlords and other greedy rich, one might anticipate a Vinoba with his Bhoodan Movement or the Land Ceiling - Surplus Act of Government of Orissa. Such was his foresight and this Act, providential as it was, immortalised its founding father. It was also instrumental for laying the edifice of the laterday law related to the bonded labour which extricated a labourer from eternal bondage, embraced due to non-payment of even a small amount borrowed.

The Abolition of Zamindary was no mean feat. It paved the way for fair distribution of wealth and land from the haves to the have-nots. One might see the irony of its implementation - Sri Tripathy himself was its great victim having been deliberately divested of hundreds of acres of ancestral property in one stroke. Thanks to his senior mentor the saintly Naba Krushna Choudhury for espousing and implementing this great cause.

Destiny played a role in his elevation to the Chief Ministership of Orissa in 1965. This period was remarkable in many ways. Almost all ministerial colleagues had resigned as they could not succeed in their design to make him relinquish the exalted office. Thanks to the party high command, notably the Congress President, K. Kamraj Nadar, who doused the fire of embitterment and cautioned that the mass resignation, if not withdrawn instantly, would be accepted. This firmness strengthened Tripathy and he continued till the end of the term. Though survived the political onslaught, he suffered a major heart stroke that rendered him immobile for a pretty length of time, which signalled that his quitting the burden was round the corner. The media was rife with speculation. Several proposals were doing their round—from Dr. Mahtab to Biju Patnaik, Biswanath Das to Nilamani Routray. A bed-ridden Chief Minister was not spared by the revolting student mass concurrently agitating for establishing a university each at Berhampur and Sambalpur. He assured them, once for all, that if at all a university would be set up at one place, the other would not be deprived of it. There would emerge two universities, if circumstances favoured. That he could establish two universities in one stroke, despite the centres forbiddings, bears testimony to his sagacity and leadership.

It is not possible to chronicle his achievements from electrification of Lord Jagannath Temple at Puri to promulgating Oriya as the official language of the State, to chairing a Committee to publish District Gazeteers of Orissa, to leasing the Government Land for setting up the Barbati Stadium for promoting games/sports among the young men and women of the State and so on. All these and many more would bear witness to the stewardship, to his clean image and honest work. Several Commissions- Saraju Prasad, Mudholkar, Khanna, to name to a few were set up, to inquire into the alleged misdeeds, acts of nepotism and charges of corruption. While other political figures were hounded, he emerged unscathed, thanks to his adherence to lofty Gandhian principles which he pursued till his end.

The split in Congress was a severe blow to all veterans. They could not easily give up their culture in the wake of a new current of thought that threatened to uproot the decaying banyan tree. They had to give way to the youthful force sweeping across the whole country. That marked the beginning of an end and the end was inevitable. Sri Tripathy became almost alone in his crusade and quite expectedly was unseated in the subsequent elections beginning with 1971 and running through 1980. The leader had very few followers. He should have gracefully quit politics,

but his advisers thought otherwise. The old race-horse was pushed into the fray without any sign of winning. Tired and hurt, Sri Tripathy chose to spend his final days at his beloved Puri Cottage. But the pain of hernia prevented him. At last, much against the medical advice, he insisted on an early operation. The old heart could not resist the trauma and he succumbed to it in the special cabin of the SCB Medical College, Cuttack on 09.09.1980.

the body reached his native Nawarangpur town quite late. The carriage bearing the body was stopped everywhere enroute. Admirers swelled by leap and bounds to have a last *darshan*. Nature too shed tears through torrential rain. The body covered with the national flag was put on the funeral pyre amidst gun-salute and shouting of *Sadasiba Tripathy Amar Rahe*. Soon it was reduced to ashes by the devouring flames. The gentle colossus remained in memory and this writer a callow youth then and had spent a good number of days talking to him is now privileged to put this portrait from memory as a homage to a great man who wrote his name in the Book of Angles.

Dr. Radhanath Behera, a retired College Principal, lives at Medri Street, Nawarangpur-764059.



Hon'ble Chief Minister Shri Naveen Patnaik reviewing the Weavers Package at Secretariat on 9.9.2009. Smt. Anjali Behera, Minister; Textiles and Handlooms and Shri Satya Prakash Nanda, Addl. Chief Secretary-cum-Development Commissioner are also present.

Dr. Sadasiv Tripathy So He Is Great

Lalit Mohan Patnaik

Dr. Sadasiv Tripathy was born on 21 April 1910. As such his birth centenary will be observed with much pomp and ceremony on 21 April 2010 by the people of Odisha. Many literary, cultural, social organisations of undivided Koraput district as well as Odisha have already started activities for publication of souvenirs, meetings, competitions among college and school students.

21st February is a great day. It is the holy birthday of the Mother (Dibyajanani Srīma, the executive power of Atīmanas Shakti). On this day, Sadasiv Tripathy was lucky enough to become the Chief Minister of Odisha i.e. on 21st February 1965 and he continued as such upto 8th March 1967.

Dr. Sadasiv Tripathy was a teacher before coming to politics. He was really a freedom fighter. He had resigned from teachership and joined actively in the freedom movement and had been imprisoned as freedom fighter. He was in the same Jail at Berhampur with the reknowned freedom fighter Laxman Nayak.

He was the seventh Chief Minister of Odisha. He had kept in his hand the important departments like Finance, Industry, Planning and Coordination, Mines, Irrigation, Energy, Forest, Panchayati Raj, Child Welfare and Revenue. Land Reformation Act was the utmost key milestone of his political career. He will be ever remembered for this contribution.

Berhampur University, Sambalpur University, Sunabeda Mig Factory, Rourkela Steel Plant, Electrification of Lord Jagannath Temple, Puri are the topmost four great golden contributions of Dr. Sadasiv Tripathy.

Nabarangpur is proud of her immortal son, for his simplicity. He was not hankering after power. Self publicity was his allergy. He was away from any kind of bribes, scams etc. He had no black money at all. It is strange enough that his living house where he was born is as it is for two decades. No repairing, no new construction, no up to date building has been built, though he was the Chief Minister of Odisha. Now a days if one becomes a political power-holder, he builds new costly buildings overnight. But nobody will believe unless one comes to Nabarangpur and sees the dwelling place of Sadasiv Tripathy, ex-Chief Minister in his own eyes. It is strange but true.

He was honest to such an extent that he denied to receive a very costly car being offered by a mines owner as bribe. To-day this type of denying is out of imagination, out of thought, out of dream. He led a highly sound moral character throughout his life. He was truthful. He was sympathetic. He was a lover of tribal people. He was well-wisher to the poor and needy. He loved pandits, teachers, artists, poets and writers very much. He was like a friend in need to the common people.

Dr. Sadasiv Tripathy's life, service, work, thought, contribution are ideals and like a light house to the future generation. People of Nabarangpur feel proud for him. His motherland is proud for giving birth to a great soul. So great Nabarangpur, so great Sadasiv Tripathy. Our hearty tribute to the greatman, great soul Dr. Sadasiv Tripathy who is ever memorable.

Lalit Mohan Patnaik lives at New Tank Street, Nabarangpur - 764059.

Dr. Sadasiba Tripathy as a Freedom Fighter

Dr. Bijaya Kumar Misra

Dr. Sadasiba Tripathy is the worthy son of Nabarangpur. He was the Chief Minister of Orissa from 1965-67. He was born a hundred years back. This is the birth centenary year of Dr. Tripathy (i.e. in 1910). Then India was under British Rule. When he became young he dreamt and worked for the independent India. The researcher has highlighted the role of Dr. Sadasiba Tripathy in National Freedom Movement of India through this short article.

Mahatma Gandhi started the Freedom Movement in India against the Britishers after his return from South Africa. His Civil Disobedience Movement had an impact on the minds of the freedom fighters of undivided Koraput District. Being inspired by the call of Gandhiji, the leaders of undivided Koraput District opened a branch of Indian National Congress. Sri Radha Krishna Biswasray (who was then known as Gandhi of Koraput), Sri Radha Mohan Sahu and Sri Sadasiba Tripathy were the founders of Congress organization in Koraput district. Sri Biswasray divided the work among themselves. Accordingly Sri Sadasiba Tripathy was to organize the movement in Nabarangpur area (Sri Biswasray worked for Koraput and Sri Radha Mohan Sahu worked for Jeypore and Malkangiri area). At that time Sri Tripathy was a Science Teacher at Jeypore High School. Being inspired by Sri

Biswasray he left the job. At that time he was residing at Sunari Street, Jeypore and his house for a short time became meeting place of freedom fighters. So as per the decision of Congress leaders Sri Tripathy left Jeypore and came back to Nabarangpur for organization of Congress work. Then Nabarangpur became his work place.

Sadasiba Tripathy became an active member of the Indian National Congress. He paid four Annas as subscription towards his membership. He also started wearing khadi dress and followed Mahatma's principles (like prohibition, truth, non-violence etc). It became a news in Nabarangpur area when Sadasiba joined the Indian National Congress. Sri Sadasiba inspired other leaders of Nabarangpur area. Among them were Sri Laxmi Chandra Das, Sri Sadanand Mohanty, Sri Anaji Rao, Sri Jagannath Tripathy, Sri Simanchal Behera, Md. Baji, Sri Raghunath Choudhury and many others. Some of the leaders from outside Nabarangpur were also inspired by the call of Sri Tripathy. Sri Rabi Singh Majhi, Sri Bali Pujari, Sri Balaram Kalar of Umerkote, Sri Raidhar Jani, Sri Sanu Majhi of Dabugaon, Sri Madhab Pradhani and Sri Syam Sundar Pradhani of Baghsiuni, Sri Miru Harijan of Patri were among them who joined the freedom movement.

The year 1936 was a landmark in the history of Orissa. On 1st April of that year Orissa became a separate province. Under Government of India Act 1935 Provincial Assemblies were set up. For Orissa Provincial Assembly elections were conducted. There were three seats for undivided Koraput District. Those seats were Koraput, Jeypore and Nabarangpur. From Nabarangpur seat Sri Sadasiba Tripathy contested through Congress ticket. His contestant was Sri Harihar Misra and Sri Sadasiba Tripathy became victorious in this election.

For the training of Congress workers Sri Radha Krishna Biswasray started an Ashram in Nuaput near Jeypore. It was just like the Sabarmati Ashram of Mahatma Gandhi. The Ashram started in the year 1938. In the first stage it was proposed to train 350 Congress workers. From Nabarangpur Sri Sadasiba Tripathy, Sri Laxmichandra Das, Sri Raghunath Choudhury and others attended Nuaput Ashram Training Centre. Sri Biswanath Dash, Maa Ramadevi, Sri Naba Krushna Choudhury, Smt. Malati Devi and other eminent freedom fighters visited this Nuaput Ashram.

At the national level a significant event took place. For the post of Congress President Netaji Subash Chandra Bose contested against Mahatma Gandhi's candidate Dr. Pattabhi Sitaramaya. After the training from Nuaput the Congress leaders of Nabarangpur went to Cuttack to cast their votes for Congress Presidency in 1938 with 26 members of Nabarangpur Sri Sadasiba Tripathy went to Cuttack. It is to be noted here that Netaji Subash Chandra Bose defeated Pattabhi (Mahatma's candidate).

From 1939 onwards Sri Sadasiba Tripathy worked tirelessly for Congress. He

moved from village to village to spread Gandhiji's message. At that time 2nd World War started. England became a party to it. Sri Tripathy convinced the people not to pay tax or war donation to Government. He also joined the individual Satyagraha, called by Mahatma. He initiated people to spinning and mobilized them to take oath on Gandhiji's principles. When his name and fame spread as an active freedom fighter he was arrested by the police for his activities. Sri Tripathy was imprisoned in Nabarangpur Jail and then sent to Berhampur Jail. At that time the atmosphere of Jail was worst for the prisoners. He raised voice against the prevailing unhealthy environment of jails and bad behavior of Jail officials. There in the Jail he met Laxman Nayak who was later hanged.

For his role and achievements in the freedom struggle of Motherland India, Sadasiba Tripathy was awarded Honorary Doctorate degree by Berhampur University.

References :

1. Dr. B.K.Misra - Political participation of Tribals & Their Development (unpublished Ph.D thesis 1997)
2. Dr. B.K. Misra - The Role of Tribal People in Freedom Movement (un published M.Phil. Thesis-1980)
3. Dr. J.K. Baral & Dr. B.K.Misra-Role of Tribal Woman of Koraput District in Freedom Movement-1997.
4. S.C. Misra - Biplabi Laxmi Chandra Dash – 1985
5. Dasarathi Nanda - Saheed Laxman Naik - 1980

Bijay Kumar Misra is the Head of the Department of Political Science, Nabarangpur College, At/P.O./Dist. Nabarangpur.

Sadasiva Tripathy : An Ardent Student of G.Ramdas, the Great Teacher and Historian

Kornel Das

G. Ramdas was a graduate of Colonial era, who preferred to be a Teacher during the time when Matriculates were offered the post of Tahasildar with a monthly salary of Rs.25. He initiated the first High School along with few colleges in the Jeypore State under the Visakhapatanam district of Madras Presidency. In those days school teachers need to be all rounder and thus he was teaching all subjects including Oriya and Telugu to the students. He laid the discipline in schooling and had built a robust library in those days. He inspired few of his pupils to take up the profession of teachership and later Sri Navina Patro, his student upscaled high schools in Nawrangpur and Kotpad and equally worked hard to strengthen the Jeypore High School.

Ramdas, popularly known as Headmaster, was a well to do person with a large land holding, now in urban area of Jeypore town and is named Prasad Rao Petta. He was a man of great learning and a Research Scholar of eminence and was admired by his students for his great leaning towards English literature. His works on Gadaba(1931), Paraja (1931) and Aboriginal tribes in Ramayana (1925) and his contribution to Kalinga history in the form of identification of Kalinga capital and identification of Erandapalla with modern Erandapalli in Srikakulam as cited in Samudra Gupta's South expeditions and his archaeological excavation of Podagada in 1925 and many more will remain as lead papers for all time to come.

He was a hard task master as well; all his students had to come by heart the poems of great English literature and so also to recite the Shakespeare dramas in class room. I have seen some of his students still reciting the poems and drama after 50 years. He never compromised to good English that is amply reflected in his writings. His students inherited the same temperament all through. Equally Ramdas and Mrs Ramdas loved the students and at home all were invited and take his help to learn better. This was the other side of the picture where he started building great persons through his personal endeavour. He used to give company to all eligible students for Matriculation examination to Visakhapatanam. Many eminent physicians, administrators and politicians of great character and repute in the post-independence period from Jeypore who contributed selflessly in building Orissa and India at large were the students of G Ramdas. Notable among them were Dr. Radhabalava Samantaroy, Dr. D. Kameswar Rao, Sri. Laxmana Panda, Sri Balya Krishna Patra, and many more including Sri Raghunath Patnaik, the former Finance Minister to Government of Orissa.

It was pre-Independence era. New Orissa State had born and many feathers had ruffled and gradually the youth were getting ready to join the National movement advocated by Mahatma Gandhi. Ramdas had great influence on his students and this great historian had infused the value of Swaraj in the young minds. Soon his students like Sri Radhakrushna Biswasray after a

brief period in Government service joined the Swaraj Andolan in Koraput district. Young Sadasiva Tripathy also joined the group for Swaraj and was the Team Leader. Sooner or later Radhamohan Sahu and his younger brother Neelakantha Sahu, Ananta Nanda and Sardar Gyan Singh joined the movement. This group first opened the challenge to the Jeypore State by burning the Jeypore State Flag flying inside the Jeypore Maharaja's Palace and organized the first meeting in front of the Singhdwara. This was hard nut to break; the main role was played by Gyan Singh, Ananta Nanda and Sahu brothers. The rebel openly started with later visits to the Ashrama of Gandhiji in Sabarmati. They were all the students of Ramdas. The Congress Party of Koraput took the birth under the leadership of Mahatma Gandhi and the team was led by Sadasiva Tripathy. Biswasray was an ardent organiser, spent days and nights in remote villages to organize the party structure and brought awareness of independent India in the minds of the tribals and the general public. This was a very risky job as the Jeypore ruling family's interest was at stake and they did not cooperate and rather were very hostile to all those involved in the movement and their family members were constantly harassed. They were holding the law and justice and it was not a simple task without grave risk from the British administration and the King.

Nanda was at Jeypore holding a small business and he was thus in advantageous position to contact people and collect information in normal daily business and transmitted all the future course of action to all party members very secretly. One day the British Superintendent of Police of Koraput took all the Nanda members including the employees and thrashed them severely in the Jeypore police station. This was how they were treating the common people. Sadasiva Tripathy was the Team Leader and was the brain behind all local strategies and all members of the Team had faith and respect on his skills and leadership. This was well reflected

in the school days of Sadasiva, who was a well behaved, disciplined student in the class; his gentleness was admired by Headmaster G. Ramdas and usually he was in his home and invited to lunch or dinner and some change from Duff's Hostel life. Once a student in the class slapped young Sadasiva; he complained to Ramdas who in turn instead of punishing the boy advised Sadasiva to understand that the boy in question is hot-tempered and he should know how to handle such persons than going in direct confrontation. Sadasiva thus became wise in handling tough situations throughout his life and used to joke to his classmate "that I learned from your slap and I will not forget". Sadasiva's style of functioning in the party was often referred as royal attitude, that means he was systematic and did not do much physical labour to go around villages but had the skill and capacity to control and influence people by sitting in his home or office. He was Leaders' Leader. He was very benevolent to poor and needy and even financed education for poor and bright students, which he never expressed. He never forgot his friends, whenever he used to pass Jeypore. He never forgot his late friend Behera's house who was his fellow Jail mate during struggle for Independence.

Sri Sadasiva Tripathy was the unique politician who made his mark in the history of Revenue Law Reforms for the State of Orissa and scaled upto the position of Chief Minister of Orissa and in the course lost 270 acres of land that he had inherited from his parents. This simple measure can give the clear picture and personality of Sri Sadasiva Tripathy of Koraput district. This bold Freedom Fighter of Koraput will remain for ever in the heart and history of Koraput and Orissa for his great contribution and selflessness to the extent that he never groomed his family members to occupy political positions.

Kornel Das lives at B-14/ BJB Nagar, Bhubaneswar-751014.

Status of Education of Scheduled Tribes in KBK Districts of Orissa

Atal Bihari Das

Introduction:

The role of education in economic development is well recognized by several research studies, economist, Constitution of India, the national policies of education and the five-year plans. The 93rd constitutional amendment made education a fundamental right. The national policy on education, 1986, modified in 1992 envisaged free and compulsory education for all children up to the age of 14 years before the onset of 21st century. To this end a number of policies and programmes have been launched. It is widely realised that the society with higher percentage of literates has higher levels of development. Primary education takes a lead in economic development, as the return to primary education is the highest followed by secondary and higher education. In India the social rate of return is 29.3% in primary education compared to 10.8 % in university education (Tilak, 1994). However, the efficiency and equity effects of education depend upon the level of both quantitative and qualitative expansion of schooling. Since elementary education has the highest impact on generation and distribution of income, there is a greater need for expansion of elementary education particularly in a less developed region and among backward population. The typical demographic composition of the state (SC and

ST constitutes slightly less than 40% of its population) contributes significantly towards its overall backwardness.

It is well documented that there is a positive impact of literacy and basic education on economic productivity of the recipients of education. Many empirical research on this topic from a handful of studies found that the number of years of schooling (mostly primary schooling) is closely related with income or job productivity. For example in the agriculture sector, studies have supported the notion that an additional year of primary schooling can directly affect wages and farm output. Studies also suggest that an additional year of schooling leads to economic returns that are greater than the cost of education itself (Haddad et.al, 1990). In view of the contribution of education in general and primary education in particular to the overall development of the recipients of education we have made an attempt to examine the educational development of the scheduled tribe population in the state of Orissa with particular reference to tribes in KBK districts.

The present paper makes an attempt to discuss the issues relating to quantitative and qualitative aspects of growth of elementary education in Orissa with a special reference to the scheduled tribes of KBK districts. In view of the extremely backwardness of these districts in

respect of almost all the developmental indicators, Government has made the districts a special group i.e KBK in order to putting more efforts for mainstreaming them in developmental process. KBK districts constitute 8 districts with more than one third of their population being scheduled tribes. The incidence of illiteracy among scheduled tribes in these districts is about 62 per cent and this is more pronounced among the females and in rural areas. The female literacy is found to be as low as 7.5 per cent in 2001 census among the scheduled tribes in one of the KBK districts (Malkangiri). All these together show a gloomy picture of educational development in KBK districts of the state.

Status of Education of Scheduled Tribes of KBK Districts in Orissa

Literacy rate

Overall literacy rate:

Literacy is considered as one of the crucial indicators of education. There is a significant difference between a literate and an illiterate person in respect of overall attitude of the concerned individuals. The overall literacy rate in Orissa has increased by about 15 percent, between 1991 and 2001 from 49.09 to 63.61 percent.

District-wise analysis of literacy rate indicates that as per 2001 census, the overall

literacy rate is the highest in Khurda district at 80.19 percent (Non-KBK District) and lowest in Malkangiri District at 30.53 percent (KBK District). The male literacy rate is the highest (88.96 percent) in Jagatsinghpur district and the lowest (40.14 percent) in Malkangiri district (KBK dist), the female literacy rate is the highest (71.06 percent) in Khurda district and the lowest (20.67 percent) in Nawarangpur district (KBK). Thus, the male, female and overall literacy rates are the lowest in the KBK Districts of the state while they are the highest in the non KBK districts of the state.

Scheduled tribe literacy rate:

As expected, the level of literacy among scheduled tribes has always been a matter of concern. In the case of Scheduled Tribes in Orissa, it is in fact much lower than for the rest of the population. As per the Census 2001, around 39.60 percent of the tribal population in the state was literate as against the State average of 63.61 percent.

There exists significant regional disparities across KBK districts and across population. In the KBK districts the overall literacy rate varied from the lowest of 30.53 percent to the highest of 62.84 percent in 2001 for all population. The corresponding literacy for ST population was 14.69 percent and 52.16 percent.

Table: 1. Literacy rate in KBK districts in 2001 census

SL NO	Districts under KBK	NST Literacy Rate			ST Literacy Rate			Overall Literacy Rate		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Bolangir	74.13	43.18	58.81	61.96	25.52	43.64	71.67	39.51	55.70
2	Kalahandi	66.91	34.15	50.58	51.7	17.15	34.17	62.66	29.28	45.94
3	Koraput	63.9	39.75	51.95	29.25	8.38	18.68	47.20	24.26	35.72
4	Malkangiri	63.46	39.23	51.55	22.05	7.50	14.69	40.14	20.91	30.53

5	Nawarangpur	59.04	32.14	45.73	36.86	11.12	24.00	47.04	20.67	33.93
6	Nuapada	62.49	30.94	46.69	50.69	16.18	33.12	58.46	25.79	42.00
7	Sambalpur	67.88	42.67	55.31	31.16	10.07	20.23	48.18	24.56	36.15
8	Sonepur	79.95	47.46	63.99	69.53	34.29	52.16	78.94	46.17	62.84
	KBK	68.49	38.99	53.86	39.06	13.08	25.9	57.55	29.10	43.33
	Orissa	81.69	58.04	70.06	51.48	23.37	37.37	75.35	50.51	63.08

Source: Census of India, 2001

Moreover, literacy among tribal females is depressingly low. Three out of four tribal females are still illiterate (average literacy rate for tribal women as per the 2001 Census is less than 24 percent i.e 23.37 percent) even after more than 5 decades of planning and development. Female Literacy was extremely low in most of the KBK Districts. The female literacy rate is found to be less than 8 percent in Malkangiri district (KBK districts), which is the lowest in all the districts and across population.

Elementary Education

Article 45 of the Indian Constitution requiring the state to provide within a period of 10 years from the commencement of the Constitution and the Supreme Court ruling in 1994 that 'a child has a fundamental right (Article 21A states education as fundamental right) to free education up to age of 14 years' clearly enjoin

the state government about its responsibility in this connection.

Growth of the number of Institutions:

After Independence, there has been a significant growth in the number of schools in the state. In 1947-48, the number of lower primary and upper primary schools was 6814 and 286 respectively. By the year 2007-08, these numbers increased substantially to 52742 and 19680 registering a compound annual growth rate of 3.47 percent for primary schools and 7.31 percent for upper primary schools. The compound growth rate of primary and upper primary schools from the year 1993-94 to 2007-08 is given in Table 2 for the KBK districts.

The compound growth rate (CGR) of schools in KBK districts is presented in Table 3 from the year 1993-94 to 2007-08.

Table-2: School related indicators in KBK districts and Orissa for Primary and Upper Primary schools

Districts under KBK	Growth of schools in % (1993-94 to 2007-08)		School per 1 lakh population		Habitations served by schools (2002-03)				Primary/UP ratio (2007-08)
	Primary	Upper primary	Primary	Upper primary	Primary (2000-01)		Upper primary		
					Within 1 km	Beyond 1 km	Within 3 km	Beyond 3 km	
Bolangir	0.04	5.35	145	29	97.14	2.86	72.63	27.37	2.64
Kalahandi	2	4.91	128	27	80.05	19.95	58.52	41.48	3.66
Koraput	2.61	6.57	157	20	69.16	30.84	43.91	56.09	4.989
Malkangiri	2.84	5.74	178	20	65.53	34.47	33.6	66.4	5.29

Nabarangpur	1.75	6.59	122	20	80.03	19.97	56.67	43.33	4.45
Nuapada	4.91	5.92	138	31	79.1	20.9	59.83	40.17	3.27
Rayagada	3.91	6.92	178.2	22	66.05	33.95	30.3	69.7	4.993
Sonepur	1.66	4.99	140	32	93.58	6.42	78.87	21.13	2.36
KBK	2.25	5.77	146	25	77.09	22.91	51.6	48.4	3.82
ORISSA	1.71	4.3	114	27	82.93	17.07	73.55	26.45	2.68

Source: Directorate of Elementary Education, Directorate of Economics and Statistics, Orissa and Seventh All India Survey (2002), New Delhi.

Habitations served by Primary and UP Schools

It is argued that schools by habitations are a better indicator than the mere growth in the number of schools. As per the national norms agreed to by the state government, a primary school is required to be provided in all habitations having a minimum population of 300 and within a walking distance of one kilometer. In case of habitation located in hilly areas with minority population, the norm is 200 people. According to the Seventh All- India Educational Survey (2002), 82.93 per cent habitations had primary schooling facility within one kilometer of walking distance from the home of the child. So there are still 17.07 percent habitations do not have schools within a distance of one kilometer.

In case of KBK districts about 22.91 percent of the total habitations are not served by a primary school within a walking distance of 1 km. Within KBK districts the highest percentage of un-served habitations was found in Malkanagiri (34.47%).

As far as upper primary schools are concerned the Government of Orissa has set a norm of opening one upper primary school within a distance of 3 kilometer in every habitation having a population of 500. As per Seventh All India Survey (2002) the percentage of habitations

served by UP schools within 3 KM was 73.55 in the state. In case of KBK districts it was only 51.60%. The percentage of habitations having schooling facility at primary and upper primary stage is given in Table -2.

Schools per one lakh Population

The number of primary schools per one lakh population in the KBK districts is 146 as compared to the state average of 114. Within KBK districts the highest number of schools (178.2) is found in Raygada district while the lowest number of schools (122) per one lakh population is found in Nawarangapur district. In case of upper primary level the number of schools per 1 lakh population is 25 and 27 respectively for KBK and Orissa respectively (Table-2).

Here one may raise a question that in spite of the larger number of schools in the KBK districts why are these districts placed lowly in the state in respect of development of education? It is generally believed that the supply of schools to the scheduled tribes is likely to enhance their enrolment and overall quality of education. But contrary to this belief it is found that despite the existence of very large number of schools in the KBK districts they are lagging behind their counterparts in respect of education. Here mere existence of schools may not enhance the standard of education unless (i) it is properly equipped with

the teaching and other inputs and (ii) the children should come and attend the school. It is noticed that in the remote tribal areas the teacher absenteeism is a regular phenomena and this affects largely the quality of education and regular attendance of ST children. Lack of basic infrastructure (roads, electricity and other communications) in the area as well as in the schools also is responsible for poor attendance in the schools by the teachers and students. Most of these schools have become dysfunctional in tribal areas.

Ratio of Primary to Upper Primary Schools

Government has fixed a norm that there needs to be one upper primary school for every two primary schools. Such ratio calculated for 2007-08 reveals that there is one upper primary school for 2.68 primary schools for the state. In KBK districts the ratio of primary to upper primary schools in the year 2007-08 is 3.82. From Table-2 it is observed that across KBK districts it is noticed that Malkangiri (5.29) has the highest ratio followed by Rayagada (4.993) and Koraput (4.989).

Growth of Enrolment

The KBK districts has made a significant progress with respect to enrolment. During the year 1993-94 to 2007-08 the compound growth of enrolment in primary education is 5.3 for STs and 0.3 for non-STs compared to the state average of 4.4 and 0.6 for STs and non STs respectively. The corresponding growth rate in case of upper primary is 6.4 for STs and 2.1 for non-STs compared to the state average of 5.1 and 2.4 for STs and non-STs respectively. Thus the compound growth rate of enrolment of STs of KBK districts is more than the state average. The compound growth rate of enrolment across KBK districts is given in Table 3.

Table 3: Compound Growth Rate (%) of Enrolment in KBK districts of Orissa(2007-08/1993-94)

Districts under KBK	Primary		Upper Primary	
	ST	Non ST	ST	Non ST
Bolangir	1.3	0.8	7.7	1.2
Kalahandi	2.0	-3.0	1.8	3.0
Koraput	8.5	1.9	6.3	1.1
Malkangiri	7.8	3.7	5.9	-1.9
Nawarangpur	-1.3	-4.5	10.6	-0.2
Nuapada	4.7	2.1	2.9	0.7
Rayagada	10.5	2.8	20.6	6.0
Sonepur	0.9	0.1	5.8	5.2
KBK (All dists)	5.3	0.3	6.4	2.1
ORISSA	4.4	0.6	5.1	2.4

Source: Directorate of Elementary Education, Directorate of Economics and Statistics, Orissa

Net Enrolment Ratio

The absolute figures on enrolment and their high growth rates donot say much about the progress of enrolment in education. To assess the real progress of enrolment it is important to look at the percentage of children of school going age group who are really attending the school and is reflected by net enrolment ratio (NER). There is an overall increase in the proportion of school going age group children in the state. But it is observed that NER is lower in case of STs than the non-STs. It is further observed that NER is lower in KBK districts than the state average across all age groups and gender (Table-10). There is a constant decline in NER when children go to higher age group. It is further observed that the NER among ST girls at higher age group is depressingly low.

Table-4: NER in KBK districts of Orissa

Age group	Community	Region	2004-05			2007-08		
			Boys	Girls	Total	Boys	Girls	Total
6-11	NST	ORISSA	95.26	94.56	94.92	97.23	97.2	97.21
		KBK	92.43	89.54	91.02	95.57	94.93	95.26
	ST	ORISSA	87.76	84.03	85.97	92	92.27	92.13
		KBK	84.77	80.42	82.68	90.32	90.05	90.19
11-14	NST	ORISSA	86.68	85.53	86.14	95.07	94.32	94.71
		KBK	83.03	77.59	80.51	91.74	86.95	89.53
	ST	ORISSA	76.37	70.15	73.55	83.56	81.3	82.52
		KBK	70.08	60.28	65.81	74.72	70.6	72.87
6-14	NST	ORISSA	92.75	92.06	92.42	96.56	96.33	96.45
		KBK	89.94	86.83	88.44	94.31	92.43	93.42
	ST	ORISSA	85.11	81.32	83.32	89.84	89.69	89.77
		KBK	81.79	77.2	79.61	86.59	86	86.31

Source: www.opepa.in

Gender Parity Index in Enrolment

The enrolment of boys is always found to be higher than that of girls. We have estimated the gender parity index in enrolment, which shows the ratio of girl's enrolment to boy's enrolment. District wise estimates of gender parity index indicate that the index is always lower for ST than that of non-STs. Across the selected districts, Nuapada(1.09) and Kalahandi(0.98) got the highest GPI for ST and non - ST respectively where as Malkanagiri got the lowest GPI in case of both ST (0.87) and Non ST (0.66) at primary level. In case of upper primary level the lowest GPI is found in Nuapada (0.78) for non-STs and Malkanagiri (0.63) for STs. The highest GPI in KBK districts at UP level is found in Sonepur districts for both STs (0.95) and non STs (0.99). Over the years there is considerable improvement in the GPI for both tribals and non-tribals. But

the tribals are still behind their non tribal counterparts in respect of girls' education. It is observed from Table-5 that in the KBK districts the GPI is more than the State average in the case of lower primary schools but in case of upper primary it is still below the state average for STs and non-STs. District wise GPI within the KBK districts is given in Table-5. The lower enrolment of girls than boys among the scheduled tribes in the upper primary level in the KBK districts is attributed mainly to (i) extremely low female literacy rate (among tribal females), (ii) low percentage of female teachers, (iii) low percentage of tribal teachers and (iv) high dropout rate of girls etc. Many studies have documented that the girl's education is significantly influenced by mother's education. The low female literacy among the tribal females may be one of the significant factors for low enrolment of ST girls.

Table-5: Gender Parity Index in KBK Districts

Districts under KBK	Lower Primary				Upper Primary			
	1993-94		2007-08		1993-94		2007-08	
	Non ST	ST	Non ST	ST	Non ST	ST	Non ST	ST
Bolangir	0.81	0.67	0.94	0.94	0.65	0.40	0.89	0.85
Kalahandi	0.58	0.63	0.98	0.95	0.36	0.60	0.79	0.73
Koraput	0.41	0.61	0.93	0.99	0.21	0.68	0.81	0.70
Malkangiri	0.69	0.57	0.66	0.87	0.63	0.50	0.86	0.63
Nawarangpur	0.57	0.57	0.91	0.99	0.60	0.42	0.81	0.66
Nuapada	0.73	0.64	0.91	1.09	0.57	0.33	0.78	0.79
Rayagada	0.67	0.53	0.86	0.93	0.77	0.60	0.84	0.70
Sonepur	0.83	0.50	0.93	1.04	0.50	0.50	0.95	0.99
KBK	0.65	0.60	0.90	0.95	0.49	0.53	0.85	0.74
ORISSA	0.72	0.64	0.89	0.93	0.62	0.56	0.91	0.79

Source: Directorate of Elementary Education, Directorate of Economics and Statistics, Orissa

Teachers

Among the various factors that influence the quality of education and determine its contribution to national development, the quality and character of teachers are undoubtedly the most significant (Education Commission 1968). Thus, teachers occupy a vital position in the education system and contribute to its efficiency and effectiveness (Panda, 2004).

Most of the tribal children may be slower learners due to the fact that majority of the tribal children are the first generation learners and have least scope of support and help from parents and relatives who are generally illiterate. Hence the role of teachers assumes significance towards these children.

Pupil-Teacher Ratio

One of the important indicators that influence the classroom transaction is the number of students per teacher. In 2006-07 the overall pupil-teacher ratio in lower primary and upper primary schools are 39 and 47 respectively in the state, indicating that the state has yet to fulfill the national norm of 35 students per teacher at the elementary level. On an average only eight districts (27%) in primary level and seven districts (23%) in upper primary have less than 35 students per teacher in the state. In case of KBK districts the PTR in Primary and UP schools are 41 and 47 respectively in 2006-07. PTR across KBK district is given in Table-6.

Table-6: Pupil Teacher Ratio in Primary and UP Schools of Orissa

Districts under KBK	Primary		UP	
	1993-94	2006-07	1993-94	2006-07
Bolangir	29	39	25	58
Kalahandi	32	49	20	60
Koraput	22	32	44	33
Malkangiri	26	44	30	28
Nuapada	29	51	13	41
Nawarangpur	35	41	35	43
Rayagada	23	36	12	40
Sonepur	32	34	32	75
KBK	28	41	24	47
ORISSA	36	39	30	47

Source : Directorate of Economics and Statistics, Orissa Bhubaneswar, 1993-94 & 2006-07

Female Teachers

It is well documented by the researchers that number of female teachers in a school generally enhances the enrolment of girls. In view of this, a particular norm (Operation Black Board) is fixed which envisages that at least 50 percent of the total teachers should be females. In 2006-07 the percentage of female teachers in the state for lower and upper primary education was 56.79 and 34.11 respectively. Thus, the state has fulfilled the above norm in case of lower primary only.

However, a significant variation is noticed across districts. For example in case of lower primary level none of the KBK districts fulfilled the norm of 50% female teachers except Koraput district. In case of upper primary level none of districts in KBK region do have 50 % female teachers. Across districts the lowest percentage of female teachers was found in Sonepur (28.91) and Kalahandi (16.52) in case of lower primary and upper primary schools respectively. Table -7 presents the growth of female teachers in Orissa and KBK districts.

Table 7: % of female teachers in Primary and UP Schools of Orissa

Districts under KBK	Primary		UP	
	1993-94	2006-07	1993-94	2006-07
Bolangir	18.38	43.57	15.32	38.15
Kalahandi	17.20	30.21	12.91	16.52

Koraput	36.31	55.12	22.92	42.82
Malkangiri	17.19	34.58	19.91	29.92
Nawarangapur	36.68	37.30	16.83	33.44
Nuapada	19.07	34.35	6.68	16.80
Rayagada	32.98	31.91	14.43	27.33
Sonepur	12.00	28.91	10.00	18.77
KBK	23.80	37.78	14.79	28.37
ORISSA	33.72	56.79	16.92	34.11

Source: Directorate of Elementary Education, Directorate of Economics and Statistics, Orissa

Schools without Female Teachers :

It is argued that number of female teachers per school is a better indicator of educational development than mere overall percentage of female teachers in the State. As per 7th All India Educational Survey 2002-03, the percentage of schools without female teachers in the state was 58.99 of which 62.02 in rural area and 10.11 in urban area. The corresponding figures in case of KBK districts are 71.07% of which 74.17 and 11.44% for rural and urban areas respectively. So, urban areas placed better than the rural areas. Table -8 shows the comparative picture of KBK districts with respect to the state.

Table 8: Percentage of Schools without Female Teachers in Primary Schools of Orissa

Districts under KBK	Rural	Urban	Total
Bolangir	76.68	3.17	73.95
Kalahandi	76.83	6.45	73.86
Koraput	63.18	9.32	57.81
Malkangiri	72.01	5.26	70.43
Nawarangapur	71.78	14.29	69.31

Nuapada	81.35	0.00	78.41
Rayagada	75.46	17.24	73.09
Sonepur	82.87	42.86	80.90
KBK	74.17	11.44	71.07
ORISSA	62.02	10.11	58.99

Source: 7th All India Educational Survey 2002-03, NCERT, New Delhi

Growth of ST teachers:

In 1993-94 the percentage of ST teachers in KBK districts was 9.58 and 6.71 for Primary and UP respectively. It increased to 16.52 and 11.47 percent in 2006-07. It is noticed from Table 9 that in Kalahandi district the percentage of ST teachers decreased from 14.25 to 11.15 during the year 1993-94 to 2006-07 in case of Primary schools. In the case of UP schools, the percentage of ST teachers in Malkangiri district decreased from 23.40 to 8.71 % during the same period. Since the presence of ST teachers is one of the important components of tribal education for attracting more tribal children, the decline in tribal teachers is a matter of great concern.

Table 9: % of ST teachers to Total in Primary Schools

Districts under KBK	Primary		Upper Primary	
	1993-94	2006-07	1993-94	2006-07
Bolangir	8.35	9.14	3.88	10.95
Kalahandi	14.25	11.15	8.54	7.85
Koraput	4.36	18.23	2.86	13.66
Malkangiri	6.67	18.35	23.40	8.71
Nawarangpur	10.19	27.75	8.38	15.34
Nuapada	16.94	23.81	5.10	14.56
Rayagada	13.93	19.29	9.33	12.96
Sonepur	1.45	5.89	2.16	5.82
KBK	9.58	16.52	6.71	11.47
ORISSA	9.08	13.75	6.37	8.05

Source: Directorate of Elementary Education, Directorate of Economics and Statistics, Orissa

Out of School Children :

In order to review the status of universal enrolment, it is essential to estimate the number of out of school children. Because unless and until all the children in 6-14 age group are in school the objective of UEE can not be achieved. There is an overall decline in the proportion of out of school children in the state in recent years. It varies from 3% in the state to 27% in KBK district which is quite substantial. But it is observed that the

proportion of out of school children is much higher in case STs than the non-STs. In the case of girls the proportion of out of school children is higher than their male counterpart. It is also found that the percentage of out of school children is higher in the age group 11-14 than the age group 6-11. The out of school children in KBK districts is much higher than the state average across all age groups and gender (Table-10).

Table-10: Percentage of Out of School Children in KBK districts of Orissa

Age group	Community	Region	2004-05			2007-08		
			Boys	Girls	Total	Boys	Girls	Total
6-11	NST	ORISSA	4.74	5.44	5.08	2.77	2.8	2.79
		KBK	7.57	10.46	8.98	4.43	5.07	4.74
	ST	ORISSA	12.24	15.97	14.03	8	7.73	7.87
		KBK	15.23	19.58	17.32	9.68	9.95	9.81
11-14	NST	ORISSA	13.32	14.47	13.86	4.93	5.68	5.29

		KBK	16.97	22.41	19.49	8.26	13.05	10.47
	ST	ORISSA	23.63	29.85	26.45	16.44	18.7	17.48
		KBK	29.92	39.72	34.19	25.28	29.4	27.13
6-14	NST	ORISSA	7.25	7.94	7.58	3.44	3.67	3.55
		KBK	10.06	13.17	11.56	5.69	7.57	6.58
	ST	ORISSA	14.89	18.68	16.68	10.16	10.31	10.23
		KBK	18.21	22.8	20.39	13.41	14	13.69

Source: www.opepa.in

Repetition rate :

Repetition of grades by students is a problem in Orissa. Many students repeat grades in primary schools due to prolonged absence from schools. In some cases parents request that their children continue in the same class to improve their achievement levels, though the state government has a policy of no detention in primary classes. Table -11 gives the district-wise rate of

repetition of students of STs and Non-STs in elementary schools of Orissa. It is observed from the table that the repetition rate of STs is higher than the Non STs and repetition of girls is the highest than boys. It is further observed that repetition rate of ST girls is higher among all social groups. Across districts, Kalahandi (KBK districts) shows a fairly high repetition rate across social groups and gender.

Table 11: Repetition Rate of Students of Primary and UP Schools of Orissa by Social Category in 2006-07

Districts under KBK	ST			NON ST		
	Boys	Girls	Total	Boys	Girls	Total
Bolangir	20.29	20.17	20.23	15.1	14.88	15
Kalahandi	39.94	41.42	40.63	36.75	36.92	36.83
Koraput	25.07	23.81	24.49	23.12	21.61	22.4
Malkangiri	37.06	38.03	37.49	29.54	30	29.76
Nawarangpur	27.21	27.68	27.42	24.71	24.6	24.66
Nuapada	31.3	32.72	31.97	29.22	30.23	29.7
Rayagada	26.11	27.36	26.69	29.64	28.04	28.89
Sonepur	19.84	19.19	19.52	19.37	18.57	18.99
KBK	29.15	29.61	29.36	25.81	25.45	25.64
ORISSA	23.35	23.12	23.25	18.13	17.26	17.72

Source: www.opepa.in

2.6: Infrastructure Facilities in Schools

It may be pointed here that infrastructure facilities in schools have significant influence on enrolment and dropouts (Tilak, 2004). In order to assess the real position of districts with respect to infrastructure facilities in Orissa we constructed the infrastructure deprivation index. The infrastructure deprivation index is constructed using the basic information on the infrastructure

facilities like play ground, boundary walls, blackboards, library, electricity, drinking water, toilet, kitchen shed, child friendly elements and buildings. Table-12 gives the relative position of KBK districts in the state. From table 12 it is observed that the KBK districts are placed in a better position across districts. The deprivation index for the KBK districts is less than the state average for Primary, UP and Elementary level.

Table-12: Infrastructure Deprivation Index for the KBK districts of Orissa, 2007-08

Sl. No.	Districts under KBK	Primary		Upper Primary		Elementary	
		Infrastructure Deprivation Index	Rank	Infrastructure Deprivation Index	Rank	Infrastructure Deprivation Index	Rank
1	Bolangir	0.29	3	0.34	5	0.3	5
2	Kalahandi	0.46	13	0.49	22	0.47	19
3	Koraput	0.53	21	0.41	11	0.49	23
4	Malkangiri	0.37	9	0.4	8	0.41	12
5	Nawarangpur	0.45	12	0.42	12	0.4	11
6	Nuapada	0.32	6	0.4	10	0.27	3
7	Rayagada	0.37	8	0.3	3	0.34	8
8	Sonepur	0.49	18	0.48	19	0.43	15
	KBK	0.41		0.41		0.39	
	ORISSA	0.46		0.44		0.43	

Source: OPEPA. 2007-08

Note: Infrastructure deprivation index is constructed by taking the indicators as follows: absence of play ground, boundary walls, blackboards, library, electricity, drinking water, toilet, kitchen shed, child friendly elements, buildings.

3. Summary and Concluding Observations

The main findings of the study are:

i) The literacy rates of male, female and total population of scheduled tribes in the KBK districts are lower in the state.

ii) The female literacy rate is found to be the lowest (7.5%) in Malkangiri district (KBK districts).

iii) About 17 percent of the habitations with predominantly scheduled tribe population do not have a primary school within a radius of one

kilometer. However the ratio of primary to upper primary schools in KBK districts seems to meet the required norm.

iv) The girls in primary schools are generally behind the boys in respect of enrolment. The percentage of out of school is found to be highest in KBK districts in case of both STs and NSTs.

v) Some of the districts like Kalahandi, Bolangir and Sonepur have very high pupil teacher ratio which is likely to affect the quality in class room teaching. The percentage of female teachers at primary level across the KBK districts is much below the required norm except Koraput.

In order to achieve the UEE, specific and need based policies for scheduled tribes in general and scheduled tribes of KBK districts in particular need to be implemented by the state government on priority basis.

The undivided districts of Koraput, Bolangir and Kalahandi (popularly known as KBK districts) of Orissa have divided into eight districts : Koraput, Malkangiri, Nawarangapur, Rayagada, Bolangir, Sonepur, Kalahandi and Nuapada since 1993-94. In view of the backwardness of these districts, government has initiated several steps for the development of these districts with focused plans and programmes.

References :

Census of India, Primary Census Abstract, Orissa, 1991, 2001, Office of the Registrar General, Bhubaneswar.

Debi Sailabala (1990) "Education and Economic Development of Tribals in an Urban Setting", Journal of Educational Planning & Administration, Vol. 10, No. 2, pp. 173.

Education Commission (1968), "Education for Development", Report of the Education Commission, 1964-66, NCERT, New Delhi.

Government of India (1966), Education and National Development" Report of the Education Commission (Kothari Committee), 1964-66, Ministry of Education, New Delhi

Government of Orissa (2007), Economic Survey 2007-08, Planning and Co-ordination Department, Bhubaneswar.

Haddad, W.D, Carnoy, M, Riniddi, R and Regel, O(1990) "Education and Development: Evidence for New Priorities", World Bank Discussion, Paper No.95, Washington D.C., World Bank.

Orissa Human Development Report (2004), Planning and Co-ordination Department, Government of Orissa.

Orissa Development Report (2002), Planning Commission, Government of India, New Delhi.

Panda, M. (2004), " Reform Imperatives that matter", paper presented at the workshop organized by Department of School and Mass Education, Government of Orissa in collaboration with UNICEF, Orissa on 19-20, February, 2004 at New Delhi.

Sujatha, K 1999, "Education of India, Scheduled Tribes: A study of community schools in the district of Vishakhapatnam, Andhra Pradesh", Working Document Series, published by International Institute for Educational Planning/UNESCO, (<http://www.unesco.org/iiep>).

Tilak, JBG (1994), "Education for Development in Asia", Sage, New Delhi.

Tilak, J.B.G (2002) Education in Orissa: A Review of Progress, Problem and Perspectives for Future on School Education, Monograph prepared for UNDP, New Delhi.

Tilak, JBG. (2004), "Free and compulsory Education". EPW, Vol. 39, No. 7.

Atal Bihari Das lives at Godavarish Chhatravasa, Room No- A-18, Utkal University, Vani Vihar, Bhubaneswar-751004

On-Farm Water Management Options for Increasing Irrigation Efficiency in Command Areas of Orissa

Dwitikrishna Panigrahi

Abstract

Management of water below the canal outlets offers the greatest scope for increased production and productivity in the irrigation commands. This paper presents some of the issues and options available for on-farm water resources management in canal commands of one of the eastern most state of the country (Orissa) with an aim to fine-tune the activities that are, at present, undertaken for resource optimization. The traditional management systems of the area, on-farm-development measures taken through the centrally sponsored Command Area Development and Water Management (CADWM) Programme and farmers' involvement in the process of distribution and utilization of irrigation water are presented in the paper.

Keywords : Irrigation Potential, Command Area Development, On-Farm Development, Water Users' Association.

Introduction

With an average annual rainfall of 1170 mm, about 4000 billion cubic metres (BCM) of water is received in our country, annually, from natural resources. But competitive uses of the finite water resources for agriculture, settlements and industries by its huge and still expanding human and animal population pose a great threat to the society. Thus, availability remaining the same, our population has now been increased many folds in the last few decades - affecting the per capita availability of water. With only 2 per cent of world's total geographical area and 4.2 per cent of its water resources, India has to support almost 16 per cent of the World's population. There has been a drastic reduction of per capita water availability in our country from the levels of 5277

m³ per person per year in 1955 to 2464 m³ per person per year in 1997 and it is projected to be reduced further to 1496 m³ per person per year in 2025 (Panda, 2006). Because of heavy demand and less availability, cost of clear and safe water is being increased and water has now become the costliest input in agriculture. It is therefore, of the utmost importance that water resources are conserved, preserved and prudently used to derive the maximum benefit from their usage.

Moreover, its availability varies from place to place, season to season and year to year. Because of the peculiar phenomenon of monsoon, a bulk (about 80%) of the rain water is available in a short period from June to December. During this period, about 50% of the annual rainfall comes from few intense storms (Pisharoty, 1990) and

water received from such intense storms is subjected to high runoff losses. Being unutilized, most of the valuable water resources generally run to the sea. Of the 4000 BCM of water that is received in our country annually, 700 BCM evaporates, 700 BCM is lost as surface runoff and 1500 BCM of it goes straight to the sea (Behera and Panigrahi, 2007). This has been the most important consideration in agricultural planning in our country since the earliest civilizations and the rulers of the country gave utmost importance to collection, transportation and storing of water with an aim to ensure its availability, when and where it is required.

Post-Independence Irrigation Development

The foremost important agenda of the new independent Indian Government in the early years of independence was to feed its poverty stricken unfilled bellies adequately. Many a measures were taken to improve productivity. But the most important problem at that time was unavailability of sufficient irrigation potential to reduce the risk of climatic hazards. On the eve of independence, there was 28.2 million hectares (Mha) of irrigated area, which constituted 24 per cent of the net cultivated area in the undivided India. Partition resulted in a substantial reduction in the proportion of irrigated area to 20 per cent of the net cultivated area (NCPA, 1982). The situation called for tremendous efforts to make the leeway and meet the requirements of the growing population. In the initial period the five-year plans accorded higher priority to the development of irrigation. Heavy emphasis was laid on tapping the water available through major, medium and minor irrigation projects. Billions of rupees were spent in achieving this hectic process of development in the irrigation sector. Public investments to the tune of about 23% of the total outlay were allotted for irrigation development upto the seventh plan. The irrigated area increased from the pre-plan levels of 22.6 Mha to 57.20 Mha at present.

Irrigation Development in the State of Orissa

The state of Orissa has a long tradition of investing in irrigation development even in the pre-independence periods. In 1860 the East India Irrigation and Canal Company was formed for the purpose of carrying out canal works in the Mahanadi, the Brahmani and the Baitarani Delta on recommendation of Sir Arthur Cotton, who was, at that time, invited to advise in the matter of flood control in Mahanadi delta. The work was however not sufficiently advanced to be of real use resulting in occurrence of terrible famine (the Great Bengal Famine) in 1866 (DoWR, 2007). Thereafter the work was intensified and even before onset of the Plan programmes in 1951, 3 major (Orissa Canal system, Rushikulya and Mahanadi Delta) and 3 medium (Jayamangal, Baldiha and Baskel) irrigation projects were there in the state irrigating about 1,76,920 hectares. The development of irrigation got accelerated after introduction of plan programmes and Hirakud multipurpose project is the first major project of the state started after independence. Around 1960s, expansion of irrigation coverage was initiated with construction of a number of new major and medium irrigation projects namely, Salandi, Dhanei, Budhabudhiani, Salia, Dejang, Ghodahada, Bahuda, Uttei, Pitamahal including expansion of Mahanadi Delta System. The pace of development went on and between 1970 and 1980, altogether 21 major and medium irrigation projects were taken up during successive plan periods. The net irrigation potential created through construction of major and medium irrigation projects in the state of Orissa in different plan periods is given at Fig. 1. At present out of the 6.559 Mha of the cultivable land of the state, 5.9 Mha is irrigable and by end of 2004, irrigation facilities has been provided to 2.695 Mha (from all sources) which comes to about 45 per cent of the irrigable area of the state (DAFP, 2007).

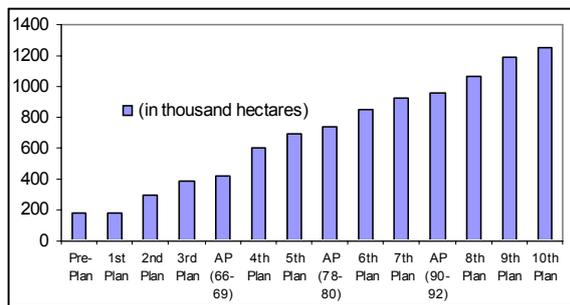


Fig. 1 Net irrigation potential created through major and medium irrigation projects in the state of Orissa in different plan periods (DoWR, 2007)

Utilization of Created Irrigation Potential

Most of the irrigation projects of the country have been under operative with a major percentage of the created potential being left unutilized. It has been estimated that there is at present a gap of about 14 Mha between the irrigation potential created and that utilized in our country. In monetary terms an investment of about 140000 crores of rupees is thus left unutilized (MoWR, 2005). The gap between the irrigation potential created and that utilized in the state of Orissa comes to 0.772 Mha, which comes to about 29 per cent of the irrigation potential created.

Causes of low irrigation efficiency

Inadequate maintenance has been cited as one of the most important factors for reduced irrigation efficiency at project levels (MoWR, 2005). Inadequate maintenance results in problems of unreliability in the availability of water at the farm level - causing low efficiency of water use and low productivity as well. But in a situation like that of Orissa, where the drawal at the head of the canals is very high in comparison to the design, the problem of inadequate availability is perhaps not so much to affect the irrigation efficiency. Moreover, huge Government funds have been spent for repair, renovation, modernization and extension of projects to get it

back to its original position at regular intervals. The efficiency of the projects has, however, hardly increased.

The most important factor of low efficiency of irrigation in Orissa is rather improper management of water below the outlets, which results in unequal distribution (insufficient or over irrigation) at most places. The problem becomes more drastic with establishment of unauthorized outlets at the head reaches drawing more than the designed quantities thereby reducing the flow in the tail end canals. The reason for this is requirement of higher quantity of water because of increase in area under paddy cultivation. It has been an established fact that the area under paddy cultivation has increased with introduction of irrigation in almost all Commands of the state. This has led to increase in size of the outlets or establishment of unauthorized ones.

Accepting people's plan

It has by now been established that people can not be dissuaded forcibly to get rid of paddy (as have been seen with experiments in the last few decades), the planning should be reoriented to get it authorized to have paddy in the head reaches. It would rather be more beneficial to reschedule the delivery system so as to get an assured middle crop in between the Kharif and Rabi crops with the available moisture to increase the cropping intensity and the productivity. This type of farming in conjunction with the On-Farm-Development activities has been proved successful in the Hirakud and other western Commands of the state (Naik, 2005).

Where does the excess water go?

Excess water because of over irrigation is generally lost in two ways, e.g. deep percolation and surface or subsurface flow. While deep percolation results in increase in the ground water tables, surface or subsurface flow affects the area at lower gradients with waterlogging, flood and

related problems. The irrigated Commands of the state of Orissa are of two types, one as that in the coastal plains with very high ground water table and the second as that in the undulated terrains of the hill plateaus inside with distinct layers of hard rock very near to the ground surface. The high water table in the coastal areas acts as an impervious layer as water is generally not allowed to go downwards. In both the cases, deep percolation is therefore not possible because of the impervious layers very near to the ground surface. This has led to accelerated drainage of water from the head reaches of every irrigation projects in Orissa. This unutilized water is generally let off in the streams downward. The most affected portion from this type of situation is the coastal plain irrigation commands where ground water table rises every year to new high levels. Drainage from these areas to the sea is practically impossible particularly in the monsoon periods of high discharge. Horizontal drainage systems have failed and vertical drainage too have a problem of disposal at times.

Recycling of the lost water

With quick disposal of the excess water in the head reaches straight to the downward streams, the option of drainage-cum-recycling projects to take the lost water back to the canals or the crop fields at higher elevations is perhaps the best option to increase irrigation efficiency, particularly in the undulated terrains. A series of such structures with provision of some head-raising component at closer intervals would even prove to be successful in reducing the extent of waterlogging in the coastal plain commands.

Command Area Development and Water Management (CADWM) Programme

The problem of gap between the irrigation potential created and that utilized was thought of as the foremost barrier for agricultural development at the national level and much

emphasis was laid to remove these deficiencies and optimize the agricultural production. A programme for integrated development of command areas was launched during the 5th five-year plan and Command Area Development Authorities were set up for identified projects. The programme is continuing in Orissa since 1976-77 and is constructing micro level distribution systems through a network of field channels and field drains and also educates the farmers on scientific water management practices for better water utilization and higher productivity.

The programme has been restructured and renamed as "Command Area Development and Water Management Programme" by the Central Government and at present the programme is being implemented in 14 irrigation projects of the state with a cultivable command area of 0.788 Mha. The scheme components of the programme presently implemented in the state of Orissa are as follows.

Construction of Field Channel

The Field channel network starts below the outlet and leads to the tail end of the outlet command. It consists of earthen channel, lined channel and hydraulic structures for negotiating to the designed slope. It is designed to carry 1 to 1.5 Cusec discharge and to irrigate about 40 Ha. of lands in its command. It facilitates to carry water conveniently to each plot independently by avoiding wild flooding. It ensures timely use of irrigation water throughout the command and helps in increasing productivity. So far an area of 4,30,686 ha has been covered under the field channel programme.

Construction of Field Drain

The field drain is a small drain executed along the valley line and is linked to the existing link drain or trunk drain. The Field channel network is designed in such a way that all the field

channels drain into the field drains. The field drains are mainly surface drains with carrying capacity of 10 to 12 Cusec. Hydraulic structures are provided at vulnerable points in the field drain to negotiate with the permissible slope. They drain out excess water from the crop field to the link drain and provide healthy surrounding for adopting diversified crops. So far an area of 1,23,880 ha has been covered under the field drain programme.

Demonstration and Training :

For making the farmers' conversant with the benefits of the diversified cropping with proper

water management and equitable use of available irrigation water, crop demonstrations are under taken in the farmers' field and training programme is imparted at village level under the programme adaptive trial in the Command Area Development Programme.

Financial norms and Funding pattern

The activities under CAD&WM programme being implemented in Orissa at present and the financing norms & funding pattern is given in Table 1.

Table 1. Cost norms of CADWM scheme components in Orissa

SI No	Items	Cost Norms Per Ha	Central Share	State Share	Farmers Share
1	Construction of Field Channels	Rs 15,000/- for areas in Non-KBK districts and Rs 22,000/- for areas in KBK districts	50%	40%	10%
2	Construction of Field Drains	Rs 4,000/- for areas in Non-KBK districts and Rs 5,000/- for areas in KBK districts	50%	50%	
3	Reclamation of Waterlogged Area	Rs.15,000/-	50%	40%	10%
4	Crop Demonstration	As per location specific need	75%	25%	
5	Farmers Training	As per location specific need	75%	25%	
6	Correction of system deficiencies above outlet up to Distributaries of 150 Cusec capacity	Rs.6000/-	50%	50%	
7	One time functional grant to water Users' Association	Rs 1000/-	45%	45%	10%

Impact of Command Area Development Programme:

This has been proved to be the best method of managing water below the irrigation outlets. The impact of the programme since it's starting

has been very much appreciated by the cultivators. The Field Channel networks constructed in the farmers' field below the canal outlet have immensely benefited the farmers to provide available irrigation water uniformly throughout the command area of the outlet. During drought

situation, the presence of Field Channels has helped the farmers to a great extent to avoid crop loss at the tail end. The social disputes arising out of non-uniform distribution of available water during peak period and also during the period of scarcity have been reduced to a great extent. The impact of the Field Drain by the farmers is also very much encouraging. It has been observed that due to construction of Field Drains, the prevalent waterlogging condition has been substantially removed and the average yield of the affected area has been increased. Due to farmers' training and Crop Demonstration Programme, the cultivators in the command area are now ready to go for diversification of crops and adoption of modern methods of cultivation and water management practices for higher productivity. The need of Field Channels are so felt by the farmers that they are now coming forward to donate the required land for construction of Field Channel and Field Drains.

Independent impact evaluation studies have also pointed that CADWM activities increase the utilization of created potentials in irrigation systems, increase in cropped area and productivity and more prominently the increase in yield per unit volume of water to a great extent. Study indicates 15% increase in utilization of irrigation potential and up to 125% increase in the water use efficiency in terms of yield per unit volume of water in kg/m³ in the command of Mahanadi Delta Stage I Irrigation project (WAPCOS, 2007). The Benefit Cost ratio of the Command Area Development measures taken in the area was worked out to be as high as 4.56 : 1. The On-Farm-Development activities through the CADWM programme should therefore be extended to more and more irrigation projects to get the maximum results of the created irrigation potentials of the state.

Farmer's Participation

Lack of participation of farmers in the process of irrigation water management has been said to be the most important factors in under utilization of the created potentials. Irrigation is a community subject and unless all the farmers in a given area adopt a common approach in selecting varieties of crops, sowing time and cropping sequence the water delivery would not match exactly with crop water requirements for obtaining maximum yield. More emphasis is therefore given to farmers' participation in management of irrigation water in all irrigation projects of the state. The Orissa Pani Panchayat Act has been enacted in 2002 and Orissa Pani Panchayat Rules have also been framed in 2003 giving substantial rights to the Water Users' Associations in managing the water resources.

Only formation of Pani Panchayat is not the solution for better functioning of CAD projects. The entire Govt. machinery relating to the Water Resources should be involved seriously for involving the farmers' actively in the process of management of available water, maintenance of sub minor and field channel systems and better crop management process for achieving the ultimate aim of better production and productivity. On the other hand, the farmers should also be conscious of their rights and responsibility on the available water and upkeepment of the distribution system within their Pani Panchayat with a view to provide uniform irrigation water to the entire area of the Pani Panchayat by mutual equitable sharing method. In the Command Area where On-Farm-Development work has not been taken up, it is the duty of the Pani Panchayat to motivate farmers to donate land required for construction of the field channel and field drains under the Command Area Development programme and actively participate for their construction and maintenance.

Conclusion :

Huge investments have been made for development of water resources through construction of irrigation projects. But a major chunk of the resources remain unutilized because of lack of management of water resources below the outlet level. On-Farm-Development activities through the CADWM programme have been proved to be the most effective method for reducing inequality in distribution of irrigation water below the outlets and increasing irrigation efficiency. The activities should therefore be extended to all the irrigation projects of the state. As the climatological and geomorphological situation of the state of Orissa accelerates surface and subsurface flows, the option of having a series of drainage-cum-recycling projects to take the lost water back to the canals or the crop fields at higher elevations is the best option to increase irrigation efficiency and should also be extensively practiced in all canal systems of the state. These programmes can be effectively implemented with involvement of the farmers as a group (Water Users' Association) in the process of operation, management and upkeepment.

References :

1. Behera, S. K. and Panigrahi, S. K. 2007. Our water resources and environment (in Oriya). Agragamee, Orissa, India : 2
2. DAFP, 2006. Orissa Agricultural Statistics, 2005-06, Directorate of Agriculture and Food Production, Orissa, Bhubaneswar
3. DoWR, 2007. Annual Report, 2006-07, Department of Water Resources, Government of Orissa, Bhubaneswar : 19
4. MoWR, 2005. Guiding Principles for implementation of restructured CADWM programme, Revised draft, Ministry of Water Resources (CADWM Wing), Government of India, New Delhi : 1
5. Naik, B. 2005. Drainage of wet areas in Hirakud Ayacut. in: Training Manual on Reclamation of Waterlogged Areas, WTCER, Bhubaneswar.
6. NCPA, 1982, The use of Plastics in Agriculture, First Report, National Committee on Use of Plastics in Agriculture, Govt. of India, Ministry of Energy, Department of Petroleum, New Delhi : 13-14
7. Panda, G. C. 2006. Harness of water - Need of the hour - Few issues related to development and management of water resources. Souvenir, 2006, CAET Alumni Association, OUAT, Bhubaneswar : 81-85.
8. Pisharoty, P. R. 1990. Indian Rainfall and Water Conservation. Proc. of the All India Seminar on modern techniques of rainwater harvesting, water conservation and artificial recharge for drinking water, afforestation, horticulture and agriculture, Directorate of Ground Water Surveys and Development Agency, Rural Development Department, Government of Maharashtra, India : 55.
9. WAPCOS. 2007. Impact evaluation study for Command Area Development Programme in Mahanadi Delta Stage-I project of Orissa, WAPCOS, Gurgaon, Haryana.

Dr. Dwitikrishna Panigrahi presently working as Water Management Expert, in the PMU of ADB-OIIAWMIP, Department of Water Resources (CAD), 5th Floor, Rajiv Bhawan, Bhubaneswar.

Traditional Agricultural Wisdom for Sustainability in Tribal Areas

*Dr Pranab Kumar Ghosh, Chittaranjan Sahoo
and Dr Sabyasachi Rath*

Agriculture is the most primitive occupation of the tribal people. Though the people had changed their cultivation pattern from traveller's cultivation to settled cultivation, but some of the practices have remained unchanged among many group of farmers. The unchanged practices may be due to the fact that they find the practices more sustainable. It is painful when somebody says the tribals are backward or primitive. It not only affects the sentiments of the clientele group but also equally affects the organizations working in those areas for their development. Hence, the technology should be transferred to them without affecting their sentiment. A number of appropriate technologies are generated by them and have become sustainable under their farming system.

The paper focuses attention to the practices of the resource poor tribal farmers that makes use of low cost renewable inputs, family and community labour for solving the food crises through their traditional wisdom which need documentation to make the future agriculture a sustainable one. Besides, effort has been made to gather necessary explanation on some of the practices followed by them. A few regular researches have been done to see whether their practices are based on any scientific basis; much other research work is yet to be started.

The study on the farmer's traditional wisdom on agriculture was initiated through non-random selection of respondents from eight different tribals of eleven Blocks of the undivided Koraput district. (For administrative convenience, Koraput has been divided into four districts i.e. Koraput, Malkangiri, Nawarangapur and Rayagada). Erstwhile undivided Koraput covers an area of 27,369.40 sq. kilometers which is richly inhabited by tribal community.

The respondents were selected from among different age groups, different working class group (basically they are farmers) - Mukhias, Disharies, Beju etc. They have given necessary explanations on the continuity of their traditional practices. About 70% of the people of 30-50 age groups were flexible and they disapproved many of the traditional practices and wanted to discontinue those practices based on blind belief.

A typical tribal village is situated a little away from the main road and mostly inside the forest. Generally, the houses are constructed on the both side of a wide village road. The cowsheds are constructed on the middle of the road earlier. Now, they are having a cowshed in their house in front side or in the end of house row. This system has changed due to reduced number of wild animals and effective forest.

Most of the houses have some backyard and they raise a kitchen garden. Gradually, this kitchen garden extends to the field which again merges with the forest. The village has been set up where there was plain land and a stream. This selection of their dwelling place shows their intelligence and foresight.

Agriculture and the Religious Functions :

The tribals are very much religious. They offer rituals for Goddess Dharani (Earth) to provide them the best crop. They also pray 'Indra' - the god of rain to shower timely rain for the crop. They worship 'Dharanimata' before sowing the seeds in the field during Baisakh. Similarly, after a month of transplanting of paddy, they have puja for filling up the grain by the grace of God. After the harvest of paddy, they have a ritual when they pray Mata Laxmi to be kind to them and bless them with a good crop. Even before going to clear the forest for jhoom cultivation (Slash and Burn Method), they usually pray God Mountain to sustain them.

Traditional Wisdom :

The tribals are intelligent and have made agriculture sustainable through their agricultural practices. Knowingly or unknowingly, they have created a balance between the environment and requirement. They hardly over-harvest anything from the nature or forest. Eventhough they sometimes starve, they never over-utilize the forest resources which is abundant; because they think for the future.

Mixed Farming :

Each and every tribal household keeps a few animals according to their size of the family. To make mixed farming sustainable, they harvest main crops. After harvest, they allow the cattle to graze in the field. In return, the animals leave the excreta which serves as the manure. They seldom

milk the cow and they believe that milk is for the calf.

They keep the birds (Fowls) because they need 7 to 10 of those in a year for the different rituals to offer in sacrifices. The functions are observed in the winter to onset of monsoon. During the rainy season, they do not observe many functions. It is interesting to refer that the birds may damage the kitchen garden crops before these crops stand. Therefore, it is seen that, all birds are killed and devoured by the family members, leaving only one or two. Moreover, the birds would be eaten away by the wild dogs, foxes as the kitchen garden would be full of crops during the early part of the rainy season. But in the early winter, the new batch of chicks is seen in the villages. Usually, the people take them to the field so that the birds would devour the insects harmful to the crops. This cycle is not seen in the coastal areas of the Orissa.

Jhoom Cultivation :

Now-a-days, the tribals are pushed up and up the hills. All the good fertile land owned by them in the valleys is near the streams now belonging to the non-tribal due to urbanization. The towns are coming up and industries are constructed resulting in the migration of the peace loving tribals farmers to interior parts of the forest. Ultimately, they have to depend on the uplands of the hill slope which can hardly give them a cropping during the rainy season. The land and produce both are not sufficient for them. Hence, they search for an alternate source for their sustain. They grow upland paddy and other grain crops such as cereals and millets in the upland areas and grow pulses in the bagada (land cleared by them in the forest). They are conscious that if the land will be left as such there might be soil erosion. They do not cultivate or plough the land, but dibble the seed with the help of a 'Gadi' or of

special hoe having one point, made up of wood. This minimizes soil erosion. Moreover, these crops cover the denuded forest area. It is customary with them to grow one or two crops in the hilly slopes in every 3-4 years. During this interval, the natural vegetation also covered the ground and the nutrient lost during the last crop is also regained by the deposition of silt.

It is seen that in late summer, just after one shower of rain, the tribal farmers usually go to the forest in search of the tuber crops; they harvest it by digging. But they refill the pit with the twig or piece of it which provide them the tubers in the next year. This is seen with arrowroot, yam, bhata kanda, masiha kanda, amorphophallus etc. Through these practices, the tuber crops continue to grow for years together in the same areas.

It can not be told that the tribals are destroying the forest. The felling of a fruit tree is an offence to the tribal communities. They treat the mango, mahua, jackfruit, salap and other fruit bearing trees as one of their own family members. But jhoom cultivation is a way of life. They cannot leave it unless they are engaged in other income generating works during the spring and the summer seasons.

Selection of Crop and Cropping Pattern :

They practice crop rotation from time immemorial. Turmeric (*Curcuma longa*) is a cash crop mostly grown as annual crop, but sometimes it is also grown as a biennial crop, but after a turmeric crop they either leave that land fallow or grow a legume crop such as bold arhar (*Cajanus cajan*), blackgram (*Phaseolus mungo*) and after 2 to 3 years, they again grow turmeric in the same field.

They are very specific in the selection of crops. In the up-land, they grow Kuri (*Panicum*

milliare), a minor millet that gives only one quintal / acre. This yield is stable in any hazardous climatic condition and not affected by diseases and pests but the crop is ready within 60 days and it provides them food when they do not have anything during October-November. They say that Kuri is like their eldest son who takes care of the old parents. Soon after Kuri, they take another oilseed crop niger (*Guizotia abyssinica*) with the available moisture.

They can predict whether the paddy crop will give them better yield. If there will be rain at night and bright sunshine in the day, the crop will be wonderful; but if the opposite condition prevail the crop will fail. By seeing the intensity of the fruiting of mango, they can predict whether the paddy crop will be good. If there will be good mango crop next year, there will be good paddy crops too.

Besides paddy, they grow a number of beans which solves their protein requirement. They get paddy from the field and cowpea (*Vigna sinensis*), blackgram (*Phaseolus mungo*), Kandula (*Cajanus cajan*) from the bagada (forest areas).

Mixed Cropping :

It is a common feature in the tribal paddy field that one can find other crops like maize, blackgram, sorghum, ragi, kandula etc. in certain proportions. Due to erratic rainfall, most of the time the paddy crops fails. Therefore, one crop serves as the insurance for the other and they are sure to get a crop. In this mixed cropping, they include a legume which adds nitrogen to the soil and provide the farmers with pulses. On the bunds of the land, they plant pulses such as arhar, blackgram, greengram etc.

CROP PRODUCTION PRACTICES :

a. Seed treatment

The tribal farmers are very careful about the seeds. They store the seeds with care and

before sowing, they sometimes treat them with locally available materials. They dip the vegetable seeds in a aqueous solution of asafetida or hingu for about half an hour. They dry it in shade before sowing. They believe that this keeps the plants healthy.

b. Sowing of seeds

Broadcasting method is the common practice in the upland situation for paddy. They explain that this practice restricts the growth of weeds. They generally take a higher seed rate and follow one to two weeding. But, they say that in line sowing, the weeding is easier but need more than two weedings.

c. Use of manures

Farmers usually mix Dhanicha seeds with paddy and sow at a time together. At the time of beusaning, they incorporate this green manure in the soil. Use of cowdung and compost is the general practices. They also put wood ash in the soil for raising vegetables and fruit trees.

d. Weeding

They use a special type of implement, Gadi for weeding. Hand weeding is the general practice. They sometimes grow black coloured paddy to rouge out the volunteered seedlings of the last years variety grown in the same plot.

e. Mulching

Generally mulch is used by them in upland condition. They say that it helps in better germination of the seed material and restrict soil erosion and it provides certain amount of nutrients. They use sal mulch for raising turmeric. They say that no other species can compete with sal. The sal can withstand browsing to a great extent. In summer, when other trees shed their leaves, the sal put forths new big leaves. It is easy to carry sal stumps without any problem. If sal mulch is

not available, they may reduce the land under turmeric. They say that in turmeric growing, sal mulch is given because it lasts longer.

f. Irrigation

They level the land properly so that water can flow without any hindrance from one plot to the other. Water is not allowed to spill over the plots. The main water channel is checked at different intervals. They divert the flow of water towards the field and from one field to other. They use earthen pipes or bamboo poles so that water can flow to the neighbouring fields without making any breach in the ridges. They may place a flat wooden plank or a flat stone piece on the ground where the water will drop with a speed. It helps in conserving the soil as it will flow only after facing a direct impact with the stone piece or wooden plank. This practice is followed where there is a perennial stream in the sloppy areas.

g. Crop Protection

When they plant fruit trees, they generally spray the whole plant with cowdung so that cattle will not eat the plant. They also spray the dilute solution of cowdung to the roadside plants so that from that side cattle will not enter the field. The tribals use the dry fruits of *Lagenaria* spp. for storage of seeds. They dry the leaves of *begonia* (*Vitex negundo*), neem (*Azadiracta indica*) leaves and mix it with pulses and keep the seeds in gunny bags or bags made out of the straw. This practice to some extent, saves the grains from attack of pulse beetles. It is recorded that this practice saves 45 - 85% of grains from the beetles. The turmeric and bael leaves are also used for this purpose.

They put a little amount of opium in the internode of cucurbits like pumpkin, ash gourd, bottle gourd. The number of fruit increases per plant (as Morphin increases fruiting). In papaya, if it does not bear fruiting, the farmers used to put

a peg horizontally on the stem and the plant starts bearing fruits (It may due to change in C/N ratio that would initiate flowering). They have no answer to the practice which seems to have good effect. This certainly shows their wisdom and intelligence to develop practices those are suitable to their situation.

Post-harvest Technology :

They dry the tendu fruits, mango, jackfruit and consume it during the rainy season without addition of preservatives. They can keep these fruits and pulps for a long period. They consume the powdered mango kernel after removing the bitter principle by washing it with running water. They use many seeds for getting starch or protein. There are many examples - a few of which are given here.

Community Resources Management :

The farmers in tribal areas mostly depend on the forest all the year round; but they believe that the forest belongs to all. Before using the community resources such as forest, water, pasture; they always discuss among themselves. Before going for jhoom cultivation, the villagers (Elder persons) sit and plan out of the future programme. They go together to the forest, cut down the trees or small shrubs from the earmarked areas only.

The tribal farmers generally keeps a particular area for getting the mulch for growing turmeric, as mulching for turmeric is a must. Everybody has equal right on this input. They do not indiscriminately cut the forest. They keep the area under the turmeric almost fixed. They unnecessarily disturb the eco-system. Even, they decide who would grow turmeric which year. There may be some exceptions, but they follow a certain rule in maintaining the eco-system.

They use their excellence in developing the terraces or developing plots in the uplands for growing paddy. In many areas, where the farmers had the cross bund by themselves and run the channel up to 2.5 km with such a precision that the flow is never interrupted. They do it very nicely using the bamboo poles as a levelling instruments.

In the streams, they dig shallow wells which retain the flow water for the summer season. They use this water for irrigating the field in the bank of the streams. In some areas, it is seen a tank stream during the rainy season. On the bank of the water harvesting structures, they fix the families who would use the water in the first year and who would use in the next year.

These practices as exist today, are certainly developed by the intelligent minds to make themselves self sufficient. Necessity has made them to think how best they can harvest the nature. Only the traditional wisdom of the farmers has to be given due importance while developing technology for them. Then the appropriate technology for them are to be found out through the research and to be tried in their setting for its efficacy. Through the testing, if it proves better and the farmers accepted it, then automatically that becomes sustainable. On the other hand, as they do not want to part with their environment and they take agriculture as their occupation, they will make agriculture a sustainable one through their traditional wisdom with the blend of modernization.

References :

1. AIHBPO (2008) Thiruvananthapuram Declaration on Traditional knowledge. National Conference 'Dhishana 2008' May 23 - 25, Thiruvananthapuram, Kerala.
2. ANGEEKAAR (2002) Souvenir. International Seminar on Traditional Knowledge, Health &

- Environment, February 23, O. U. A. T, Bhubaneswar, Orissa.
3. Gairola, Y. (2008) Can we need to revise our Traditional Knowledge system. Science India. VolII(12): 4-6.
 4. NISTHAA (1993) Participating Rapid Appraisal Tribal Community's perceptions, priorities and needs of health services. A study conducted in undivided Koraput with the assistance provided by Overseas Development Administration, U.K.
 5. SAMBADH (2008) Traditional Knowledge in Agriculture. The Tradition, E - Journal Vol. No. 9 (24/6/2008).
 6. Rath, S. Das, S. N. and Pattnaik, A. K. (1988) Role of women in tribal community for economic development in a forest based mixed farming system. Paper presented at the International Symposium on Farming Systems Research, Oct. 10 - 12, 1988, University of Arkansas, U. S. A.
 7. Rath, S. Pattnaik, A. K. and Das, B. N. (1988) Forest and Tribal Culture. The Phulbani Experience. Paper presented at the International Symposium on Tribal Culture in the Changing World. Dec. 10 - 12, Institute of Orissan Studies, Cuttack, Orissa.

Dr Pranab Kumar Ghosh is working at CAPART, Regional Centre, Indira Nivas, Bharati Nagar, Dasankoppa Circle, Dharwad - 580 001 (Karnataka).

Chittaranjan Sahoo and Prof. (Dr.) Sabyasachi Rath are associated in Dept. of Plant Physiology and Dept. of Horticulture respectively, College of Agriculture, O. U. A. T., Bhubaneswar - 751 003.



On the occasion of 63rd Independence Day Celebration, prizes are given to School and College students being organised by the Information & Public Relations Department at Kolkata in collaboration with Utkaliya Milita Manch .

Ecolable and Its Environmental Countenance

*Lokesh Kumar Panda
Dr. Shreerup Goswami*

Introduction

Marketing offers a great opportunity to mitigate the environmental problems. However the customer education is undoubtedly is an important factor. The concept of sustainable marketing i.e. green marketing/ eco-marketing explains that (i) the production process must be compatible with ecosystem, i.e. it should take care of ecosystem, eco-costs and welfare of the society, (ii) it should be compatible with the goals of the company and (iii) it must satisfy the customers.

Eco-label is an environmental claim that appears on the packaging of a product. It is awarded to a manufacturer by an appropriate authority. ISO 14020 is a guide to the award of Eco-labels.

The term "Ecolabelling" is derived from the science of ecology, which deals with interrelationships between organisms and their environment.

"Ecolabelling" is a voluntary method of environmental performance certification and labelling that is practiced around the world. "An ecolabel" is a label which identifies overall environmental preference of a product or service within a specific product category (Banerjee, 2006; Santra, 2005; Uberoi; 2003; Roy, 2003; Holling, 1978)

Ecolabelling was first introduced in Germany in 1977. Now, most of the developed countries and some developing countries including India have established Ecolabelling programme. The Government of India launched an Eco-mark Scheme in 1991 to increase consumer awareness in respect of environment-friendly products.

Standards for Eco-labelling

Labels are being used not only to warn consumers but also to provide information on ecological issues across the range of stakeholders. Eco-labelling involves third party evaluation, labelling of the production process and the product for attesting the origin, status or any other claim made about their qualification. It has two main components, i.e.

1. Certification to sustainability of natural resource management.
2. Product certification including identification of products and the services from well management sources.

The Eco-labelling and certification system usually has an international body with a mandate to issue international certification and accredit national certification initiatives.

Grouping of Eco-labelling

The Ecolabels are grouped under a number of headlines, these are:

1. National ecolabel: The National Ecolabelling Institute has developed criteria for different products. The focus is on purely environmental issues.

2. Fair trade labels: These labels mainly focus on the labour and living conditions of the workers or employees in developing countries. Environmental issues play a minor role within the scope of these labels.

3. Labels for organic production: These labels focus almost exclusively on agricultural products. Fruits, vegetables, flowers and plants along with the fishery products are eligible for such label.

4. Product-Specific labels: These labels focus on environmental aspects of one product group only. An example is the labelling of forestry products.

Criteria for Eco-labelling

The criteria are based on the cradle-to-grave approach, i.e. from raw material extraction to manufacturing and to disposal. The criteria are specific at the product level. A product is examined in terms of the following main environmental impacts:

That they have substantially less potential for pollution than other comparable products in production, usage and disposal.

That they are recycled, recyclable, made from recycled products or biodegradable, where comparable products are not.

That they make significant contribution in saving non-renewable resources including non-renewable energy sources and natural resources compared with comparable products.

That the product must contribute a reduction of the adverse primary criteria which has the highest environmental impact associated

with the use of the product, and which will be specifically set for each of the product categories.

General Requirements: The general requirements of products deal with the issues of compliance of the pollution control acts raising environmental awareness among consumers and with the issues of safety, quality and performance of the products. The general requirements are:

(a) Products to meet the relevant standards of BIS (Bureau of Indian Standards).

(b) Manufacturers to produce documentary evidence in regard to compliance of EPA, Water Act and Air Act and other rules and regulations such as Prevention of Food Adulteration Act, Drugs Act, Cosmetics Act and Rules made thereunder.

(c) The product to display the list of critical ingredients in descending order of quantity present.

(d) The packaging to display the criteria based on which the product has been labeled environment-friendly.

(e) The material used for packaging must be recyclable/ reusable/ biodegradable.

(f) The product to be accompanied by detailed instruction for proper use.

Product Specific Requirements:

While determining the product specific requirements, the following issues have been taken into account:

- i. Production process including source of raw materials.
- ii. Use of natural resources.
- iii. Likely impact of the environment.
- iv. Energy use/conservation in the production.

- v. Effect and extent of waste arising from the production process.
- vi. Disposal of wastes
- vii. Utilization of waste and recycled materials.
- viii. Suitability for recycling or packaging and
- ix. Biodegradability.

Eco-mark criteria of the product categories covered under the scheme:

The Government of India has notified the final criteria for the following 16 product categories. These are identified by Eco-mark Steering Committee and the eco-mark criteria are finalized by Eco-mark Technical Committee.

1. Soaps and Detergents
2. Paper
3. Food items
4. Lubricating oils
5. Packaging materials
6. Architectural paints and powder coating
7. Batteries
8. Electrical / Electronic goods
9. Food Additives
10. Wood Substitutes
11. Cosmetics
12. Aerosol propellants
13. Plastic Products
14. Textiles
15. Fire-extinguisher
16. Leather

Mechanism of Eco-labelling Scheme

There are three stages that lead to criteria development for each product category and the award of the Eco-mark in India (www.envfor.nic.in/legis/others/ecomark.html, www.iimm.org/knowledge_bank/8ecolabeling-scheme.htm).

The Steering Committee of the Ministry of Environment and Forests (MEF):

- It determines the product categories to be taken up under the scheme.
- It creates mass awareness for promotion and acceptance of the scheme.
- It formulates strategies for future development of the scheme.

The Technical Committee of the Central Pollution Control Board (CPCB):

- It identifies specific products for classifying as environmental friendly.
- It sets-up sub-committees for each product category, if required, to draft the Eco-mark criteria.
- It recommends the most appropriate criteria and parameters to designate various products as environment-friendly.
- It reviews from time to time, the implementation of the scheme by Bureau of Indian standards (BIS).
- The Central Pollution Control Board has become the member of Global Ecolabelling Network (GEN) Since March 2000.

The Bureau of Indian Standards (BIS):

- It assesses and certifies the products and draws up a contract with the manufactures, allowing the use of the label, on payment of fee.

Procedure for obtaining BIS Eco-mark

- The procedure for grant of license by BIS under the scheme of Eco-mark is the same as applicable for grant of license by BIS for its Product Certification Mark Scheme.
- Under the scheme of Eco-mark, The Standard Mark of the Bureau shall be a single mark being a combination of ISI mark and Eco-mark.

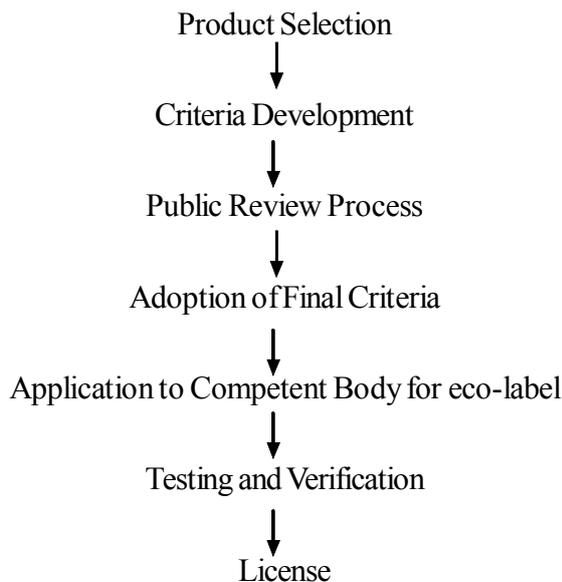
The license is granted initially for one year and is renewable.

During the license period, officer of the Bureau makes inspections and if he finds any deviation or non compliance, action as provided under the BIS Act is taken (Banerjee, 2006; Santra, 2005; Uberoi; 2003; Roy, 2003; Holling, 1978; www.envfor.nic.in/legis/others/ecomark.html; www.fuo.org/douip/005/Y2789E/y278906.htm).

Period of Award

The label shall be awarded for a minimum period of one year and shall roll forward annually. The Bureau of Indian Standards has the powers to withdraw the license at any time if they find any misleading information. The award may also be withdrawn in case of any change in criteria due to the advancement of technology or any other valid reasons, in consultation with the technical committee. The time period of the award may be reviewed from time to time.

Chart representing steps of the general procedure for the development of eco-labels



Eco-mark Logo (Germany)

The world's first ecolabelling programme, Blue Angle, was created in 1977 to promote environmentally sound products.



The label is composed of a blue figure with outstretched arms surrounded by a blue ring with a laurel wreath. A standard inscription, "Umweltzeichen" is at the top of the logo, and a second inscription for the individual product group is found at the bottom.

The ecolabel relies on information and voluntary cooperation, as well as on the motivation and the willingness of the individual to make a contribution towards environmental protection. Seventy-one product groups have been identified, with over 4000 products approved by the German Environmental Protection Agency.

The criteria for awarding the Blue Angle include the efficient use of fossil fuel, reduction of greenhouse gas emission and conservation of resources.

Eco-mark Logo (Canada)

The Eco-mark symbol of Canada is "Environmental Choice". It consists of three stylized doves intertwined to form a maple leaf, representing consumers, industry and government. It is established in 1988.



This programme helps consumers identifying the products and services that are less harmful to the environment.

Currently Environmental Choice has more than 1400 approved products, with 119 licensees and 29 guidelines under which companies may be licensed and their products are certified.

Eco-mark Logo (Japan)

Since 1989, the Japanese Environmental Association has administered the Eco-mark programme with the goal of disseminating environmental information on products and encouraging consumers to choose environmentally sound products



The symbol itself represents the desire to protect the earth with our hands, using the phrase "Friendly to the earth" at the top of symbol and product category below it.

The products must meet the following criteria. It must impose less environmental load than similar products in their manufacture. It should be meant for sustainable use and disposal. It should reduce the environmental load and promote environmental conservation.

Eco-mark Logo (France)

The NF Environment mark is the Eco- logo for France, created in 1992. It features a single leaf covering a globe.



The mark means that the products have less impact on the environment while achieving the same level of service as other products on the market.

Industries who wish to highlight their environmental efforts can voluntarily apply to use the Eco-logo for their products.

Eco-mark Logo (European Union)

The European Union ecolabelling programme was launched throughout the European Community in 1993 to encourage the manufacture of eco-friendly goods.



The European Union's Ecolabel, a flower with the EU's star symbol, is awarded to products that have passed a life cycle analysis.

Criteria for acceptance have been set at about 10 to 20% of brands or models on the market, with an annual license fee based on 0.15% of the value of sales of the product.

This will encourage a progressive increase in environment- friendly performance of consumer goods.

Eco-mark Logo (US)

Green Seal is an American non-profit environmental labelling organization that awards a "Green Seal of Approval" to products, which is less harmful to the environment.



The Green Seal is a blue globe with a green check, identifies such products, which are environmentally preferable. Green Seal believes in the power of consumers both at individual and institutional level, to change the world. It develops environmental standards for consumer products through a public review

process involving manufacturers, environmental organizations, consumer groups and government agencies. Green Seal has awarded its seal of approved to 234 products. Moreover, Green Seal publishes a series of industry specific green guides and listing of environmentally preferred products. It also implements environmentally-sound procurement policies.

Indian Eco-mark and its Logo:

The Government of India launched an Eco-mark Scheme in 1991 to increase consumer awareness on eco-friendly products. An earthen pot has been chosen as the logo for the Eco-mark scheme in India. The familiar earthen pot uses a renewable resource like earth, does not produce hazardous waste and consumes little energy in making. Its solid and graceful form represents both strength and fragility, which also characterizes the ecosystem.



As a symbol, it puts across its environmental message. This image has the ability to reach the people and can help to promote a greater awareness of the environment. The logo for the eco-mark scheme signifies that the product, which carries it, does the least damage to the environment.

The scheme identifies 16 categories of consumer products for the purpose of development of eco-criteria and labelling. So far criteria for 14 categories of products have been finally notified by the Government. The manufactures of these categories of products can apply to the Bureau of Indian Standards, if their products are

meeting the relevant standards notified, for the award of Eco-logo. Ministry has also launched publicity campaigns for providing necessary awareness among the consumers and manufacturers. The scheme could not become popular due to lack of adequate response from the manufacturers.

GLOBAL ECOLABELLING NETWORK

The Global Ecolabelling Network (GEN) is a non-profit association of third party, i.e. environmental performance labelling organizations, which was set up in 1994 to improve, promote and develop the "Ecolabelling" of products and services around the world.

The mission of the GEN is to:

- a. Serve its members, other ecolabelling programmes, and other stakeholders.



- b. Improve, promote and develop the ecolabelled products and the available information regarding ecolabelling standards around the world.

c. Foster cooperation, information exchange and harmonization among its members and other ecolabelling programmes.

d. Participate in certain international organizations in order to promote ecolabelling and

e. Encourage the demand for, and supply of more environmentally responsible goods and services (www.fuo.org/douip/005/Y2789E/y278906.htm)

GEN Membership

GEN includes twenty-six national and multinational member organizations that operate ecolabelling programmes around the world.

The members are United States (US), Germany, Japan, France, Canada, European Union/EU (Austria, Belgium, Denmark, Finland, Greece, Island, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, UK, India etc.

CHALLENGES TO ECOLABELLING

Misleading or fraudulent claim:

An ecolabel has no value to the environmentally conscious customer when it is misleading or fraudulent. Terms such as "Recyclable, Biodegradable" and "Ozone Friendly" must be used accurately. When claims are used arbitrarily in advertising and labelling, customers will become confused, discouraged and skeptical even of legitimate claims.

Union formative claims:

Labels that provide trivial or irrelevant "green" information and do nothing to reduce environmental impacts.

Unfair competition:

Some companies are concerned about unfair competition. They are unwilling and hesitant to rely on the assurance of an overseas ecolabelling programme. Some companies may intentionally misrepresent their products as

environment friendly in order to gain a long profit. This amounts to unfair competition for those companies, which must spend the time and money to adhere to regulations.

Green Consumerism:

Many environmentalists are critical of consumerism. "Green consumerism" is a self-contradiction term. "Green Shopping" will do little to bring about the more fundamental economic and social changes that are required to protect the planet. Indeed, consumer preference and market forces cannot give the guarantee of environmental protection.

Feasibility:

Another concern is that only a small number of products can realistically be labelled as "green". Since the vast majority of goods will not be covered by ecolabelling programmes.

Benefits of Ecolabelling

Ecolabelling has a number of major benefits (Banerjee, 2006; Santra, 2005; Uberoi, 2003; Roy, 2003).

Informing Consumer Choice:

Ecolabelling is an effective way of informing customers about the environmental impacts of selected products. It empowers people to discriminate between an ecolabel and non-ecolabel makes. Customers get more benefit of certain ecolabelled products such as recycled paper or toxic-free cleaning agents. It also promotes energy efficiency and waste minimization.

Promoting Economic efficiency:

Ecolabelling empowers customers and manufacturers to make environmentally supportive decisions. This is beneficial to both government and industry.

Stimulating Market Development:

When customers choose ecolabelled product, they have a direct impact on supply and demand in the marketplace. This is a signal, which guides the market towards greater environmental awareness.

Encouraging Continuous Improvement:

A dynamic market for ecolabelled products encourages a corporate commitment to continuous environmental improvement. Customers can expect to see the environmental impacts of products decline over time.

Promoting Certification:

An environmental certification programme is a seal of approval, which shows that a product meets a certain ecolabel standards. Certification therefore has an educational role for customers, and promotes competition among manufactures, since certified products have a prominent logo to help customer choices.

Assisting in Monitoring:

Another benefit of an official ecolabelling programme is that environmental claims can be more easily monitored. Competitors and customers are in a better position to judge the validity of a claim.

Conclusion

To bring sustainability it must make sense in the business to achieve cleaner production. The following conclusions are drawn:

- It is one of promising tools of economic instruments.
- The environment label would be an important element in future environmental policy.
- The Ecolabel or Environmental label would prove itself a useful instrument based on cooperation and self-commitment on the part of industry.
- The Environmental friendly scheme would definitely help to solve the pollution in certain areas.

- It also provides an incentive for manufacturers and importers to reduce adverse environmental impact of products.

- It can assist consumers to become environmentally responsible in their daily lives by providing information to take account of environmental factors in their purchase decisions.

- It encourages citizens to purchase products, which have less harmful environmental impacts.

- Ultimately it improves the quality of the environment and encourages the sustainable management of resources.

References:

1. Banerjee G.D. 2006. Kurukshetra, Vol.54, No.3, Page 52.
2. Santra S.C. 2005. Environmental Science. New Central Book Agency (P) Ltd., Kolkata, pp.680
3. Uberoi N.K. 2003. Environmental Management. Excel Books, New Delhi, pp.315-318.
4. Roy Sovan 2003. Environmental Science: A Comprehensive Treatise on Ecology and Environment. Publishing Syndicate, Kolkata pp 434.
5. Holling, C.S. (ed.) 1978. Adaptive environmental assessment and management. Wiley, London, UK.
6. www.envfor.nic.in/legis/others/ecomark.html, accessed on 14th June, 2006.
7. http://www.iimm.org/knowledge_bank/8_ecolabeling-scheme.htm, accessed on 14th June, 2006
8. <http://www.fuo.org/douip/005/Y2789E/y278906.htm>, accessed on 14th June, 2006

Lokesh Kumar Panda is a Final Year Post Graduate student in the Department of Environmental Sciences, Fakir Mohan University, Vyasa Vihar, Balasore-756019.

Dr. Shreerup Goswami is Lecturer in Environmental Science, P.G. Department of Environmental Sciences, Fakir Mohan University, Vyasa Vihar, Balasore-756019.

Home Grown, World Class: A Review of the English Poets of Odisha.

Dr. Pratap Kumar Dash

Worth saying that the soil of Odisha is full of talents in each and every field. But hardly do they get wide publicity or recognition. In comparison to the intellectual input of others, an input is virtually much more vital and useful. But reward and recognition in return is less. It may be because of our backwardness or meanness or shyness, lack of coordination and strong interest or may be because of the deliberate negligence of others. Still then, the gifted litterateurs of our state have embroidered and enriched our literature in a great way. At the same time our translators have translated a number of Odiya classics into English in order to popularise them in the English speaking world. Our esteemed writers and translators like Gopinath Mohanty, Mayadhar Manasingh, Binod Chandra Nayak, Jatindra Mohan Mohanty, Madhusudan Pati, Bikram Ku Das, Sitakanta Mohapatra, Subas Pani, Jatin Naik and Arun Mohanty etc have translated those classics and achieved worldwide recognition. The fresh stream of translation continues till date profusely. In addition, we have a continuous and indigenous effort of writing in English. At least in the field of English poetry, we are not backward. We have tried to catch up our tradition, culture and literary bent of mind in writing English poems. Since English language became a part of our culture and assimilated into our thought and action, we are also at the front with the beautiful poetic creations in English. Credit goes to numerous identified

poets of Odisha writing in English. But the identification of such a stream although at its infancy, blooms up with all shades and variety. The international inception of English poetry written in Oriya soil has been done by Jayanta Mohapatra and Laxminarayan Sahoo like able poets. This force has been accelerated by numerous others. Time is burning with the passion of remembering and reviewing them. So, in this article we have made an attempt to, squeeze them into the pages of black and white with due credit.

Writes Prof. Pabitra Mohan Nayak that Laxminarayan Sahoo (1890-1963) "was enthused into poetry in his roaring forties. Poetry with him became a passion, an ungovernable impetus. His book of poems includes *The Fountain* (1952), *Konark* (1954), *Poesy* (1955) and *In Pain and Sadness* (1960) which have found a place in his collected works (1971). This collected works contain 199 poems. Prof. Nayak has categorised some of the selected poems in the heads "Brothers and Sisters all" of "Life and Death" and "Life Infinite Variety".

He has written odes and songs of praise on the sons and daughters of India soil including Thakarbapa, Srinivas Shastri, Jogesh Chandra Ray, M. Kondya, M. A. Swaminathan, Saradamani, Ratnakar Pati, Arakhit Das, Dr. Biswanath Sahu etc. Also he has songs of praise for Aristophanes, Socrates, Buddha,

Anniebesant, Mahatma Gandhi and Subash Bose. He praises the poets like Robert Burns and William Blake.

One can find a strong influence of partition, spiritual realization, mystic feelings and modesty in his poems. He reflects the sense to be unprejudiced and the ideology of Gandhiji at all level. He has written a poem sympathizing a leprosy patient. He defines different common human conditions, actions and moods like birth, death, sin, virtue, pain, pleasure, life, love, sex, beauty, dance, music, colour, festivity, gleam and gloom.

He glorifies women in writing "Sati", "Shakuntala", "My Daughter" and "Maiden". He highlights the Vedic systems and invokes the ethereal elements like Daya, Mitra, Varuna, Surya, Sabitri, Aswini, Usha, Mantras, Vaya, Pragnya, Rudra, Prithvi and Agni. He writes beautifully on man and the other natural elements like Greenery, hills and valleys. He worships mother earth. He glorifies our culture. He is a hero-worshipper and speaks, "What is life but feeling and refilling of love constantly?" (On the Bank of the Ganga). He studies the wage of life of Pigeon, Dog, Cat, Cock and Hen and praises them. He persuades human being to follow their ideologies. He is no doubt unique and creative in his poems of praise of the artistic and architectural monuments of Odisha. His poems also include "O Gandharvikas", "The Bird of Clay", "A Picture", "The Sculptured pair", "Excelsis" and "The Konark Temple". He seems to have touched by many moments, experiences a lot and reflects with creative genius.

A series of English poets are there still glittering in Odishan sky. Ghanashyam Dhal's I love and live, Manmohan Acharya's Verses of a Broken Heart, Ratan Das's Floating Life with New Century, Dust in Heaven and Thirsty Vision, Tarini Charan Das's Unity of being, Jujuthu Ku Dev's Rejuvenation and other Poems, Girija Shankar

Dash's Love in a Dream land, Nabakishore Dash's A Bouquet, A Book of Verse on Universe, To the little Star, Europa and To the Star, Devdas Chhotray and Prafulla Mohanti's Longing : Poems, Debendranath Nanda's Oh ! Almighty, Krushna Chandra Nayak's I Have Seen the God, Bikram Keshari Verma's Oh ! Cowherd Boy, Manmathnath Das's Songs of the Sunset, Jagannath Prasad Das's Silences, B.B. Kanungo's The Past, The Present and The Permanent, Subodh Das's Moment in Darkness, Poetry of Shanta Acharya and Sailendra Narayan Tripathy etc are worth mentioning. Dr. Seemanchal Pattnaik's Queen English Poetry, Pradyumna Patel's Gate to the Modern Age, Sankarsan Parida's The Golden Bird, Sangram Keshari Nayak's Strings of Lyre, Rajvansh Kumar Padhi's When Even the Heavens Weep etc are the emerging anglicized poetic expressions of Oriya heart and mind, Jayanta Mahapatra (1928-) is one of the first Indian English poets to have been honoured both at home and abroad. He wins the Central Sahitya Academy Award for his poetry book Relationship in 1981. In his poems, he goes back to Indian roots and his past memories and portrays the Indian situations with great authenticity. His first book of Verse is Close the Sky, Ten by Ten, in 1971. His other volumes include Swayamvara and other poems (1971), A Father's Hours (1976), A Rain of Rites (1976), Waiting (1979), The False Start (1980), Relationship (1980), Life Signs (1983), Selected Poems (1987), Burden of Waves and Fruit (1988), Temple (1989), and A Whiteness of Bone (1992). A number of research works and evaluations of his poems have already been done in home and abroad. Famous critics like K.R.S. Ayengar, M.K. Naik, and V.A. Sahane have studied his poems very closely. Many of his poems including the much anthologized poems like "Stanza from a Country", "Chandipur-on-sea" and "Indian Summer" have claimed great honours from artistic and creativity point of view.

Prof. Niranjan Mohanty (1953-) of Visva Bharati has written six books of poetry so far. The books include *Silencing the Words* (1977), *Oh, This Bloody Game!* (1988), *Prayers to Lord Jagannath* (1994), *Life Lines* (1999), *On Touching You and Other poems* (1999) and *Krishna* (2003). His poems are philosophical, sensitive and satiric, emotional, devotional and reflect the reality of life. Scholars have already started evaluating him in their papers and magazines. He uses "Tiger", "House", "Family", "Journey" and "Absence" as important symbols.

Bibhu Padhi (1951) has so far published five books of poems. His *Choosing Place* is a popular one. His poems have appeared in well known magazines throughout the English speaking world. His poetry has been included in anthologies and College / School textbooks in India and abroad. He seems to bear a meditative spirit like Robert Frost. In his poem *Small Asking*, he says that he goes on asking questions one after another. He expects numerous answers. But the tremor of the warm tongue of his counterpart gives answer to all his questions. In his poem "Betrayed ?", a consolation is obtained for the betrayed people. He says that to be betrayed means one is devoid of the prison of Love and therefore devoid of selfishness and pain. His "Inviting the Dead by Default" is confessional. In this, he supports the annual ritual dedicated to the innumerable dead forefathers. He says that these are the occasions of meaningful ceremony reminding us our duties and let us confess our own mistakes with a note of self analysis. In his "The Smell of Blood", he sings the song of glory of blood as a deliberate, pre-determined hand's rough work beneath the flesh. "Midnight, Winter" is an account of a winter night, when he experiences a gloomy condition and spends time with heart-beat. "The Last Rains in Cuttack" expresses his sad feeling over the loss of the real interest of rain in such a city. "Waiting" speaks of philosophy of waiting and says that waiting has

also got a limit. "Today" is a self-told story of city that speaks of the story of life of everybody.

Indian English poetry has come of age and now stands firmly and confidently on its own beside its formidable international counter-parts. And among the chosen few from Orissa enriching this stream of creative energy the then young (1973-78) burgeoning poetic talent Sasanka Sekhar Panda (the second generation of poet from a creative lineage) contributes phenomenally to the illustrious tradition of Indian English poetry.

Through his academic years at G.M. College as a sophomore and at Delhi University as a graduate student, Sasanka has made it a point to commemorate every passing experience or reflection while not sparing any worthwhile moment he passed through in his earlier years as an adolescent.

His poems, as it were, spans a stupendous range from "Picnic" to such serious themes like "Death". All along, there is a clean and unmistakable trend of this young poet to respond to such characters like a "Street Child", "a Gypsie" and "a Dalit" that reflects his deep concern and comparison for the deprived and the hapless.

As a student of history Sasanka Sekhar shows his loyalty by turning his poetic lens at such antique characters like *Amrapali* that comes brilliantly alive in his poetic embellishment. Even his curious, roving eyes don't miss such matter-of-fact features like *Hippie* or *Jamasthmi* with his brevity and control over his syntax Sasanka Sekhar seems to follow the great masters like Ezra Pound and T.S. Eliot. As a whole *Voice of Silence* is a highly readable Published Anthology of poems that is indeed palatable to readers of all age-groups with its variety and freshness.

Bishnu Prasad Sethi (1967), although an administrator by profession but seems life in poetry. He has a great love for Nature and its minute details. His 'Where shall I Go' is a well

known one. In his poem "From Dream to Reality", he reflects this. He becomes dreamy, sensuous and feels the rhythm of Nature through the movement of butterflies, freshness and fragrance of flowers, plants and trees. His dream also vitalized with his association with Nature and help supply ingredients for survival. 'Lion of Souls' is a poem of unique taste in which he praises the love and devotion displayed by Gopis to Krishna. He develops transcendentalism in that way. His 'The Winter Night' provides the warmth of the first glimpse of the Sun as well as comfort as obtained from a Veena. After a winter night, the touch of the Sun recharges the hopes and aspirations for the next day. In his 'Yours Company', we discover the pleasure of love which he had not felt earlier. His mystical union with his partner is electrifying the path of life. He has written a poem on evening entitled "Different Moment" in which like Thomas Hardy's feelings in "On A Fine Morning", he feels magic of twilight, starry sky and chirping of birds. The poet welcomes such a natural change from the core of his heart.

Durga Prasad Panda (1970)'s works have appeared in mainstream literary Journals. He is a recipient of Indian Literature Translation prize. His collection of poems is titled A Taste of Darkness. In his poem, with the same title, he says that night comes with darkness as per the law of Nature. He draws the image of a house in darkness. He closes all its doors and then looks out of the window of it. He feels as if night makes him feel some obscure loss. He thus stretches his faith like hand but the "taste of darkness" still lingers in his tongue. His "Family Portrait" is a poem of funful images of his family members. In his poem "Market", he reveals how the use of language of money makes him feel the loss of human value. Man becomes a commodity himself. He writes a poem on Puri entitled "Puri : A Reflection", He criticizes people those who can not respond to the beauty of the sea, the full moon night, the roar of the sea and accept the so called lives.

Prabhanjan Mishra has served as the president of poetry circle, Bombay. He is the editor of the Associations Journal "Poesis". He has published books of poems like 'Vigil', 'Lips of Canyon' and 'Litmus'. He has received JIWE poetry Award. His poems have appeared in Anthology of New Indian English Poetry and Bombay Poems. Among his widely anthologied poems, 'Watched' is one. In this poem, he expresses his annoyance over his loss of freedom because of the surrounding. Even he loses freedom to make love. In fact, he expresses deep disgustness over the loss of privacy in the present urban life of worry and anxiety. In his 'Fantasies', he gives a new dimension to human experience. He says that if reality is full of suffering, then let us live a life of fantasies so that we will find out a possibility of existence. In his poem 'Words', he emphasizes on the use of words that would value human dealings and add to human feelings and relationship. Disciplined use of genuine words is an expression of the genuineness of self and soul. 'Grit and Ennui' expresses a belief of to err is human to the fuller extent. He says we run, escape, hide and loose ourselves among fugitives. Also we bear animal instincts and try to derive pleasure from the mundane world because we are human being. 'Flower and Sitars' expresses his consciousness of both the beauty of nature and music which is extended to his another poem titled Shehnai.

Rabindra Kumar Swain (1960-) has three books of poems, the latest being 'Severed Lord'. His poems have been published in the journals in home and abroad. He is the Managing Editor of Chandrabhaga. His poems like "The Pigeon Couple", "The Mask of the four walls" are the expressions of minute details of the life of creatures and their sensitivity.

Sarojkanta Mishra (1956) writes poems of profound and meditative value. His "Waiting" reveals his apprehension over healing injuries of heart and mind. In His "Kaleidoscope" he

criticizes the oddities of human society of our time. In his "The Vanquished", he says that he has seen his life and now he sees children, who are looking into their lives, looking at the varieties and variations of life makes the difference. Pinky Behera's Introspective is published in 2001. She is being a lover of nature and its creations, her mostly dealt on their subject. She tries to arrest the essence of modern life and bring about a synthesis of man and nature in her poems. From the mesmerising beauty of creation in "Seascape" to the heartrending enquiry of life in "Beggar", her book of poems take us on a contemplative tour of different aspects of existence flavoured by its myriad hues. In her poem "A Devotional Fancy", she prays God to get rid of all the ordeals of life and time which is but a fancy. She stands as a worshipper of beauty in her poems, "The Seasonal Affairs" and "The Portrait". She is in support of innocence which should prevail among the humanity. She reflects her unique ideas in the poems like "My Tribute" in which she praises the freedom fighter of India and the country. In her "The Darker Side", she finds a contrast of life and death. She says that when death occurs, the spirit of a man is lost. Her "Hunter in the Jungle", she reflects the condition of panic stricken animals in the presence of a hunter in the forest. In her "In Search of Eternity", she finally advocates for spiritual realization.

Dr. Chittaranjan Mishra (1958) has so far published one book of poetry entitled Website. He has however published very good poems in the book. He reflects on the unforgettable dreams in his "Images". The same stream continues in his "Nightmare" and "Dream" like poems. In his poems like "Solitude" and "In Silence", he enjoys peaceful mood and becomes thoroughly meditative on the natural themes. In his poems "Reminiscence" and "Love's Archaeology", he expresses his nostalgia over some monumental achievements. In his "To You", he values love that comes like a sea in exchange of a drop of tear.

He has written poems like "Radha", "Racluse", "Sculpture" in which he focuses on the Indian mythological beliefs and portrayals. In his poems "Half way" and "Winter" he looks at life closely. He has written poems of unique taste. They are "Generations" in which he has noticed the generation gap between people of different ages and concludes on the point of ultimate adaptation. His "Tele-watch" is a comment on artificialities of life. I am the last but not the least to publish a book of poems entitled Emotional Savings. Some selected poems like "My own World" expresses a mystic feeling in darkness. "Myself Chained" gives an account of a love for the nature and countryside Odisha. "True Language" speaks of validity of voices of birds, animals and natural elements. "Hand to Mouth" is a satiric reflection of the modern materialized middle class life. "On Pilgrimage" is a poem of praise over the spiritual journey in life. The realization of self has been selected in the poems like "Ab Imo Pectore" and "Still then I am a Man" and must touch everybody.

References:

1. Nayak, P.M. (ed), Songs of the Soul, New Age Publication, Cuttack, 2006.
2. Dash, Manu(ed), Ninety-nine Words, Panchabati Publications, Raygada, 2006.
3. Behera, Pinki., Introspective, Minerva Press, New Delhi, 2001.
4. Mishra, C.R., Website, Sreeparna Prakashani, Puri, 2001.
5. Dash, P.K., Emotional Savings, City Printers, Nayagarh, 2005.
6. Information received from different poets, State Library and poems from various issues of Indian Literature, i.e. Published by Central Sahitya Academy, New Delhi.

Dr. Pratap Kumar Dash teaches English at Ranpur College, Ranpur, Nayagarh.

An Exhibition in the Marvel of Mahendra Giri

Gurbir Singh

The task seemed easy on papers, but to put it in action was indeed an effort of herculean dimension. Holding an exhibition on the highest altitude of Orissa- why Orissa alone, it is the highest peak of the entire Eastern Ghats mountain ranges- standing at a majestic height of 4, 925 feet above the sea level, with the Bay of Bengal from Andhra side being merely 25 km away and a majestic river n a m e l y Mahendratanya finding its source from Orissan side, was a risky affair.

With no support coming up from any quarter literally speaking, the odds set against us were heavy. The probability of risk perception came from both men and nature. Among the prying eyes of some stern looking stangers who kept a thorough watch on us right from the time we arrived there till we had left, and the enthusiasm of thousands of simple hearted locals from the villages far and wide downhill and

pilgrims and visitors of other districts and from across the borders, we had our spirits brave the chilly onslaught of fiercest wind in the night. Seeing happiness on the faces of a tired population, who had walked their way up to the mountain top to celebrate Shiv Ratri, upon finding a lonely lighted tent on the bottom of the hill upon which the Bhima

Temple stood, which was their last and most difficult climb, where a whole night exhibition was on, was our solace. And seeing their jolly impatience which was not there for long for a film show to begin, and the clappings and whistles of youngsters that soon followed

when the film show began was our great reward.

Mahendragiri is situated on a Center Lat/ Long 15° 47' N; 80° 54' E with an extent of 1,131 km / 703 mi North-South, 1,053 km / 654 mi East-West. It has an area of 262,673 sq km / 101,418 sq mi which may include lowland areas.



The spanning over of the approximate percentage of its range area among many states is as follow: Andhra Pradesh (48%), Orissa (25%), Tamil Nadu (24%) and Karnataka (2%). The highest

peak Mahendragiri where we had our exhibitions tent put up is the Range-4 of the Eastern Ghats mountain ranges. It has mentions in the great epics *The Ramayana* and *The Mahabharata*. It is from this peak that Hanuman was said to have taken his first plunge towards Lanka to look for the abducted Mother Sita. It is where the Pandavas were said to have spent

sometime during their *vana vasa* (living willfully in the dangers of forests) along with their mother Kunti and wife Draupadi. To bear testimony to this, there are three great temples of antiquity on the top of the mountain named after the Pandava brothers and their mother Kunti. Sarala Dasa, the author of Oriya Mahabharata, attributes the establishment of the Gokarnesvara Sivalinga to Pandava brothers who visited Mahendragiri during the period of their exile.

The myths relating to this sacred hill top are abundantly immense. The fair held on the eve of Maha Shiv Ratri here every year has no equals, if one considers the insurmountable difficulties in climbing up the 10 km stiff incline with no roads and eating places, and with only dusts to fill up one's nostrils and lungs to full. Only vehicles with

four wheel gear system can take the arduous journey up, and there are not more than half a dozen of such vehicles in the district headquarters all of which had been requisitioned by the district

administration. They only catered to the officials on duty and visits to the hill top. Private vehicles were not allowed to ply and it was walking and walking alone that was the only option available for the rich and the poor, the healthy and decrepit, the old and the young and for the locals and the outsiders alike to take up the arduous travel upwards, which they did without any

complaint and whining. Many panted on the way, some took frequent breaks in between, but in the end none gave up without reaching the hill top.

I wanted to hire a pick up jeep to transport our goods up there, but did not find a single commercial vehicle with the four wheel system. I had borrowed photo exhibits from the neighbouring Rayagada district and had also made many flex boards for exhibition. Getting a tent man agree to travel with us was another difficult task during the marriage season when their bookings are full. I got one willing to supply the tent materials on the condition that he would not be personally available with us. We hired two porters who did a wonderful job for us there. Half the goods reached the Burkhart Pass a day before in the morning, which is 5 km away from Kainpur from



where the buses stop plying. The staff waited whole day for the four wheel system requisitioned jeep to arrive and it was only in the evening when they were taken up. When the next day, the remaining goods arrived in our official jeep, the wait for any of the requisitioned vehicles to come was inordinately long.

I chose to walk my way up to call for help as we had been left stranded downhill for hours with materials and generator. My asthma was getting worse in the first two kilometers of climb, but a puff of Aerocort inhaler and a determination to check out if I still had in me the attitude of carefree youthful days, something which I saw in all of them climbing up the rigorous pass made it easier for me to finish in normal time which is 1 hour and 15 minute for any able-bodied man. The climb was stiff; many times the gradients inclined up to a little less than right angles. For a first timer in the darkness of no moon night, the thrill was immense. Help came when I reached the hill top at 7.30 PM, to find myself amidst a frenzied gathering of some 20,000 people. People were amiable and helpful. When the generator developed a snag, a mechanic from amidst the gathering offered to fix that thing and he did that successfully. When our projectionist, who of course was new to using a digital LCD Projector, found the audio missing and was unable to fix things up, it was the same man who came to our rescue to fix the problem of missing sound.

The nauseating decline of 5,000 feet, the overlooking stretch of vast valleys across the distant township of Manjusha and Badua of Andhra Pradesh, the scores of mountain ranges which stood at a lower height from us gave us a nice vantage point to observe the celestial marvel of nature. One felt at the top of the world to be there in the first place, doing one's job that brought smiles over thousands of people's faces at the same time was like a silver lining in the cloud.

One saw a strong bodied, jeans clad tribal boy losing his consciousness due to fatigue at one place, his companions who were a young boy and girl who had made desperate efforts to wake him by giving him water to drink and by pouring water on his face, leaving him unattended when they failed. Of course, they asked for forgiveness for leaving him half way when a semi-conscious told them that he had given up his journey. When I returned by walking down again the next day, I was curious to see whether the Youngman was still there. No, he was gone. The downward journey was not all that bad. With the gravity coming to take some of your weight from you, one saves half the energy that is required while climbing up. Many young boys who almost ran down during their return journey were heard shouting, "The breaks of our bodies are failing us." I held an obese, middle aged woman by arms, thanks to a sudden quick reflex, when she lost her control over a stiff decline and was all set to roll down to a fatal injury. I did not stop to exchange pleasantries with her, but overheard her saying to her companion that Bhima had plans to take her to the heavens.

Off all, the marvel of all marvels was being on the top of the hill where the Bhima temple was situated. This is the topmost height, the magical 5000 feet mark. With completely destroyed stairs, the visitors in thousands were thronging their ways up the whole night, throwing their safety to winds. To find one's foot hold on slippery incline full of stones and gravels in the dark of night among pushes and shoves was an experience which fails words to describe. Anything could have happened, a stampede or an individual fall of somebody from the height. Thankfully it did not. Apart from the routine *darshans*, there was yet another reason for the gathering. To watch the sun rise from the vantage height of the region's highest point. It was sacred and it was splendid. An INTACH

photographer from Shrikakulum, who was there to film the sun rise professionally, told me the very many colours that could be lucidly seen in the body of the rising sun. Dark grey followed by crimson red with splendid sparkles, if I have my memories right. I chose a safer place to sit, waiting for the sunrise at 4 am in the teeth biting cold. The sea breeze was at its fiercest. Thousands occupied their places on the dangerous precipices, looking at the east-ward horizon. A very slim, but immensely beautiful moon that was days ahead of its crescent shape, lurked up to demand attention. The fog was immense, though the sky was crystal clear, with billions of stars looking downwards.

The impatient wait for sunrise was getting inordinately long. One overheard a rustic woman from Ganjam saying, "The God is throwing tantrums upon seeing thousands waiting for him, and hence He is being late in rising." The sun god came, lately though. The immense fog had played the spoil sport. The photographers and videographers were dejected for failing to shoot the mysterious splatters of colours which are

unique to this sunrise alone, but the rest of the gathering cheered at the sight of an already risen sun. Yodels and whistles from religious and frenzied men and women reverberated in the mountain ranges, welcoming, greeting, worshipping the source of the life on earth. A feeling of awe and reverence was in everyone's heart. A once in a life time experience for many who do not belong there, who never knew if they could come back again to this beautiful place.

For those who want to grow their familiarity with nature to a celestial level, the place is this. Some 60 Kilometer from Parlakhemundi in the district of Gajapati. Come and be a part of an awe of such magnitude next time during Shiv Ratri. Precisely on the day preceding Shiva Ratri when the fair is held.

Gurbir Singh is working as District Information and Public Relations Officer, Gajapati.



Hon'ble Chief Minister Shri Naveen Patnaik going round the Annual Terracotta Exhibition-2009 'MRUTTIKA' at Exhibition Ground, Bhubaneswar on 11.9.2009.

Success Story

Ganadahati Gram Panchayat is one of the remotest tribal pockets in the Block. In Rayagada Block 35 villages have been selected to be covered under OTELP for which SWWS is the FNGO, these villages come under ten numbers of micro watersheds.

Satabhauni MWS is one of the most tribal concentrated areas with three villages. There are eight SHGs, in S. Laupur village, there is a self help group namely Maa Tarini comprising of 13 members and the group was formed on 20.08.2000. During that time, the condi-

tion of the tribal women was pathetic due to exploitation by the village touts and the money lenders, but after the intervention of OTELP several training programmes were organized for the SHG members with sophisticated delivery mechanism to build up the capacity of women by this effective tool of monitoring system they could be able to save to the tune of Rs.23400/- as their own corpus. Apart from this they were able to make

internal lending, and by that way, they were accustomed to banking habits.

In the SHG monitoring system, the same SHG got an "A" grade and became eligible for availing Revolving Loan Fund from the Village Development Committee through Rural Financial

Services component of OTELP. FNGO staff interacted with the members and took decision to start the Pisciculture in their village; fortunately the SHG could avail loan of Rs.20000/- for the above said purpose. The FNGO has imparted relevant training for modern inte-



grated pisciculture and after that 13 tribal women got skills and encouragement to start Pisciculture in their own village this year. It shows that with a little outside intervention and timely help, and their effort could pave way for great success. Now they are examples to other women SHGs in general.

Source: OTELP, Gajapati.

Intercropping Elephant Foot Yam in Orchard Crops

*Susanth Kumar Jata,
Biswanath Sahoo and
M. Nedunchezhiyan*

Introduction

The paucity of land compels the farmers to use every inch of the land including the inter space of horticultural crops. Subsidiary food crops like tuber crop are considered as the most suitable inter crop for growing under partially shaded situation, especially under horticultural garden/orchard crop (coconut, papaya, guava, grafted mango, litchi and custard apple etc.). Elephant foot yam (*Amorphophallus paeoniifolius*) is an important crop cultivated for its edible corms. It can be raised profitably as intercrop in different horticultural crops. They can supplement the food requirement of the family besides providing additional employment.

It is well known that fruit/orchard crops give economic yield after 5-6 years of planting and some crops take even 8-10 years or so. Only a few are short duration like banana and papaya. Under such circumstance, it becomes essential

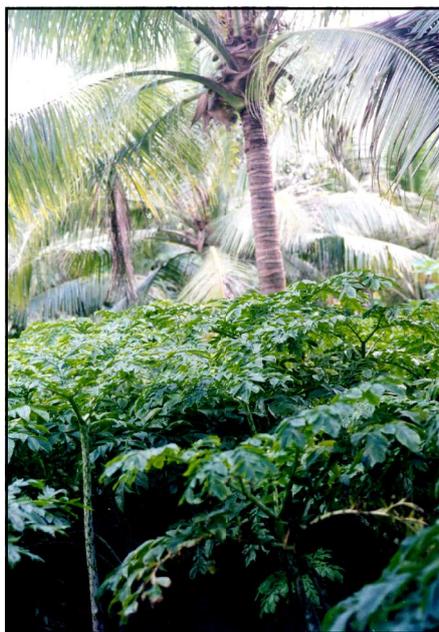
to think on how to get additional income from some orchards so that maintenance expenditure and cost of planting materials are obtained before bearing the fruit/orchard crops, if not getting additional profit at least. Solution to this problem

lies only in with rising suitable inter crops on space available between rows of fruit/orchard trees.

Elephant foot yam Cultivation

Elephant foot yam is a tropical and sub-tropical crop which requires an average temperature of 28-35°C, preferably fairly equable during its growing period. The rainfall should be evenly distributed and between 100 and 150 cm, although the plant can be grown with a rainfall as low as 65 cm provided irrigation facilities are available.

Warm and humid conditions favour leaf growth, and dry conditions favour the development of the corms. For optimum yields, deep loamy soils worked to a fine tilth are necessary, preferably not alkaline. Field spacing



*Photo 1: Elephant foot yam +
Coconut intercropping system*

- trials in India using whole or cut pieces of tubers of 500 g gave the highest yield per hectare when planted at 90 x 90 cm. A seed rate of 5-6 t/ha is required. Mulching immediately after planting is perhaps one of the most important cultural operations required in elephant foot yam. Being widely spaced crop, three manual weeding were necessary at 30, 60 and 90 days after planting. Earthing up of the crop should be followed immediately after weeding. A fertilizer dose of 80:60:80 NPK kg/ha is recommended along with FYM 10 t/ha.

Collar rot is the common disease in heavy soils. Sporadic incident of mosaic disease is also reported in India. *Sclerotium rolfsii* a soil borne fungus causes this disease. Poor drainage, water logging and mechanical injury at collar region favour the disease incidence. At collar region first develops brownish lesions which spreads

to the entire pseudostem. In severe case the plant collapses leading to complete crop loss. The disease can be controlled by 1) Using disease free planting material, 2) Removal of infected plant materials, 3) Improving drainage conditions 4) Two spraying 0.2% mancozeb at 15 days interval immediately after appearance of symptoms and 5) Incorporation of organic amendments like neem cake 250 g/plant in endemic area.

Leaf blight (*Phytophthora colocasiae*) is also causing considerable damage to the crop. Usually it is found in the month of August in India

which coincides with high rainfall and high temperature. The disease can also be managed by 1) Early planting to avoid heavy monsoon rains, 2) Use of healthy planting materials, 3) Spraying with fungicides viz. mancozeb (0.2%) or metalaxyl (0.05%) and 4) Treat the seed tubers with bio-control agent viz. *Trichoderma viride*. Some times yellow vein mosaic has been seen in case of elephant foot yam. Reports from India also indicated that corm rot (caused by *Rhizoctonia solani*) is a serious problem. Drenching the soil around affected plants at monthly intervals with 0.2% captan or 0.1% quintozone was highly effective and led to almost double the corm yields compared to untreated plants.

Harvesting of elephant foot yam becomes ready 7-8 months after planting. The crop attains maturity when total senescence takes place. The corms are dug by hand. The tuber is dug out carefully. It yields corms of 30-35 t/ha.



Photo 2: Elephant foot yam + Guava intercropping system

Intercropping

Orchard crops are spaced widely i.e. mango (15×15 m), sopota (10×10 m), guava (10×10 m), citrus (10×10 m), custard apple (10×10 m), coconut (20×20 m), areca nut (5×5 m), banana (10×10 m), papaya (5×5 m), drum stick (10×10 m). Elephant foot yam can be planted between the inter space of the orchard crops with the recommended spacing of 90 x 90 cm. Depending upon the canopy size of the fruit/orchard crops, 5000-9000 plants of elephant foot yam/ha can be accommodated. It requires seed

rate of 3 t/ha. Application of FYM 12.5 ton/ha and NPK@25:30:33 kg/ha is sufficient for elephant foot yam inter cropped in coconut garden (Ravindran et al, 2006). In India the average yield ranges between 12 and 22 t/ha; as an intercrop with coconut 13 t/ha, mango 20 t/ha; guava 23 t/ha, papaya 25 t/ha. Under experimental conditions over 60 t/ha has been reported as pure crop, and 36 t/ha in mixed cropping. Das and Maharana (1995) reported that elephant foot yam is not competing for light as because this crop is able to tolerant shade.

Cost of cultivation of elephant foot yam as intercrop

Input	Cost Rs. /ha
Seed materials 3 t/ha @ Rs. 15000 per ton	45,000/-
Land preparation	2,000/-
Planting	3,000/-
FYM	3,000/-
Fertilizers	2,000/-
Weeding cum earthing up	3,000/-
Irrigation	500/-

Plant protection	500/-
Harvesting	7000/-

Total **66,000/-**

Yield: 15 t/ha @ Rs.10/-=1,50,000/-

Gross return	: Rs. 1, 50,000/-
Cost of cultivation	: Rs. 66,000/-
Net return	: Rs. 84,000/-

References :

Ravindran, C.S., Nair, M. and Nedunchezhiyan, M. 2006. Intercropping tuber crops is remunerative. Indian Horticulture, 51 (6): 25-27.

Das, A.K. and Maharana, T. 1995. Effect of spacing and intercropping on bunch characters of banana cv. Robusta. The Orissa Journal of Horticulture, 23 (1-2): 13-17.

Susanth Kumar Jata, Senior Research Fellow, M. Nedunchezhiyan, Senior Scientist are working at Regional Centre of Central Tuber Crops Research Institute, Dumuduma, Bhubaneswar - 751 019

Biswanath Sahoo, Scientist, working at KVK, Bhadrak.



Shri Prasanna Acharya, Minister, Health and Family Welfare, Public Grievances and Pension Administration, inaugurating Swine-Flu Testing Laboratory at Chandrasekharpur, Bhubaneswar on 23.9.2009.

Zinc : An Essential Micronutrient for Crop Production

Dr. Prasanna Kumar Samant

The first green revolution during 60's prompted farmers to use hybrid and high yielding varieties, integrated nutrient management, integrated pest management, integrated disease management etc. Use of chemical fertilizers with greater proportion ultimately leads to soil health degradation and environmental pollution. Now a days farmers are very much concerned about use of major nutrients like nitrogen, phosphorus and potash ignoring micronutrients like zinc, copper, iron, manganese, boron, molybdenum, cobalt and chlorine. As per the requirements of plant if it takes less than 50ppm(mg/lit.) of certain nutrients then that is considered as micronutrient. Imbalanced and indiscriminate application of high analysis value fertilizers to different crops with low or no use of organic matters, biofertilizers, greenmanures and micronutrients leads to deficiency of micronutrients. The deficiency of micronutrients are linked to dietary insufficiency and malnutrition leads to health hazard in human beings and animals. Now a days zinc deficiency has become a serious problem affecting nearly half of the world's population (Takkar et al. 1989 and Cakmak, 2008). Now 25% of Indian population has been affected with zinc deficiency. This deficiency causes dwarfism, anemia, anorexia, skin lesions, immune suppression and loss of taste etc. The problem is more serious in young

childrens as a matter of fact they become stunted. A recent study in Haryana on pregnant women has reported 65% of them are deficient in zinc due to poor intake of diet (<15mg/day) (Pathan et al., 2008). Similarly in Punjab and Haryana, the Parakeratosis disease of animals associated with bone and joint disorder and thickening of skin was due to intake of forages deficient in zinc (< 20mg/kg drymatter) (Vasudevan, 1987). This is actually happening due to low zinc content of the crops grown in zinc deficient soil.

Role of zinc:-

It is an important micronutrient element essential for plant growth and metabolism. It plays a pivotal role in auxin and protein synthesis, seed production, rate of maturity, membrane integrity. It promotes RNA synthesis and in absence of it, carbohydrate metabolism is greatly hampered. Apart from this it helps in cellwall development, respiration, photosynthesis, chlorophyll formation, enzyme activity, protein synthesis and rate of maturity.

Zinc is present in the soil in association with other minerals for which extraction becomes difficult. Very low amount of zinc present in the soil solution is readily available source of zinc to the plants. Various factors affecting zinc availability from mineral reserve to the soil solution are -

pH

Moisture regime

Temperature

Plant uptake

Redox potential

Organic matter

Textural class

Climatic factor

Partial pressure of CO₂

Nutrient interaction

Zinc deficiency occurs in acid sandy soil low in total zinc, neutral/alkaline soil with higher amount of fine clay, high pH and water logged soil. As it is immobile in soil and plant its concentration is more in older leaves than younger leaves.

At lower pH range (acidic condition) zinc is available to plants but each unit increase in pH reduces its availability to the tune of 10². Hence application of ammonium sulphate fertilizer significantly improves zinc deficiency due to development of soil acidity. In waterlogged condition the availability of zinc usually decreases due to its precipitation to zinc carbonate, zinc sulphide or formation of organic zinc. In other ways it can also be interpreted that due to submergence the concentration of iron and manganese increases by which availability of zinc decreases.

Symptoms of zinc deficiency:-

Interveinal chlorosis and in later stage these areas become pale green, yellow or even white, short internode (rosette), bark becomes rough and brittle, leaf size decreases (little leaf) and chlorotic older leaves.

Deficiency symptoms in some plants:-

Rice- After 15-20 days of transplanting chlorosis along with small, scattered like yellowish brown spots appear in older leaves which imparts pale yellowish brown colour. The severity of symptoms increases with coalesces of spots and turn deep brown referred as iron rust or bronzing or khaira.

Groundnut- After 30-35 days of growth size of leaf decreases with light yellow colour. Rosette appearance of internodes. Plants become stunted and kernel becomes shriveled.

Mustard- Younger leaves show deep purple colour which moves towards midrib. Small circular spots of purple colour are also seen and with advancement of time these spots become bleached. The plant becomes stunted and flowering/maturing is delayed.

Papaya- After 35-40 days depression in growth, appearance of chromatic spots in the interveinal areas. Flowers do not form in severity condition.

Role of zinc in controlling diseases:-

As reported by Smith and Hallmark (1987) when level of zinc in soil solution decreases the root rot disease of cotton increases. It has also been observed that application of zinc reduces fusarium root rot of chickpea and rhizoctonia bataticola rot of groundnut. Of course it has not yet been cleared whether it has a direct toxic effect on pathogen or it acts directly on plant metabolism. Sparrow and Graham (1988) reported that progression of fusarium wilt in wheat was depressed substantially due to application of 0.06ppm zinc. Application of zinc also reduced the brown rot disease of mandarin from 99 to 6%, even scurf of potato was suppressed by dipping tuber in zinc solution as reported by Somani (1986). Application of zinc sulphate @ 0.5% reduces the root rot disease of soyabean. Zinc has a tendency to accumulate in older part

than younger tissue because of its restricted mobility from roots to growing parts that is why deficiency symptoms appears in the younger plant parts.

How to correct zinc deficiency:-

Soil application or foliar spraying of zinc fertilizer with correct proportion will reduce zinc deficiency.

Sl. No.	Fertilizer source	Zinc content (%)
1	Zinc sulphate monohydrate	33
2	Zinc sulphate heptahydrate	21
3	Zinc oxide	70
4	Zinc chloride	45
5	Zinc EDTA	12

Soil application through broadcasting @ 12.5 kg Zn /ha seems to be very effective in

correcting deficiency. It can also be applied by mixing, drilling, band placement, top dressing, foliar spray, soaking seeds with zinc solution, seedling root dip etc.

For foliar spray - 0.5% zinc sulphate heptahydrate (ZnSO₄ 7H₂O) or 0.15% Zinc EDTA.

Soaking seeds - 2% zinc sulphate heptahydrate

Seedling rootdip - 4% zinc oxide (ZnO)

Soil application - 12.5 kg Zn/ha or 25 kg Zinc sulphate/ha

Dr. Prasanna Kumar Samant, SMS (Soil Science) Krushi Vigyan Kendra, Kendrapara, At-Jajanga, PO- Kapaleswar, Dist.-Kendrapara.



Hon'ble Chief Minister Shri Naveen Patnaik launching the 'School Health Programme' under N.R.H.M at Dutipada Tribal Girls' High School, District Kandhamal on 1.10.2009. Shri Prasanna Acharya, Minister, Health & Family Welfare, Public Grievances and Pension Administration and Shri Pratap Jena, Minister, School & Mass Education are also present.

Chudakhai Yatra

Dr. Chitrasen Pasayat

When studying Sociology in Jawaharlal Nehru University of Delhi, I learnt about an amazing festival in some parts of Boudh, where the women participate in dance and obscene language describing sex rudely is used in the songs during the dance. It was during my first research trip to Boudh in 1989 that, I could gather information about this dance based on rituals. Taking me on a walk around Marja-kud of Boud and Rushibandh village near Baunsuni, my friend Mangal Sahu wondered why I should be acquainted with this ritual dance. Immediately, I could not explain him properly. Now, he is no more. I am thankful to him for his cooperation during my research work in these villages. It is difficult to recall those villagers who have provided valuable information on this ritual dance during our visit. Popularly known as *Chudakhai (Chuda-Khai) Yatra*, it contents to live in obscurity. The reason is obvious.



Chudakhai is a very popular *Yatra* celebrated in different places namely Marja-kud, Rushibandh, Panchara, Badmal, Badikata, Narayan Prasad, Kantia-Padar, Jhadrajing, Thidkajur, Bukesingha, Jamtangi,, Babda, Kampla near Athmallik and Paljher of Boudh district. It is also celebrated in the village Dubula under Tarva Block of Sonepur district. Some variations are observed in some places of its

celebrations. For instance, it is observed on *Margasira Purnima* i.e. on full moon day in the *Hindu* month of *Margasira* (November-December) in the village *Marjakud*. In the village *Rushibandh*, it is celebrated on last *Gurubara* i.e.

Thursday of *Margasira*. In *Marjakud* and *Panchara*, *Asta-Mangala puja* is performed in phase-wise. But in *Kantia-Padar* and *Babda* though it is observed on last *Gurubara* (Thursday) of *Margasira*, it ends on that day. It

means that, *Chudakhai* is a one day festival in these two villages, where *Asta-Mangala* puja is not performed on this occasion. In this paper we discuss briefly the *Chudakhai Yatra*, observed in Rushibandh and Marjakud.

Chudakhai Yatra represents the tribal folk i.e. Little Tradition of Boudh area. Sakti cult of Hindu Great Tradition has influenced this folk and tribal tradition, where mother worship is prevalent. It is largely a tribal festival of Kandha community, which is officially recognized as one of the 62 tribal communities in the state of Orissa. Marja-kud is a small island village in the river Mahanadi. *Kud* means island. Marja-kud may be called a part of Boudh town. It consists of four wards of Boudh NAC. Boudh is the district headquarters town situated on NH-224. Sati-Kanya Devi and *Pitabali* are two important deities of this village. Traditionally, *Pitabali* is a tribal deity of Kandha people.

During *Chudakhai* Yatra, women participate in vulgar procession and vulgarity continues even in the sphere of worship. Vulgar songs are sung loudly without inhibition to appease the deity. Strange as it may sound, the fact is that Hula i.e. vulgar songs are sung during the *Chudakhai Jatra*. Margasira has been the season/month of this Jatra. It indicates the influence of Tantra. Such ritual dance obviously needs an isolated area and definitely Marja-Kud in its natural location is the best place for *Chudakhai Yatra*. The non-Brahmin priest of this Yatra belongs to *Sud* caste in Marja-Kud. It appears that women surrender themselves completely before the deity while performing this ritual dance. The aim and objective of this ritual dance is to appease the deity who saves their village from fire, flood and such other natural calamities. In course of time, vulgarity has been reduced to a great extent.

Songs are really in crude Sambalpuri/Kosali language and vulgar. First time, the author was shocked and stunned. One can easily notice some youths standing with reddish face while observing the procession of this Jatra. Even though the author stood with an innocent expression, he could not maintain it for long and felt uncomfortable. He could see his friend standing with a sheepish look and it was all written on his face that, he was embarrassed. Later on, an old woman called us and gave the reason of the use of vulgar songs in this Jatra and its effects.

She explained that, Marja-kud is a small island in the river Mahanadi. *Pitabali* is the Aradhya-Devi (reigning deity) of this village. The main Pitha of the deity is located in the middle of the village. Another Pitha is situated on the bank of the river. On the southern side of the village, the Pitha of Grampati is located. It is learnt that, customarily *Pitabali* and *Grampati* are the deities of Kandha people. On the northern side of this island village, where the Mahanadi is divided into two streams, the Pitha of Sati Kanya is situated. There is no specific temple for her. She is placed amidst the Jhad. The spot is green and well wooded with mango and other trees and forms a pleasing sight.

Marja-kud is always liable to be flooded by the Mahanadi River in the height of the rainy season. The deity is satisfied with ritual offering, animal sacrifice and singing Hula. Once, a person refused to sing Hula. Next day a tiger came to the village and dragged away a cow of the village head-man. Considering the geographical location, appearing of a tiger in the island village was a matter of surprise for all of them. People thought that it was the anger of the deity because Hula was not sung by that man. There is no denying the fact that, the Mahanadi really took my breath away. The river in her heyday in rainy season is a

picture of elegance and grace. It is brilliant when it comes with her full-flooded youth.

As per the oral tradition, *Chudakhai Yatra* in Rushibandh was started during the reign of Rudhu Mallik when he was the Zamindar of the village. The adorable deity of this Yatra is *Maa Maheswari*. There is an attractive fable or oral narrative regarding appearance of the deity in Rushibandh village. Rushibandh is situated about 37 kilometers away from Boudh towards Sonapur. Jamtangi is a roadside village situated about 32 kilometers on NH-224, from where one has to take a left turn to cover nearly five kilometers to reach Rushibandh village.

There was a Kandha Zamindar in Rushibandh village. Once, the Kandha Zamindar had been to Amurda Ghat (Dahya) of the nearby river *Mahanadi* with some of his Keunt (fishermen caste of this area) colleagues for fishing. Dahya is a village near the river Mahanadi. It is situated about 36 kilometers away from Boudh towards Sonapur on NH-224 between Boudh and Sonapur. From Dahya one has to take a right turn to cover nearly two kilometers to reach the Amurda Ferry Ghat. The Kandha Zamindar and his *Keunt* friends enjoyed the day there. The fishermen threw their net in the river. They felt that something was their, but when they lifted the net above the water they found nothing. Despite repeated efforts, they failed to catch a single fish on that day. Their hard work went in vain. In other words, the entire day was spent without any fruitful result. It was a depressing day for all of them. So they returned to the village with gloomy face.

At night, *Maa Maheswari* appeared in the dream of the tribal Zamindar and told him that she was there in the net every time they lifted the net above the water, but their human eyes could not see her and recognize her. If the tribal Zamindar would perform seva-puja to her then

he would be blessed with wealth and honor. Hearing this, the tribal Zamindar woke up from sleep and remembered his dream. Thereafter, he decided to worship the deity.

There is another myth prevalent in this area concerning emergence of the deity. In olden days, the river *Mahanadi* was navigable for most part of the year. Till recent years, this waterway served as an important means of communication from both Cuttack and Sambalpur sides. The Mahanadi and the Tel rivers were offering excellent facilities for water carriage. The river *Mahanadi* was the trade route between Sambalpur and this area. Ferryboat was the only mode of transportation at that time. On one occasion, some businessmen of this area and Panchara *Zamindari* were returning from Sambalpur by a vessel after a successful business trip. On the way, one charming lady wanted lift at Gobind *Darha*. The deep gorge in the river is called *Darha*. The boatmen and other passengers of the boat did not want to pick her up. But the lady with fascinating personality did not care and forcibly boarded the ferry. When the boat reached Amurda *Darha / Ghat*, the attractive lady was found disappeared. It was a matter of huge surprise for every one present in the boat. Everybody was shocked not seeing her on the boat. They searched a lot, but could not trace her. Finally, they returned to their villages.

In fact, the pretty lady who came from Gobind *Darha* of Sambalpur to Rushibandh and vanished at Amurda *Darha* was a divine being. When the tribal *Zamindar* Rudhu Mallik of Rushibandh went to the Amurda *Darha / Ghat* of the river Mahanadi for fishing, the goddess showed her miracles and finally expressed her wish to be worshipped by the tribal *Zamindar* as discussed previously.

However, the tribal *Zamindar* Rudhu Mallik wanted to worship Maa Maheswari. First, he kept the stone image of the deity in the village Jamtangi and donated that village for regular *Seva-puja* of the deity. In other words, the *Sevakaris* like Dehuri (non-Brahmin priest), *Mali* (gardener or supplier of flowers), *Kumbhar* (potter), *Dhulia* (Dhol player), *Muhuria* (Muhuri player), *Chhatar-Dharua* (who carries Chhatar), *Palia* (who supplies water) and the like of the deity were given all the lands of that village for their *Sevas*. Jamtangi was four to five kilometers away from the village Rushibandh. Every day, the tribal *Zamindar* used to visit the temple to have a *Darsan* of the deity. On one occasion, the *Zamindar* was reluctant to walk down five kilometers to the village Jamtangi to offer ritual to the deity. The deity could understand his mind. She appeared in his dream and suggested him to make arrangement for her *Seva-puja* in his own village Rushibandh. Then the tribal *Zamindar* established the deity in his village and started worshipping her. But all the *Sevakaris* were coming from the village Jamtangi.

Once, a *Mahajan* (businessman) from Patna kingdom came with vast quantity of goods to this area for business. The local inhabitants asked him to donate *Chanda* for the worship of the deity, but the *Mahajan* did not want to give *Chanda*. So, he was looted by the people. The *Mahajan* returned to his kingdom and appeared before the Patna Raja and presented his grievance. Patna Raja heard him carefully. At that time, Boudh was a part of Patna kingdom. On the basis of the complaint lodged by the *Mahajan*, the tribal *Zamindar* of Rushibandh was served notice to appear before the king. The *Zamindar* was very scared. Out of fear, he did not appear before the king. He sent his distant relative Nabaghana to the court of Patna Raja to appear

on his behalf. Nabaghana was a very brave young man. First he went to the temple of *Maa Maheswari* and prayed for her blessings and then went to Patna. The king placed two pots before him. One pot was meant for *Phasi* i.e. punishment of hanging and the second one for *Mati* i.e. soil. Nabaghana prayed to *Maa Maheswari* and raised his hand. His hand was going towards the pot meant for *Phasi*, but surprisingly it turned towards the pot of *Mati*. The king realized that the *Mahajan* had really committed mistake. So, Nabaghana was released. The king also presented him a sword and ordered that the tribal *Zamindar* would enjoy his *Zamindari* cheerfully and without dispute.

Nabaghana returned to Rushibandh with the sword, which was the symbol of his victory in the case. He narrated the episode to the *Zamindar*. *Zamindar* was very happy and expressed his gratitude to the deity. He asked all the *Prajas* of his *Zamindari* to bring one *Tambi* (a traditional unit of measurement) *Chuda* (parched rice) each for special offering to the deity. *Maa Maheswari* was offered *Chuda Bhog* and the *Chhatar* was worshipped accordingly and celebrated the occasion. This ritual was named after *Chuda* i.e. *Chudakhai Yatra*. The tribal *Zamindar* carried the sword i.e. the symbol of his victory and went round the *Devi-Pitha*. His *Prajas* were so happy that, they started dancing around the *Devi-Pitha* joyfully and singing merrily. They were ecstatic and overjoyed. Their excitement and thrill lead to vulgar dancing and singing. In due course of time, it has become a tradition to dance and sing vulgar songs during the *Chudakhai Yatra*. Even today, the visitors and guests on the occasion of *Chudakhai Yatra* are entertained with *Chuda*. Till now, the sword is worshipped in the temple by the villagers of Rushibandh.

As per the tradition, the *Chuda-Khai Yatra* is observed every year on last Thursday and Friday in the *Hindu* month of *Margasira* (October-November). The tribal *Zamindar* is the main *Purodha* of this festival. The priest of the temple or deity belongs to *Sud* caste. This non-Brahmin priest is called *Dehuri* or *Deheri*. People of this area believe that this is the marriage ceremony between *Maa Maheswari* and *Khambeswari* (Siva). However, *Chuda-Khai Yatra* is also prevalent in the village *Dubula* of *Tarva Block* in *Sonepur district* but rude language is not used in the songs performed on the occasion. As it has been discussed earlier, vulgarity is an integral part of *Chuda-Khai Yatra* of *Rushibandh* and *Marya-Kud*.

A log of *Rohini* tree represents *Chuda-Khai* deity. The top of the log is shaped like a round. It is fixed on the open field. The *Chuda-Khai Yatra* is arranged annually at this place. Since the deity is identified with the *Rohini* tree (*Soyminda febrifuga*), it is regarded as sacred and the people do not cut it. They believe that it will hurt the sacred tree and inflict injury to the tree. Villagers also do not use it for fire wood or for any other commercial use in this area due to the strong religious belief. Villagers are sentimentally and religiously attached with this tree. Since it is placed on the open field, in course of time the log is likely to be damaged naturally. Then the villagers go to nearby jungle and cut a *Rohini* tree to prepare the image of the deity. At the time of cutting the *Rohini* tree, a simple puja is performed under the proposed tree. They lit a lamp, offer *Dhupa*, *Arua-Chaul* (sun dried rice), *Mandara* flowers, *Haldi* powder and milk. Then the tree is cut down, brought to the village and prepared the *Stamba* i.e. the symbol of the deity.

First phase of *Yatra* begins in the afternoon of *Margasira Purnima*. All the villagers assemble

in front of the house of the *Dehuri* for preparation of the *Yatra*. Puja materials and other *Bhandar* items of *Devi* are taken out from the *Bhandar Ghar*. Among the *Bhandar* items or materials, silver *Chhatar* is an important item of the deity. The person who carries this silver *Chhatar* is called *Changu-Deheri*. *Yatra* starts with the music of *Dhol*, *Nishan*, *Muhuri* and *Tasa*. People prepare themselves for the *Yatra*, carrying the *Bana* and *Chhatar*. People sing *Hula* songs i.e. vulgar songs in the tune of the music during the procession. The whole atmosphere is vibrated with the energetic dance. The visitors and spectators on the occasion also participate in this dance and procession. Thus, the procession leads to the *Pitha* of *Sati-Kanya*.

We may trace the origin and source of *Chudakhai Yatra* of *Marja-kud* to *Tantra-Yana*. Subsequently, during the Hindu revival movement *Sakti* cult might have also influenced this ritual folk dance. Also, it might be the product or synthesis of these two. The *Tantrik Buddhism* (*Vajra-Yana*) flourished in *Boudh* (*Khinjali Mandala*) during the reign of *Bhaumakaras* in medieval period. The *Bhanjas* of *Boudh* were their feudatories, who showed their allegiance and loyalty to the *Bhauma* rulers. Consequently, this cult was extended to *Khinjali Mandala* with *Boudh* as its main centre. The findings of *Buddhist* antiquities and remains and other monuments in *Boudh* evidently point to the existence and continuation of *Tantric* cult. *Boudh* was surely a centre of *Buddhist* learning in the medieval age. *Boudh* was a great centre of *Mahayanic* and *Tantric Buddhism* in the medieval period and lingered longer in *Boudh* than in any other parts of *Orissa*. Certainly, the name *Boudh* carries with it the memories and reminiscences of the *Buddhist* heritage of the past.

Scholars believe that, the productivity activity of the divine is thought of in terms of sexual union in *Tantrism*. It is believed that, this is a very old idea found even in Rig Veda. With the spread of this idea sexual symbolism and even sexual intercourse is considered as a part of religious rite. This idea is incorporated into the schools of both Hinduism as well as *Buddhism*. It is said that, in the sexual rites of *Tantric Buddhism* all taboos are lifted. Even incest is acceptable and allowed. Meat and alcohol are included in this ritual. What is misdeed and sin to the ignorant and uninformed is believed to be the virtue to the *Tantric*. These things are, however, done under strict control and confidentially only by the practitioners as sacred ceremonies. In view of this Marja-kud was the best place for this ritual. It was the principal centre of *Chudakhai Yatra*. Slowly, it extended to other areas. It is still a ritual force in Marja-kud. Hence, *Chudakhai Yatra* exhibits the synthesis between *Buddhism* and *Hinduism*.

It is interesting how the elite as well as privileged sections of the society deride and ridicule the *Chudakhai* tradition just for the reason that, it falls inside their rejection parameters. This is not to say that *Chudakhai Yatra* is the best form of folk ritual dance. Or even to say that, it is a bad form of tribal ritual dance. This is not to say that *Chudakhai Yatra* is the product of Buddhism. Or even to say that it is a product of Saktism or Hinduism. This is to say that *Chudakhai Yatra* is as good a ritual dance influenced by *Tantrism*, the knowledge of which is beyond the reach of ignorant and common people. Means (*Sadhana*) of performing this are called *Tantras*. By pronouncing the correct formula (*Mantra*) in the proper method or by drawing the correct magical symbol (*Yantra*), one may force the deity to bestow power on the worshipper. Common people may call it a magical

mysticism. Also, general people may say that, the worshipper or the practitioner hypnotizes himself in this ritual performance.

Another significant point to be noted here is that, Maheswari is the *Ista-Devi* of Dumal caste people of this region and *Maheswari* is worshipped during *Chudakhai Yatra* of the Kandha tribal people as well. This reveals the tribal - non-tribal interaction in this region. The peaceful co-existence between the Kandha tribal people and Dumal caste people of Boudh region has paved the way of cultural assimilation of these two cultural traditions i.e. tribal tradition and local caste tradition. It is really complicated to say who has borrowed Maheswari from whom. But the name *Maheswari* (Maha+*Iswari*) appears to be a Hindu name. From this point of view one may simply say that, the aboriginal people i.e. Kandha people have borrowed the deity from their neighbouring outsiders i.e. Dumal people. It is also possible that, Dumals have borrowed the tribal deity from their neighbouring Kandha people and given a Sanskritic name (*Maheswari*) to the deity and assimilated in their society. Perhaps, it was essential and indispensable during state formation in the Boudh region to win over the tribal people. Possibly, it was crucial and vital for their (insiders and outsiders) peaceful co-existence as well.

It may be noted that, Dumals worship a pole of Rohini tree as Maheswari Devi. This is why, Rohini tree is a sacred tree for them and they do not cut it. Also, they do not use this tree as fire wood or for any commercial purpose. It may be said that, it is a traditional conservation activity woven in the ritual performance of the people of this area. This traditional arrangement seems to have worked very well because; there has not been any incidence of cutting of Rohini tree by the Dumals of this area. So, from scientific

point of view we can say that, this is a conservation activity.

Undoubtedly, *Chudakhai Yatra* is an integral part of regional folk and tribal culture of Boudh. It has helped in preserving and disseminating this ancient heritage, tradition, belief system and culture. In fact, this festival has placed Rushibandh and Marjakud in the folk and tribal cultural map of Boudh. Its fame and popularity attracts the daughters of this village who have married outside. On this occasion, they visit their parents' house and participate in *Chudakhai Yatra*. Undoubtedly, one finds tremendous amount of enthusiasm and passion in this area during this festival.

It would not be out of place to mention that, Marja-kud has a different biodiversity which needs protection. It presents a unique environmental and ecological wonder. It requires safety with sustainable development. The wide range of flora and fauna is somewhat unique to this site. It is the most captivating and enchanting spot from the visitors' point of view. It is the

paradise for the ornithologists. Birds coming to Chilika Lake take a break and relax in this island on their way. Watching these migratory birds and listening to their music while cruising through the creeks can be an exciting and thrilling experience. During their stay, these wonderful creatures throng the island and they present a breathtaking sight. One can never forget the sight of thousands of birds coming and going from this island. For the nature lovers, Marja-Kud remains as a treasure house in Boudh. Had it been in any other part of the state or India, the Governments could have easily earned lots of revenue by taking advantage of its picturesque location and diversity. But regrettably, still good days of the island is far behind. It is not only the duty of the Government but also of every inhabitant of this area and district to take care so that the island would be a joy for ever.

Dr. Chitrasen Pasayat lives at 152-Vijay Vihar, Nuagaon Road, Sishupalgarh, Bhubaneswar.



His Excellency the Governor Shri Murlidhar Chandrakant Bhandare inaugurating the 60th TB Seal Sale Campaign in Orissa on the occasion of Gandhi Jayanti at Raj Bhawan on 2.10.2009.

Patakhanda Yatra of Jarasingha in Bolangir District

Sarmistha Barik

Patakhanda Jatra is a famous Jatra of Jarasingha in Bolangir district. Jarasingha is a village situated on the bank of Sungad, which is a local stream. Earlier, Jarasingha was under the Patna kingdom. There was a Kandha *Zamindar* in Jarasingha.

The reigning deity of this village is Budhi-Aai. Every year, a festival is organized in honor of the deity on the fullmoon day of Asadha (June-July). But, the festival celebrated in honor of Patakhanda Devta is very popular. The deity is believed to be very powerful. It is celebrated in the *Hindu* month of Aswina (September-October). It begins on the second day of bright fortnight in the month of *Aswina* and ends on the fullmoon day of *Aswina*.

Patakhanda deity is the symbol of unity and integration. This Jatra is so popular that, it creates a center of attention. Common people believe that, Patakhanda deity cures the mentally retarded persons and blesses the issueless couples to have children. So, the deity is famous.



As per the myth, a Kandha couple was staying in a small shed in a remote village near San-Khemundi of Ganjam district. Daily, they used to gather fruits, leaves and firewood from the jungles for their living. Once, the Kandha man had borrowed some money from one money-lender. After some days, the *Sahukar* came to him to collect money. At that time, the Kandha couple had been to jungles.

The *Sahukar* waited them in front of their hut. He noticed a basket full of living fishes hanging from the roof of the hut. Below the basket there was a *Panki* i.e. local made knife. He observed that, a fish automatically jumped from the *Khalei* on the *Panki* and the sharp *Panki* cut the fish into two pieces. It was surprising for the *Sahukar*. He saw this amazing sight. He realized that, the *Panki* might have some miraculous power.

In the evening, the Kandha couple returned from the jungle. They saw the money-lender sitting in front of their house. They asked him the reason of his coming. He said that, if the

Kandha couple could give him their *Panki*, then he would waive the loan they had taken from him. The Kandha couple handed over the *Panki* to the *Sahukar*.

At night, the *Sahukar* saw a dream. *Patakhanda Devta* appeared and told him that he was in the form of that *Panki*. The deity asked the *Sahukar* to carry the *Panki* with him. Next morning, the *Sahukar* took the *Panki* with him and reached on the bank of the river Sungad. He kept the *Panki* on a clean and safe place under a tree and went to have a bath. When he returned, he did not find the *Panki*. He searched a lot but it was in vain. He thought that, it was the wish if the deity.

That night, *Patkhanda Devta* appeared in the dream of the Kandha *Zamindar* of the village situated on the bank of the river Sungad and introduced himself. The deity asked him to worship him. The Kandha *Zamindar* said that, the presiding deity of the village is *Budhi-Aai*. Without her permission, he cannot worship him. So, *Patkhanda Devta* met *Budhi-Aai* and expressed his desire. *Budhi-Aai* told him that, she is the Samanta Devi of *Pataneswari* of Patnagarh. She is the sovereign deity of this whole kingdom. Jarasingha is under her kingdom. If she permits, then you can stay at Jarasingha.

Patakhanda Devta approached Pataneswari Devi and sought her kind permission. Pataneswari told him, "It is alright. You will also remain as my Samanta in Jarasingha. People will offer you special puja after the completion of my Yatra in the month of *Aswina* (September-October) every year. *Sindura* from my temple and *Pata-Kana* from *Samaleswari* temple will be provided to you. Then, you will get my power.

Since then, *Patakhanda Devta* has been residing in the hole of a *Mahul* tree (*Madhuca indica*) in '*De-Jhar*'. 'De' means deity and '*Jhar*'

refers to jungle. So, '*De-Jhar*' denotes 'jungle of deity' or 'the jungle where deities reside'. If the tree dies due to some reasons or other, then the deity is transferred to another *Mahul* tree. Significantly, *Patakhanda Devta* resides only in the *Mahul* tree.

There is another historical legend associated with the origin of *Patakhanda Devta*. It is said that, the fort of Bastar was besieged by the soldiers of Patnagarh for several days. At that time, an old lady used to visit the camp of the soldiers daily. She was selling *Mudhi* (prepared from rice) to the soldiers. Everyday, some soldiers were dying after having that *Mudhi*.

The king of Bastar invited two *Gunias* (Black Magicians) named Hira and Madan from Patnagarh. They came to Bastar and knew that an old lady was coming to the camp of soldiers every day to sell *Mudhi*. She was none else than Bastaren herself, who was the presiding deity of Bastar. She was coming in disguise to weaken the strength of Patna king. Hira and Madan suggested the king to win over the deity first if wanted to win over Bastar. They requested the king to worship Bastaren Devi and please her. Accordingly, Patna Raja worshipped the deity and satisfied her. He assured the deity that, after his victory over Bastar, he will make all arrangements for her worship all over his kingdom.

It is said that thereafter, the puja of Bastaren Devi has been prevalent in all villages of Patna kingdom. During this war, Patna Raja had requested Pataneswari Devi to bless him. The deity presented him a *Khanda* i.e. sword, which helped the king to win over Bastar kingdom. In this warfare, the Kandha *Zamindars* and his subjects of Jarasingha had extended their cooperation, which finally led to victory of Patnagarh.

When the king returned from Bastar, he presented the *Khanda* to the *Kandha Zamindar*

of Jarasingha. Then, *Pataneswari* Devi permitted the *Kandha Zamindar* to worship the *Khanda*. This is why the *Patakhanda* puja is also known as *Bira-Puja* to commemorate the victory of Patnagarh over Bastar.

Now three small pieces of iron plates are worshipped as *Patakhanda* Devta. If these three pieces are jointed together, it would not look like a *Khanda* i.e. sword. Rather, it will take the shape of a *Panki*, a locally made knife used for cutting vegetables and fishes etc.

Annual worship in the form of *Patkhanda Jatra* is performed in the month of *Aswina*. *Sindura* comes from *Pataneswari* temple of Patnagarh. *Pata-Kana* comes from *Samaleswari* temple of Patnagarh. *Chhatar* and *Kalasa* come from the temple of *Budhi-Aai*. Then only *Patakhanda* Yatra begins. When the deity appears through *Barua* or ascends in the body of *Barua*, he comes out with these three iron pieces with his hands.

Patakhanda Yatra is also prevalent among *Bandas* of *Mudulipada* in *Malkangiri*

district. It is celebrated annually in the month of *Magha*. It is observed on first Monday after *Magha Purnima*.

Animal sacrifice is prevalent on this occasion. It is believed that, the head of the sacrificial animal ought to be dissociated from the body at one stroke only. *Patakhanda Jatra* in Jarasingha, besides providing entertainment, has been used to spread the message that, the deity is capable to cure the mentally retarded person and cure the 'Bandhya-dosa' of women. This festival is based on faith and belief, where medical science has nothing much to do.

References :

Dr. Chitrasen Pasayat (1998), "Patakhanda Jatra" (in Oriya) in *Esana*, an Oriya journal of the Institute of Oriya Studies, Cuttack.

Sarmistha Barik lives at Qrs. No VA-24/2, Unit-2, Bhubaneswar, Orissa-751009.



His Excellency the Governor Shri Murlidhar Chandrakant Bhandare flagging off the National integration Rally organised by N.C.C. Group of Cuttack at O.U.A.T. Campus, Bhubaneswar aiming at awareness generation on the theme "Save Girl Child" on 09.10.2009.

Post Super Cyclone Orissa: An Overview

Avaya K. Nayak

Exactly a decade has passed since the devastating super cyclone hit Orissa on 29th October, 1999. The super cyclone had a wind speed of more than 300 Kmph. and it centered over coastal Orissa for three days with a torrential downpour and a tidal surge of about 6 metres which swept coastal low lying areas for a distance of about 40 to 50 km. inland. All the adult members of the State, particularly in the coastal region, have direct or indirect experience of the intensity and the effect of this cyclone. Many have seen the wrath of Nature and the miseries it inflicted on this fateful day or on the days followed. The Super cyclone which originated as a "depression" on 25th October, 550km. east of Port Blair, moved northwest wards and intensified into a "cyclonic storm" on 26th October morning and moving further northwest wards, intensified into a severe cyclonic storm on 27th morning when it was 750 km. from Paradip. The system moved further northwest wards and deepened into a super cyclonic storm on 28th October with an estimated wind velocity of 260km. per hour. IMD predicted its landfall between Puri and Balasore. It crossed Orissa coast on 29th October near Paradip, remained centered around it for nearly 36 hrs and weakened only after 31.10.99 further moving Northerly towards Balasore coast. The super cyclone affected 1.89 crore people in 128 blocks, 46 urban local bodies, 2399 gram panchayats and 17993 villages in 14 districts of Orissa. 8243 human lives were lost, 4.45 lakh livestock

perished. Crops in 18.43 lakh hectare damaged. The total loss of infrastructure was estimated to be Rs.6243.96 cr.

29th October, the day when super cyclone first hit the state, has been observed as the National Day for Disaster Reduction and Orissa Disaster Preparedness Day. Only ten years in the long history of human existence may be too short a period, yet compared to the total life expectancy of a generation, it is not that less. Now it is time to look back and look into the lessons learnt and our actual preparedness in abridging the critical gaps we had then. It was not just another disaster in this part of the Globe. Due to its intensity and extensive damage caused, it had taught a good lesson to many including the Policy makers, Administrators, Disaster Managers and other Stakeholders. The most prominent of the lessons are: First, only Government machinery is not sufficient to handle the disasters of higher magnitude. Other stakeholders, civil society organizations and the vulnerable community itself can play very effective role in mitigating the disasters. Second, the traditional world view that Relief is a charity and the conventional approach of Relief, Reconstruction and Rehabilitation are no more acceptable in this century and need a change in approach and orientation. Thirdly, there were critical gaps in our infrastructure,

* Death toll was high in areas close to coast due to absence of safe shelter buildings.

* As telecom and electricity lines were cut off, there was no alternative power back up, and a fail safe two-way communication network with the field.

* Relief lines were either cut off or blocked due to uprooted trees. No man (trained or skilled) and machine (power saws) were available to clear the relief line immediately. It took weeks to clear the high ways even, not to speak of other arterial roads.

* No trained personnel on Search and Rescue techniques were available at the grassroot level to deal with the emergency of such a magnitude.

* Disposal of carcasses of large numbers (about 4.45 lakh) and unclaimed dead bodies was a herculean task at that time, particularly in absence of trained and dedicated volunteers. Since the entire community was severely affected, even some villages in Erasama area had drastically lost population due to death or missing, hardly there was anybody to come forward for this work voluntarily.

* There was no mechanism at the State level to monitor the aids and relief from our state agencies and charitable organizations.

These lessons gave rise to brainstorming at all levels which resulted in a series of follow up actions. Orissa State Disaster Management



Authority (OSDMA), earlier known as Orissa State Disaster Mitigation Authority, an autonomous organization dedicated for disaster management with operational flexibility in place of bureaucratic rigidity came into existence in Orissa in 1999, immediately after the Super Cyclone. This was the first organization of its kind in the entire country. After Bhuj Earthquake in 2001, Gujarat State Disaster Management Authority (GSDMA) was set up. It was only in 2005, the National Disaster Management Authority (NDMA) was formed.

Slowly and consciously, emphasis was shifted from conventional approach of Relief, Reconstruction and Rehabilitation to Planning, Prevention and Preparedness. Relief was recognized as a right, not a charity.

As an alternative to Indian Armed Forces and to create a specialized and skilled Force for Search and Rescue operations, Orissa was pioneer in setting up of a dedicated response force namely Orissa Disaster Rapid Action Force (ODRAF) in 2002 with dedicated Jawans from the State Armed Police, trained in modern Search and Rescue techniques and latest equipment. Five units of ODRAF are functioning at Jharsuguda, Koraput, Cuttack, Chatrapur and Balasore. Each ODRAF unit has been provided with 66 types sophisticated equipment required for





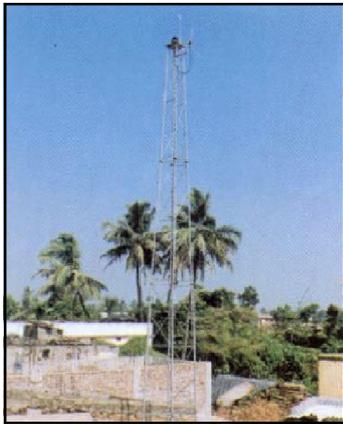
disaster management including road clearing equipment, branch cutter, tree pruner, concrete cutter, RCC cutter, boat, inflatable tower light, generator, forklift, hydraulic rescue kit, collapse structure search and rescue (CSSR) kit and medical first responder (MFR) kit, ambulance, manikin, high discharge submersible pump, flexi tent, flexi water tank, mountaineering equipment, commando search light, diving equipment set, breathing apparatus with gas mask and chemical cartridge, etc. Five more ODRAF Units at Paradip, Bhubaneswar, Baripada, Rourkela and Bolangir are being set up. NDMA has also set up one unit of National Disaster Response Force (NDRF) at Munduli, Cuttack.

It was learnt that death toll was high in Super Cyclone due to non-availability of safe shelter buildings in the coastal village, which could have withstood the intensity of the cyclone and the storm surge. Only 23 cyclone shelters were constructed by Indian Red Cross before the super cyclone, wherein about 42000 people took shelter and saved their life. Taking a clue from the Red Cross, OSDMA has created a network of Cyclone shelters along the Orissa coast to provide safe shelters to the vulnerable people during floods and cyclones. The locations were identified through a scientific survey conducted by Indian Institute of Technology (IIT), Kharagpur with two major postulates i.e. No person will have to travel

more than 2.25 km to get a safe shelter and without crossing a natural barrier. The building is designed to withstand wind speed up to 300 kmph and moderate earthquakes. Its plinth is above High Flood Line (HFL) and standing on a stilted floor, it can remain unaffected in storm surge up to the 1st floor level. So far, 204 multipurpose cyclone shelters, including 65 by Indian Red Cross Society have been constructed in coastal districts of Orissa and have been handed over to the community based Cyclone Shelter Management and Maintenance Committees (CSMMC). 23 more cyclone shelters are under construction. In flood affected areas, 52 flood shelters of similar design are being constructed in 9 flood prone districts out of Chief Minister's Relief Fund. About 149 more cyclone shelters and six shelters cum godowns are proposed to be constructed under National Cyclone Risk Mitigation Project (NCRMP). Community members have been trained in Search and Rescue and First aid techniques and all types of equipment have been supplied to the shelters. In the aftermath of the Super Cyclone, as many as 8890 Primary School and 1152 High School buildings have been constructed in the State, which can act as shelters. To review preparedness and to practice the skills learnt, mock drills are being organized in collaboration with National Disaster Management Authority (NDMA) in all cyclone shelters on 19th June every year.



Speed is the essence of Disaster Management. Dissemination of Early warning and disaster safety tips to the vulnerable community, to the field level disaster managers is very important. Sooner the warning is disseminated, more preparation time becomes available for the community, the field functionaries and volunteers to get ready for the incoming disaster. Another success story with visibility in Orissa is the layers of communication in place for disseminating early warning. A dedicated civil VHF network has been set up at 414 locations covering districts, blocks, some vulnerable tahasils, Gram Panchayats and



other locations. Multi-hazard resistant Emergency Operations Centre (EOC) buildings have been constructed at all District headquarters and the State level EOC has been set up in the Cell

Office of SRC at Rajiv Bhawan. Communication and other EOC equipment have been supplied to State EOC and District EOCs of 30 districts. Equipment like inflatable tower light, branch cutter, etc. have been provided to District and Sub-divisional EOCs and all Cyclone Shelters. Toll free telephone numbers 1077 and 1070, have been installed in District Emergency Operations Centres (EOCs) and State EOC respectively. All the districts have been provided with satellite phones as a fail safe communication tool.

Amateur Radio popularly known as HAM Radio is primarily a hobby and a service in which participants, called "Amateur Radio Operators" or "HAMs," use various types of radio/ wireless communications equipment to



communicate with other radio amateurs for public service, recreation and self-training. At the same time, the HAMs often support the communities and administrators with emergency and disaster communications at the time of need. In the aftermath of Super Cyclone, 1999, HAM Radio was found useful in establishing communication with the affected areas in which HAMs from other states participated in this activity. Based on the said experience, initiatives have been taken to train the volunteers in HAM Radio with technical assistance of National Institute of Amateur Radio (NIAR), Hyderabad in order to enable them to qualify in the prescribed examination and obtain the required license to operate HAM stations in our State. OSDMA has trained 291 volunteers on HAM Radio and has set up 21 HAM Stations.

It is said that if planning is done properly, then 50% of the work is complete well in advance. The Government of India and UNDP assisted Disaster Risk Management (DRM) Programme





has been implemented in 23,263 villages under 3,210 GPs of 155 blocks and 58 Urban Local Bodies under 16 districts of the State. Disaster Management Committees (DMCs) have been formed and Disaster Management Plans (DMPs) have been prepared in all the districts, blocks, Gram Panchayats and villages under the programme.

Only a handful of trained officials of the Government will be capable enough to handle the disaster of a Super Cyclone magnitude. To overcome the shortfall, OSDMA has created an army of volunteers at different levels and imparted trainings on different skills of disaster management. 446 DMC members at district level, 4259 members at block level, 49220 members at Gram Panchayat level, 244213 members at village level have been trained on preparation of Disaster Management plans and use of the same at emergencies. Similar training Programmes have been taken up for capacity building of PRI members (315 PRIs at state, 538 at district and 7982 at block level), NSS Programme Officers and volunteers (563 at state level and 4082 at district level), NYKS Officers and volunteers (60 at state level and 1001 at district level), and NCC and Scouts Guides (3715) under DRM Programme.

Basic Training on Shelter Management has been given to the CSMMC members of all

cyclone shelters and 50 volunteers of shelter based Disaster Management Teams, per shelter have been given training on First Aid and Search and Rescue techniques (25 volunteers in each category per shelter) in collaboration with St John Ambulance and Civil Defense Organization respectively. Similarly, Civil Defense Units in the State have been strengthened and training equipment have been provided.

Urban Earthquake Vulnerability Reduction Programme is being implemented in Cuttack, Bhubaneswar and Sambalpur towns. The City level Disaster Management Committees, City Preparedness Committees and City Enforcement Committees have been constituted. Sensitization programmes for Corporators and Councilors have been conducted. Civil Engineers of Cuttack and Sambalpur have been sensitized in earthquake resistant design and construction of buildings. Training on earthquake resistant design and construction practices have been organized for Masons in Cuttack, Bhubaneswar and Sambalpur towns. Training on earthquake resistant design and construction of buildings has been organized for the civil engineers in all the districts.

First 72 hours is known as the golden hour of Disaster Management, for the vulnerable community itself has to face the wrath of nature as the First Responder, before any external agency reaches to intervene. Hence capacity building of the vulnerable community, strengthening the task forces, setting up of a network of Stakeholders and civil society organizations, preparation of village level DM Plans, continuous upgradation of knowledge through training and capacity building and follow up practice through mock drills are very important to keep the machinery in an ever ready mode. OSDMA has been doing that very successfully for last 10 years.

every incident/ disaster, a team of Officers are deputed to the disaster area to set up an incident command post and to assist the district/ local administration to manage the emergency scientifically and systematically. The principles of ICS have been successfully practiced by OSDMA in managing disasters like Balasore floods in June 2007 and in July 2008 and Mahanadi floods in September 2008, Karomandal Express train accident in 13th February, 2009 and tornado in Rajkanika block of Kendrapara district on 31st March, 2009

Non-Governmental Organizations play an effective role in educating the community members on disaster safety tips and in assisting the administration in managing the disasters. OSDMA has recognized the role of these civil society organizations. ANGO Coordination Cell is in operation in OSDMA to organize and coordinate the functions of different NGOs, INGOs, Indian Red Cross Society and UN Agencies like UNDP and UNICEF. Block level nodal NGOs have been identified to coordinate the activities of cyclone shelter management and maintenance. Indian Red Cross Society, Orissa State Branch has been working with OSDMA in many fields. Training programmes for CSMMCs of Puri district were organized in collaboration with the Concern Worldwide, an INGO. Similar training on school safety plans have been done with SEEDS India and UNDP. In collaboration with Handicaps International and Santa Memorial Trust, specific designs are incorporated and equipment are distributed to selected cyclone shelters for differentially- able persons.

It is a fact that a number of structural and institutional interventions have been done by the Government of Orissa during the past ten years. The coping capacity of the vulnerable community has been strengthened. Civil society organizations have been proactive. Social activism has

increased. Political will and bureaucratic attitude have undergone positive changes for creating a disaster resilient society. Now we are not totally unprepared. Efforts are on to further strengthen our disaster related infrastructure and further update and sharpen our skills on disaster management. National Cyclone Risk Mitigation Project (NCRMP) is in pipeline for implementation under Government of India and World Bank assistance. The major components under the project are Last mile connectivity as Component-A, structural interventions as Component-B and Capacity building and other software activities as Component-C. OSDMA has proposed construction of 149 multipurpose cyclone shelters and six godown cum cyclone shelters, construction of connecting roads to the shelters and Raising and strengthening of saline embankments under Component B of the project to further strengthen our disaster related infrastructures.

Orissa is a disaster prone State and natural disasters cannot be prevented or avoided. What can be done is their impact can be reduced. People have to live with disasters, but with preparedness to face the same and with resilience to endure them. The Super Cyclone was a crusader to have inflicted unprecedented damage, an eye opener to have taught us to rectify our mistakes and a millennium pole star to have directed our activities towards a disaster resilient State. From the very first day of the new millennium, the welfare State has been doing the same to increase the resilience of the people of Orissa by strengthening their coping capacity, by building up their confidence and by facilitating their preparedness. Now we are better prepared to face the disaster of a similar magnitude. xxx

Deputy General Manager, OSDMA, Rajiv Bhawan, Bhubaneswar.

ORISSA REVIEW

VOL. LXVI NO. 3

OCTOBER - 2009

RABINDRA NATH DASH, I.A.S.
Commissioner-cum-Secretary

BAISHNAB PRASAD MOHANTY
Director-cum-Joint Secretary

SASANKA SEKHAR PANDA
Joint Director-cum-Deputy Secretary
Editor

BIBEKANANDA BISWAL
Associate Editor

Editorial Assistance
Bibhu Chandra Mishra
Bikram Maharana

Production Assistance
Debasis Pattnaik
Sadhana Mishra

Manas R. Nayak
Cover Design & Illustration

Hemanta Kumar Sahoo
Manoj Kumar Patro
D.T.P. & Design

Raju Singh
Manas Ranjan Mohanty
Photo

The *Orissa Review* aims at disseminating knowledge and information concerning Orissa's socio-economic development, art and culture. Views, records, statistics and information published in the *Orissa Review* are not necessarily those of the Government of Orissa.

Published by Information & Public Relations Department, Government of Orissa, Bhubaneswar - 751001 and Printed at Orissa Government Press, Cuttack - 753010.

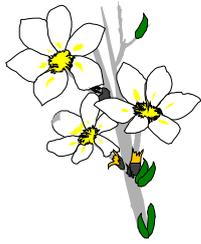
For subscription and trade inquiry, please contact : **Manager, Publications, Information & Public Relations Department, Loksampark Bhawan, Bhubaneswar - 751001.**

Five Rupees / Copy

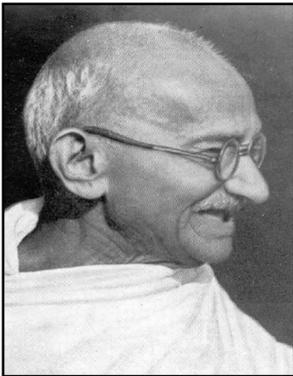
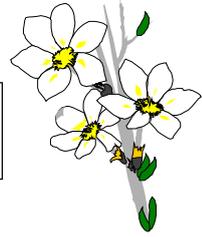
E-mail : iprsec@rediffmail.com
Visit : <http://orissagov.nic.in>
Contact : Ph. 0674-2394839

CONTENTS

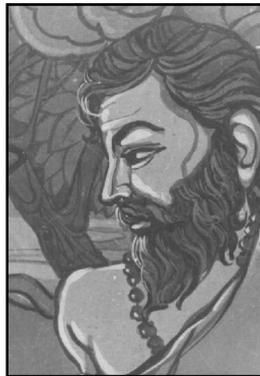
Relevance of Gandhian Ideas for Human Rights and Empowerment of Women	<i>Dr. Bina Kumari Sarma</i>	...	1
Gandhian Vision About Higher Education and Its Relevance in the 21st Century	<i>Dr. Dinabandhu Dehury</i>	...	5
Gandhiji and Sarvodaya	<i>Rabindra Kumar Behuria</i>	...	10
Challenges of 21st Century and Gandhian Alternative	<i>Dayanidhi Parida</i>	...	14
Utkalmani Gopabandhu - The Pride of Orissa	<i>Dr. Surya Narayan Misra</i>	...	16
Jayee Rajguru - The First Martyr of Orissa	<i>Jayanti Rath</i>	...	20
Lal Bahadur Shastri : A Messiah of Peace	<i>Manas Ranjan Khuntia</i>	...	24
Remembering Loknayak Jaya Prakash Narayan	<i>Chhabi Mohanty</i>	...	28
Sadasiba Tripathy - A Gentle Colossus	<i>Dr. Radhanath Behera</i>	...	30
So He Is Great	<i>Lalit Mohan Patnaik</i>	...	33
Dr. Sadasiba Tripathy as a Freedom Fighter	<i>Dr. Bijaya Kumar Misra</i>	...	34
G. Ramdas, Headmaster in the Life of Sadasiva Tripathy	<i>Kornel Das</i>	...	36
Status of Education of Scheduled Tribes in KBK Districts of Orissa	<i>Atal Bihari Das</i>	...	38
On Farm Water Management Options for Increasing Irrigation Efficiency in Command Areas of Orissa	<i>Dwitikrishna Panigrahi</i>	...	51
Traditional Agricultural Wisdom for Sustainability in Tribal Areas	<i>Dr. Pranab Kumar Ghosh</i> <i>Chittaranjan Sahoo</i> <i>Dr. Sabyasachi Rath</i>	...	58
Ecolable and Its Environmental Countenance	<i>Lokesh Kumar Panda</i> <i>Dr. Shreerup Goswami</i>	...	64
Home Grown, World Class : A Review of the English Poets of Odisha	<i>Dr. Pratap Kumar Dash</i>	...	72
An Exhibition in the Marvel of Mahendra Giri	<i>Gurbir Singh</i>	...	77
Inter-cropping Elephant Foot Yam in Orchard Crops	<i>Susanth Kumar Jata</i> <i>Biswanath Sahoo</i> <i>M. Nedunchezhiyan</i>	...	82
Zinc : An Essential Micronutrient for Crop Production	<i>Dr. Prasanna Kumar Samant</i>	...	85
Chudakhai Yatra	<i>Dr. Chitrasen Pasayat</i>	...	88
Patakhanda Yatra of Jarasingha in Bolangir District	<i>Sarmistha Barik</i>	...	95
Post Super Cyclone Orissa : An Overview	<i>Avaya K. Nayak</i>	...	98



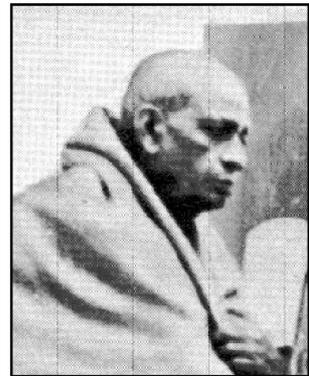
BIRTHDAY TRIBUTES



Mahatma Gandhi
2.10.1869 - 30.01.1948



Jayee Rajguru
(1739-1805)



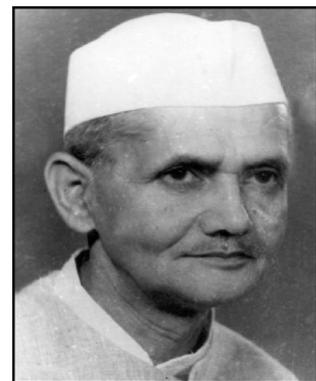
Sardar Vallabhbhai Patel
31.10.1875 - 15.12.1950



Utkalmani Gopabandhu Das
09.10.1877 - 17.06.1928



Jaya Prakash Narayan
11.10.1902 - 08.10.1979



Lal Bahadur Shastri
02.10.1904 - 11.01.1966

*OUR TRIBUTE TO THE GREAT FREEDOM
FIGHTER & EX-CHIEF MINISTER, ORISSA*
LATE SADASIBA TRIPATHY



Birth : 21st April, 1910 Demise : 9th Sept. 1980