

Address at the Inaugural Function of
24th India International Trade Fair - 2004
by Dr. A.P.J. Abdul Kalam, Hon'ble President of
India on 14.11.2004 at New Delhi



Creating Brand Institutions

I am delighted to participate in the inauguration of the 24th India International Trade Fair - 2004. I greet the organizers, members of the Ministry of Commerce and Industry, members of the India Trade Promotion Organisation, Captains of Industries, contributors and participants from various nations for this mega event. I also extend my greetings to partner country China and focus country Brazil, for this trade fair. IITF is a unique blend of trade and tradition, and provides a platform for a wide range of industrial opportunities in various sectors of the economy by showcasing nations' technological strength. This year's Trade Fair has the twin theme of "Agriculture" and "Information Technology" - which are the key drivers of the India's socio-economic development. I have selected the topic for discussion: "Creating Brand Institutions."

During the last few years a number of developments have taken place in the agriculture and IT sectors with profound results in improving the productivity and quality of the products. I would like to share with you the status of development and focus for the future on the theme areas.

Agriculture and Agro Food Processing

India is now producing 200 million tonnes of food grains, as a result of the first green revolution. India has now embarked on Second Green Revolution which will enable increase in productivity and diversification of the agricultural sector. The second green revolution will have the farmers in focus, farming technology as the friend, food processing and marketing as partners and the consumers as the angels to be satisfied. From now on to 2020, India will gradually increase the production to around 400 million tonnes of grains. The increase in the production will have to be done under the reduced availability of land from 170 million hectares to 100 million hectares with reduced water availability. We should also learn to diversify to meet specific consumer preferences, export markets and also in the interest of ecological balance. This is to be achieved through information access to all stakeholders and not with central controls or restriction of movements of agro-products.

The challenges for the scientists and technologies would be in the areas of development of seeds that would ensure good yield even under constraints of water and land with ecologically balanced farming. The challenges for the scientist is indeed a knowledge graduation from characterization of soil to the matching of the seed with the composition of the fertilizer, water management and evolving new pre-harvesting techniques for such conditions. The domain of

farming would enlarge from grain production to food processing and marketing. I visualize the trade fair showcasing the state of the art food processing industries for enabling the farmers and village enterprises to learn and produce products, which are competitive in both national and international market. Another area where the trade fair can take a lead is to bring out the innovative technologies available in farm equipment relevant to Indian conditions. Newer forms of co-operative entities are required to be established for ensuring maximum benefit to the farmers. E-marketing concepts may also be put into practice to provide farmers choices in selling. Some of the areas which need focus are : soil up-gradation, dry land agriculture, temperature and salinity resistant seeds and minimum water cultivation. There have been successful experiments carried out by TIFAC team in Bihar, where per hectare output of wheat has been tripled by farmers in collaboration with agricultural scientists through scientific methods. As a result, the earnings of the participating farmers have remarkably improved. Such experiments can be replicated in many parts of our country, carefully tailored to local conditions. This is a crucial socio- economic need.

ICT and Agriculture

ICT is a potent tool in various sectors of activities in public domain and agriculture is no exception. Demand and supply monitoring of inputs, dissemination of technologies relevant to farming community through various organizations including universities, making available marketing information at grass root level are some of the usage of ICT in agriculture. Covering each and every farm family through village Panchayat knowledge centres, Internet and community radio should be the aim for greater usage of ICT. Successful models of effective communication to the farm community through the use of ICT accomplished in different states can be presented in the exhibition for emulation by farmers of different states.

ICT -India's Core Competence

The core competence of IT, Indian industry has earned revenue of 15.9 billion in the year 2004-05 and targeted 20.5 billion in the next year. With the non-linear growth and value addition with innovations in the application areas such as information security, e-Governance, embedded real time software, hardware and software integration, chip design, wireless, infotainment and tele-education, IT and communication industries in India should aim at higher growth rate to reach a target of 150 billion dollars business by the year 2010.

Enterprises for rural prosperity

India has 700 million people living in 600 thousand villages. Therefore rural sector is a big market. We need enterprises to service this need and generate a large-scale employment. Entrepreneurs and captains of industries assembled here have a great business opportunity. I would like to discuss some of the large-scale employment and wealth generating avenues in the rural sector.

(a) **Jatropha -Biofuel:** Government has decided to permit of mixing of 10% bio-fuel with diesel. This has opened up new opportunities for employment and wealth generation. We have nearly 63 million hectares of wasteland available in the country, out of which 33 million hectares of wasteland have been allotted for tree plantation. Certain multi-purpose trees such as Jatropha can grow well

in wasteland with very little input. Once grown the crop has a fifty years of life. Fruiting can take place in this plant in less than two years.

It yields oil seeds up to five tonnes per hectares per year and produces two tonnes of bio-diesel. Presently, the cost of bio-diesel through the plant is approximately Rs.17 to Rs.19 per litre, which can be substantially reduced through choice of right size of the plant and using high yield variety plantation. Bio-diesel plants grown in 11 million hectares of land can yield a revenue of approximately Rs. 20,000 crore a year and provide employment to over 12 million people both for plantation and running of the extraction plants. This is a sustainable development process leading to large-scale employment of rural manpower. Also, it will reduce the foreign exchange outflow paid for importing crude oil, the cost of which is continuously rising in the international market. Moreover, use of Bio-diesel is CO₂ emission free. This oil can also be used for soap and candle industries. De-oiled cake is a raw material for composting. Also *Jatropha* plantation provides a good environment for honey production. We should absorb best of the technologies available worldwide and start commercial operation soon, instead of staying at pilot plant levels. I would request the industrial community assembled here to take the initiative, generate detailed project report in collaboration with technical agencies such as The Energy and Research Institute (TERI) on this project and promote entrepreneurs with financial support from the banks in rural areas who can undertake the plantation and commissioning of extraction plant leading to production of cost-effective bio-fuel. Can there be a better project than this for coherent development of our rural sector and sustainable business proposition for industry ?

(b) **Rural Lighting:** Recently, I received a E-mail from Chintapalli Gramam, Nalgonda District of Andhra Pradesh about the implementation of LED lighting through solar power in a remote village inhabited by Lambada tribes. The village has a population of 142 people residing in thirty houses. The one time cost of providing LED lighting for all the houses including wiring and solar charging system for the battery is around Rs. 65,000. On an average, the cost of providing electricity per house works out to Rs. 2200. This is definitely much cheaper than the cost of providing electricity to the village through a power line running into number of kilometers costing many lakhs of rupees. Particularly in remote areas and hilly region electricity could not be reached due to high initial cost of installation. Presently I am told electric lines have not reached over one lakh villages in our country. LED power system is a self-contained system in which the energy cost is virtually free since solar energy is used to charge the batteries. I would recommend the industrial community to study this project for converting it as a business proposition, which can be taken by rural enterprises for implementation in different sectors. Once successful this technology can find utility in many parts of the world where similar situation exists. This has tremendous business potential.

(c) **Electricity Generation through Municipal Waste:** Increased urbanization has led to a serious problem of accumulation of municipal solid waste. Efficient and environmentally clean disposal of garbage has always been a major technological challenge. While being a threat to the environment, mounting garbage is also a rich source of energy. The potential for converting this waste into useable energy, which will eliminate a major source of urban pollution, was realized by one of our innovative organizations-Technology Information Forecasting and Assessment Council of DST, which helped in developing a completely indigenous solution for the processing

of waste into a source of fuel. This fuel could, in turn, be used for generation of electricity through mini plants. Two entrepreneurs in Andhra Pradesh adopted the technology with refinement and established two independent plants in Hyderabad and Vijayawada generating over 12 megawatts of electricity, which is being supplied to the State Grid. India needs thousands of mini power plants using municipal waste. Industrial sector can provide the thrust for promoting creation of such power plants in major municipalities as first step in collaboration with banks and non-governmental organizations.

These are some of the examples of rural development projects, which can be promoted by the industry with the active participation of banks for upliftment of the 700 million people living in our villages. There are similar possibilities in water, habitat, infrastructure, ICT, Agriculture and many more. Once the industries get committed in all these sectors in a proactive manner, I am sure the path to development will be much smoother and our realization of development will be much faster.

Conclusion

Business symbolizes competitiveness. Competitiveness leads to economic growth. Competitiveness is single factor, which will decide India transforming into a developed nation. Technology powers the competitiveness. Competitiveness leads to creation of brand institution. IITF can be the unique window of knowledge for smart and intelligent minds to understand the strength of competitiveness. If we choose an integrated technology-driven path, then India will be in a position to become a developed nation by 2020. Some people tend to think of economy without the technology dimension. Therefore, their extrapolation will be linear. If we use the right technologies, we can bring in the right non-linear elements in all our sectors viz. agriculture and agro processing, education and healthcare, infrastructure including water and power, information and communication technology and critical technologies in strategic sectors. Another factor, which is very important for growth, is that we should have synchronized and integrated growth in all sectors of the economy, which is vital for making the impact of growth, reaches every section of the society.

I would like to request that Indian Industries should learn to think big with the whole world as our market by developing a strong and interactive Technology-Market-Value Adding Competitive Linkage. It will be a great resurgence for our manufacturing, marketing, and maintenance services. Indian Industries should aim to become multi-nationals. Our youth love challenging jobs. We have to create challenging opportunities for them. We can WIN if we think we can win and act tenaciously with our clear goals in India to EXCEL IN A COMPETITIVE NEW WORLD AND CREATE INDIA BRAND.

I would like to compliment the India Trade Promotion Organisation, the organizers of IITF -2004 for playing the role of catalysts and facilitators in increasing exports and giving impetus to intra-country trade. I declare the 24th India International Trade Fair -2004 open.

My best wishes to both national and international participants for success in their business endeavours.

May God bless you.



**BIO-DATA
OF
HIS EXCELLENCY
THE GOVERNOR OF ORISSA,
SHRI RAMESHWAR THAKUR**

1. Name : Rameshwar Thakur
Native Place & Permanent Address : Vill/P.O - Thakur Gangti,
District - Godda, Jharkhand.
2. Date of Birth : July 28, 1927
3. Education : M.A., LL.B, F.C.A.
From : (i) Bhagalpur, Patna University
(ii) Calcutta University
(iii) The Institute of Chartered
Accountants of India, New Delhi.
4. Wife : Shrimati Narmada Thakur
5. Children : Two sons and two daughters
6. Profession : (i) Chartered Accountant since 1953
(ii) Lecturer, City College,
Calcutta University - 1955-1960
(iii) Visiting Professor,
Delhi University - 1960-1973

Participation in Other Activities and Public Life :

A. Actively participated in Quit India Movement, 1942. Remained underground for nearly six months in Raj Mahal Hills in Santhal Parganas. Was arrested and detained in Central Jail, Dum Dum, Calcutta in 1946 in connection with the national movement.

B. Shri Thakur took active part in health care, educational upliftment, social reforms and rural reconstruction activities particularly in Santhal Parganas, Jharkhand.

C. Founder Trustee :

- (i) *Hari Devi Smarak Nidhi* - A Public Charitable Trust established in 1965. Established a 30 bedded Rural Referral Hospital in 1976 and another 40 bedded Hospital for Cancer, Leprosy & T.B. in 2002 at native village, Thakur Gangti, Dist. Godda, Jharkhand.

- (ii) *Gadadhar Mishra Smarak Nidhi* - A Public Charitable Trust established in 1965 at Gandhigram. Engaged in Khadi & Village Industries, Rural Development Programmes in Godda District, Jharkhand since 1965.

D. Shri Thakur has held important and prestigious positions from time to time including :

- (i) President : Institute of Chartered Accountants of India (1966-67)
(ii) National President: All India Bharat Scouts and Guides.(1998-01 & 2004- till date).
(iii) Chairman : Study Group on Banking Costs, Banking Commission, Government of India (1978-82).
(iv) Chairman : Associated Journals Ltd. (1987-91).
(v) Chairman : Thakur Research Foundation, New Delhi (Since 1981).
(vi) Chairman : Rajendra Bhawan Trust, New Delhi.
(vii) Director : (i) Unit Trust of India (4 years), (ii) Export Credit and Guarantee Corporation (3 years), (iii) Punjab National Bank (1978-82), (iv) Punjab, Haryana and Delhi Chambers of Commerce (3 years), (v) Board of Governors, Management Development Institute, Gurugaon, Haryana.
(ix) Secretary : Sanjay Gandhi Memorial Trust, Amethi, U.P.

E. International Delegation :

- (i) Deputy Leader - Indian Parliamentary Union Conference, Geneva (1984).
(ii) Leader of Indian Delegation to the World Congress of Scouts, Brussels (1964).
(iii) Group Leader to the International Congress of Accountants, Mexico (1982).
(iv) Leader of Fifteenth Asia Pacific Gathering, Colombo (1984).
(v) Leader of Indian Delegation to the 17th General Assembly Coventry, London (1987).
(vi) Chairman, World Congress of Scouts & Guides Fellowship (1999)

F. Parliament & Union Council of Minister :

- (i) Shri Thakur was elected to the Rajya Sabha (April 1984 to March 1990) and was re-elected (April 1990 to March 1996).
(ii) Shri Thakur was Union Minister of State for Finance (Revenue), Rural Development and Parliamentary Affairs (June 1991 to December 1994).

G. Travels Abroad :

Russia, France, Germany, Italy, United Kingdom, Switzerland, United States, Mexico, Bangladesh, Nepal, Sri Lanka etc.

Hundred Years of Co-operative Movement : Emerging Issues and Challenges

Dr. P.C. Samantaray

Backdrop

The evolution of Co-operative in the world can be traced from time immemorial, beginning from the day individual first joined hands for the advancement of common pursuits in life. Modern Co-operative Movement is generally dated from the foundation of the Rochdale Equitable pioneers at the end of 1844. The structure and rules of the Rochdale Co-operative Society of weavers formed the model for countless successors not only in England but also in other countries and continents.

In India Co-operative movement in its modern form started in the year 1904 with the advent of Co-operative Credit Societies Act on 25th March 1904. The year 2004 is a historical landmark for the Indian Co-operative Movement. Starting from 1904, the Co-operative Movement this year is celebrating hundred years of its glorious existence. The valuable services the movement has rendered to the nation will be remembered forever. The movement has been acknowledged as an instrument towards achieving the socio-economic transformation of Indian society with special focus on the life of people living in rural areas. Co-operation since inception has been striving hard to usher socio-economic development of our country. It is with the

concerted and sustained efforts over decades by the Co-operatives that they have about 21 crores membership covering 67% of rural households and 99% of the villages in our country.

With this backdrop an attempt has been made to take the stock of its progress to examine what has been achieved more importantly, what could have been achieved and the emerging challenges before it in the 21st century.

Progress of Co-operatives at a Glance

Indian Co-operative Movement was basically organized against the exploitation of unscrupulous money-lenders to exonerate the farming community from the web of poverty and indebtedness. The Government took lot of measures to improve the conditions of the farming sector and as such promoted Co-operative Credit Societies in the light of Raiffeisen model credit societies on the basis of recommendation of Sir Fredrick Nicholson 1889. Now co-operatives and formal legal entities under a statute have been existence for a hundred years and this is the centenary year for Co-operatives. It is, therefore, an appropriate time to discuss the pace of its progress and emerging challenges in the competitive business environment.

To-day Co-operative movement in India is one of the largest movements in the world. Initially it was started with a limited spectrum of activities or dispensation of rural credit has now entered in all fields of economic activity with social content. We are proud of the movement which has covered 100 per cent villages and 75 per cent rural households and functioning over 545 thousand Co-operatives of various levels with membership coverage of 236 million and working capital of 34,00,555 million inclusive of credit and non-credit. It has been playing a significant role in disbursing agricultural credit, distribution of agricultural inputs, providing market support, processing, etc. The share of Co-operatives in National economy is as follows :

Rural Net work (villages covered)	-	100%
Agricultural Credit disbursed by Co-operatives	-	46.15%
Fertilizer disbursed (6.049 million Tonnes)	-	36.22%
Fertilizer production (3.293 M.T. - N&P) Nutrient	-	27.65%
Sugar produced (10.400 million tonnes)	-	59.0%
Capacity Utilization of Sugar Mills	-	111.5%
Wheat Procurement (4.50 million tonnes)	-	31.8%
Animal Feed Production/Supply	-	50%
Retail Fair Price Shops (Rural + Urban)	-	22%
Milk Procurement to Total Production	-	7.44%
Milk Procurement to Marketable surplus	-	10.5%
Ice Cream Manufacture	-	45%
Oil Marketed (Branded)	-	50%
Spindlage in Co-operatives (3.518 million)	-	9.5%
Cotton Marketed / Procurement	-	NA
Cotton yarn/Fabrics Production	-	23.0%
Handlooms in Co-operatives	-	55.0%
Fishermen in Co-operatives (Active)	-	21%
Storage Facility (Village level PACS)	-	65.0%
Rubber processed and marketed	-	95.0%
Areanut processed and marketed	-	50%
Direct employment generated	-	1.07 million
Self-Employment generated for persons	-	14.39 million
Salt Manufactured (18,266 Metric Tonnes)	-	7.6%

(Excerpts : Profile of Indian Co-operative Movement-2002)

The statistics here indicates that modern cooperative movement has made tremendous progress in every walk of its activities and occupies a major place in the share of the national economy. Thus the importance of Co-operative movement cannot belittled. In this

context we are being reminded by the findings of the All India Rural Credit Survey Committee 1954 that "Cooperation has failed but it must succeed" and the comments of Royal Commission on Agriculture "if the Co-operatives fail, this will be a failure for best hope of India." It is, therefore, planner of post-independence era gave thrust to the co-operative movement, and the then Prime Minister Pandit Jawaharlal Nehru wanted India to be convulsed with Co-operatives.

Co-operatives in Orissa at a Glance

Orissa is characterized by predominantly an agrarian economy. No development strategy would be effective and pragmatic without development of agriculture. Since Agriculture in the State has been given priority for the cause of its economic development, co-operatives constitute an integral part of State agricultural development programme as the State Co-operative render 70% of the total agricultural credit requirement.

Utkal Gourab Madhusudan Das, founder of modern Orissa organized the first consumer Co-operative Store at Cuttack in 1898 and inspired Balmukunda Kanungo, the then Deputy Collector Banki, Rai Bahadur Bidyadhar Panda, Head Pandit, Subarnapur M.V. School, Dinabandhu Sahu and others to organize Credit Co-operative Societies in 1903 at Banki and Banki - Dampada Central Co-operative Bank in 1910. In 1912, there were 82 number of Small Size Credit Co-operative Societies functioning in the State having a membership of 3 thousand and working capital of Rs.2.78 lakhs. During 1936-37, the number of Central Co-operative Banks and Credit Co-operative Societies in the state increased to 13 and 2154 respectively. The membership and working capital of these Co-operatives were 74

thousand and 9.81 lakhs respectively. At the time of independence, the number of Central Co-operative Banks and Primary Credit Co-operative Societies were 15 and 3317 respectively and by this time the Co-operative movement had already diversified its activities into various field such as Marketing, Farming, Housing and Consumer.

The number of all types of Co-operative Societies functioning under the administrative control of Registrar of Co-operative Societies, Orissa as on 31st March 2002 comes to 10,818 out of which 4757 are functioning and 740 and 5321 respectively are moribund and under liquidation stage respectively.

Similarly, under the functional Registrars viz : Animal Husbandry and Veterinary Services, Textiles, Industry, Handloom and Cottage Industries, Fisheries, OMFED etc. as many as 7490 Co-operatives have been organized out of which 3485 are working. The rest 1696 and 2304 respectively are lying in moribund and liquidation stage.

It is revealed from the above statistics that there is a manifold growth of the Co-operative movement spreading over all sectors. But it is a matter of concern to make the non-viable societies vibrant and functional.

Emerging Issues

Over the last one hundred years (1904-2004) Co-operatives have made substantial contribution to the country, particularly to the rural poor. Notwithstanding their achievements and phenomenal growth, Co-operatives are beset with several issues and confront with challenges in the era of economic reforms which is described as under.

(i) WTO & Co-operatives

In the new millennium, a serious challenge which will be faced by Co-operatives relates to WTO Agreement on Agriculture. Co-operatives are closely attached with agriculture and agro-based activities in the rural areas. Concern is being expressed by members of Co-operative fraternity that the implementation of various provisions of Agreement on Agriculture will seriously affect the farming community in terms of their income levels, levels of living and quality of life. This aspect is particularly important as 70% of our population is dependent on agriculture and agro-based activities. Where as only 4% of population is dependent on agriculture and allied activities in case of developed countries.

Further, it has to be ensured that food security in terms of providing minimum food for various sections of Indian population does not get adversely affected by the WTO Agreement on Agriculture and hence there is the need for providing a separate "Food Security Box" under WTO provisions with emphasis on encouraging on food production and per hectare productivity of various crops. Various segments of Co-operative Movement should be encouraged for improving their operational efficiency and for promoting cost effectiveness and quality standards to face the daunting challenges of competitive culture.

(ii) Participation of Women in Co-operatives

The need for greater participation of women in cooperatives especially in areas where they have a natural advantage is accepted by all. It is known that under the system of adult franchise prevailing in India, women have equal opportunities for voting and

electing their representatives in Central and State Legislatures as also in local bodies and panchayats. Central and State Governments are also extending various concessions for promoting education among girls and women. However, despite these favourable developments a majority of women in our country are still illiterate and do not have access to various resources including credit from banking channels.

For the uplift of women the Self Help Group (SHGs) is in the tune with Co-operatives. Their conversion to co-operative form of organisation will go a long way in empowering women in view of the vibrant democratic structure of the Co-operatives. Micro finance through SHGs by involving more and more women will be important task in the 21st century.

(iii) **Professionalisation of Co-operatives**

Co-operatives have lost their democratic character and have become the government controlled bureaucratic organizations. The cooperative societies must evolve as independent self-reliant, autonomous and member-driven institutions. Rightly Capoor Committee (2000) has recommended on these lines besides professionalisation, human resource development (HRD) business diversification recovery management fund mechanism and setting up of a cooperative rehabilitation and development fund. The committee also cautions against excessive control and regulation.

Central Government along with its State Counterparts has taken initiative to strengthen infrastructure facilities and to develop professional skills in the cooperatives.

The Co-operative Education and training programmes being implemented by National

Co-operative Union of India (NCUI) and National Council for Co-operative Training (NCCT) and Junior Level Co-operative Training Centres. But still there is a feeling all over the need for professionalisation. The cooperatives professional may have to redefine their roles in the light of the emerging knowledge society. Information Technology (IT) has assumed such high importance that ICMs should now turn their focus on I-Business, E-Commerce, E-Governance CRM etc. To enable them to acquire competitive ability in terms of quality, cost, timeliness, availability, service and support, total quality management (TQM) are the specific areas that would improve Co-operative during the dawn of new millennium.

(iv) **Co-operative Law Reforms**

As per recommendation Chowdhury Brahma Perakash Committee that model Co-operative Societies Act 1991 provided scope to enable cooperators to develop self-reliant cooperatives with much autonomy and participation in democratic management. Accordingly parallel State Co-operative Law/self-Reliant Co-operatives was first enacted in A.P. in the year 1995 followed by MP, Chhatisgarh, Karnatak, Orissa, Bihar, Jharkhanda, J & K and Uttaranchal. The attempt is a reflection of reforms in the Co-operative sector sweeping across the world. Self Reliant Co-operatives (SRC) seeks to restore to all those Co-operatives not dependent on the government equity, and share. Thus it is an timely attempt to make the cooperatives more a member driven for which all possible care may be taken to materialize the goal of the Co-operative law reforms.

Another landmark in reforms in Co-operative law is the amendment of Multi

State Co-operative Societies Act 2002 the fifth Central Legislation on Co-operatives enacted in the 51st year of Republic of India and aimed at removing the restrictive provisions of Multi State Co-operative Societies Act (MSCS) 1984. The Government's power to give directions and supersession of Board have been restricted to such societies in which the Government holds 51% or more. The societies will be free to raise resources by receiving deposits, raising loans and grants. The federal Co-operatives would have more responsibilities and the disputes would be settled through arbitration at the choice of the society.

Further NCDC Amendment Bill, 1995 has been passed during 2002 which was pending since 1995. The Amendment has since been enforced with effect from 16.9.2002. Now NCDC shall be financing more activities allied to agriculture, like animal husbandry products, such as milk, meat, skin, wool etc to help augment the earnings in rural areas. Similarly, service sector and industrial Co-operatives including goods produced by the Cottage and Village Industries will come within the purview of the NCDC. The NCDC would also be able to undertake direct financing of Co-operatives against reasonable security without State/Central Government guarantee.

(v) **National Policy in Co-operatives**

Internal and structural weaknesses of cooperatives, wide regional imbalances combined with lack of proper policy support had neutralized their positive impact. This had necessitated the need for a clearcut National Policy on cooperatives. The objectives and salient features of the comprehensive National Policy on Co-operative (April 2002),

announced by Government of India is as follows. Under this policy, cooperatives would be provided necessary support, encouragement and assistance so as to ensure that they work as autonomous, self-reliant and democratically managed institutions accountable to their members and make a significant contribution to the national economy. The policy aims at ensuring the functions of cooperatives based on the Manchester Declaration of International Co-operative Alliance 1995 (voluntary and open membership, democratic member control, members' economic participation, autonomy and independence, education, training and information, co-operation among co-operatives and concern for community).

* While upholding the values and principles of Cooperation, the National Policy recognizes the Co-operatives as autonomous association of persons, united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise;

* Upholds the preservation of the distinct identity of Co-operatives, its values and principles by providing an appropriate environment and taking the required administrative and legislative measures;

* Recognizes Co-operatives as a distinct economic sector and integral component of the socio-economic system of the country and an effective and potential instrument of socio-economic development.

* Accepts the need to phase out its share holdings/equity participation in the cooperatives. The Co-operative shall be enabled to set up holding companies/subsidiaries, enter into strategic partnership, venture into futuristic areas like insurance, food

processing and information technology etc., and shall be independent to take the financial decisions in the interest of the members and the furtherance of their stand.

* Recognizes the role of the Government in ensuring that the benefits of liberalization and globalisation in the emerging special provision in the Co-operative Societies Act with regard to banking, housing, real estate development, processing, manufacturers Co-operatives, infrastructure development etc.;

* Undertakes to devise and execute suitable programmes and schemes to build and develop co-operative institutions in the cooperatively under developed states/regions with particular reference to the North Eastern States including Sikkim;

* Recognizes the support of Co-operative Movement to develop human resources, Co-operative education and training, appropriate technologies and infrastructural facilities so as to promote professional management in Co-operatives.

* Undertakes to initiate structural reforms in order to improve the functioning of the Co-operatives at various levels to ensure greater efficiency and viability.

Conclusion

The Co-operatives in the 21st Century must remain on vanguard in providing the required lead to the millions of our producers. This calls for well managed efficient Co-operative sector and to keep them away from the fears to draconian laws and unwanted interference. The vision for the second century is to withstand the challenges of competitive business environment where excellence, efficiency and high productivity parameters will be given priority. Emphasis will continue to be laid on an improvement with Co-operative governance through the process of restructuring and rejuvenation.

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NCC student pinning the flag on the dress of Shri Debasis Nayak, Minister, Information & Public Relations, Sports & Youth Services on the occasion of the Armed Forces Flag Day on 7.12.2004.

Cuttack Credit Ltd.: A Success Story

Introduction

The world-wide importance of micro-finance for the poor is being increasingly realized. As a result, an intense debate has erupted among the planner, bankers and officials of Government and NGOs as to how resources could be raised for this purpose and credit delivered to the poor in an effective, efficient and sustainable manner for self-employment and other financial and business services (including savings and technical assistance).

Till recently, all over the country banks had treated the poor as not bankable. The capacity of the poor for saving and repaying loan was not recognized. All the policies centered around the presumption that the poor need cheap and subsidized credit. This has reflected in the state under current of hesitation by private and public sector banks in dispensation of credit to the tiny entrepreneurs have created challenges and opportunities for the cooperatives to mobilize local resources for its productive deployment to generate employment opportunities and thus the Cuttack Credit Cooperative Ltd. Credit Cooperative Ltd. was registered on 27.6.1998 vide No.42/CD. Consequent upon enactment of Orissa Self-Help Co-operatives Act 2001 (Orissa Act 4 to 2002) it was converted and registered as

Cuttack Credit Co-operative Ltd. (Short name - Credit Co.) under Section 4 of the said Act by the R.C.S. (O) Bhubaneswar on 3.9.2002 extending its area of operation to the whole of the revenue district of Cuttack and Khurda only.

Objectives :

The aims and objectives of the present study is as under :

- (i) To study the growth of the credit co in terms of membership coverage working capital share capital reserve and borrowings.
- (ii) To examine its cost of management.
- (iii) To study the loans advanced and business activities and suggest remedial measure.

Performance of the Credit Co

Growth and performance of any organisation without focusing on its membership coverage and resources raised cannot be measured properly. As such the membership coverage of Credit Co is worth to note which is reflected below :

Table - 1

Membership

1998-99	-	51
1999-2000	-	253
2000-2001	-	752

2001-2002	-	980
2002-2003	-	1027
2003-2004	-	1176

It is revealed from the above table that initially membership position of the society was 51. But the same has been considerably started increasing which as speaks about voluntary spirit for the cause of development and progress of the society.

Financial Indicators of Credit Co

Progress of any organisation can not be judged in isolation with its financial indicators. As such it is worth to discuss about its financial indicators consisting of paid up share capital, reserves, deposits and borrowings which is shown in the following Table No.2.

Table - 2

Particulars	(Rs.in lakhs)		
	2001-02	2002-03	2003-04 (Position as on 31.03.2004)
Paid up to Share Capital	19.79	24.09	30.02
Reserved and offer funds	4.36	8.81	28.17
Deposits	414.10	426.29	526.93
Borrowing	Nil	Nil	Nil
Profit & Loss	17.83	26.47	18.74

It is revealed from the above table that there is a steady growth in terms of Share Capital, Reserve fund and deposits from 2001-02 on 31.03.04. It is worth to mention here that loans and advances made comes to Rs.377.69 lakh as on 31.3.04 which formed 58% of the working capital i.e., Rs.648.84 lakh. Against total deposit of Rs.526.93 lakh as on 31.3.04 the cooperative maintained Rs.232.34 lakh (44% of total deposit) towards fluid

resources to meet the demand of depositors which has been reflected in table No.4.

Working Capital

Working capital is the nerve centre of any business organisation. As such it is worth to mention the status of working capital position of "Credit Co" which is given in the following Table No.3

Table-3

Year	(Rs. in lakh)
	Working capital
2000-01	9.22
2001-02	10.53
2002-03	10.37
2003-04	10.76

It is revealed from the above table that working capital comprising of the share capital, reserves, deposits and other liabilities, less contra items is also showing a considerable growth considering the age of the organisation.

Working capital & cost of management

Cost of management with working capital has a important impact on the health of an organisation. This has been discussed in the following table.

Table - 4

Year	Cost Management	Working Capital	% of Cost of Management with compound with working
2000-01	9.22	341.47	2.70
2001-02	10.53	476.00	2.20
2002-03	10.37	514.11	2.02
2003-04	10.76	648.84	1.66

It is revealed from the above table that the cost of management is within 3.5% of the

working capital credit co's management cost remained within 1.66% only.

Loans & Advances'

Loans and advance made for the last four years is given in the following table.

Table-5

(Rs.in lakhs)

S1. Purpose No.	2000-01	2001-02	2002-03	2003-04
1. Business Plan	109.04	135.39	175.87	176.45
2. Transport Loan	66.11	92.86	106.22	139.70
3. Consumer Loan	4.71	3.39	4.87	5.05
4. Loan against deposit	11.82	37.50	33.94	24.31
5. Loan against KVP/ NSC	0.39	3.43	1.92	4.49
6. Cash Credit	9.58	8.92	14.74	12.63
7. House Building Loan	3.39	3.83	3.19	7.05
8. Other interest bearing advance	0.14	0.39	0.12	Nil
9. Overdraft	Nil	Nil	Nil	8.01

It is revealed from the above table that the progress of loans and advance made by Credit Co. is quite encouraging. It is understood from the data available by the Credit Co. that the cumulative disbursement of loan up to 31.03.2004 was 1860 lakh.

Demand and Collection

Due to careful and qualitative lending credit co. has maintained satisfactory record of recovery during past 3 years i.e., 80% in 2001-02, 85% in 2002-03 and 86% in 2003-04. It could be possible due to whole-hearted cooperation and regular follow up action taken by the field staff.

The Credit Co. is as on date is operating with the following four branches within a limited staff position of 15 only and the same has also been computerized.

- (i) Main Branch - 02.10.1998
- (ii) Fulnakhara Extension Counter - 10.02.2000
- (iii) Kalapada Extension Counter - 30.01.2002
- (iv) Janapath Counter - 20.09.2004

Best Performance Award

The most important achievement of Credit Co. is that since inception it has been enjoying to its credit "A" status in Audit Classification. To add to this achievement on the occasion of 50th All India Cooperative Week celebration on 17.11.2003 in a grand function it was felicitated as the best Credit Co. Award. Further, it is heartening to mention that it has been enjoying this award continuously from 1999-2000.

Action Plan for 2004-05

The following Action Plan is under active pipeline of the Credit Co.

- * Drive for mobilization of share capital target Rs.35.00 lakh.
- * Reserve and other funds to increase to Rs.38.00 lakh.
- * Recovery to be stepped up minimum target fixed at 90%.
- * To achieve deposit target of Rs.550 lakh.
- * Loans and advances to reach the level of Rs.426 lakh.
- * Working capital to grow from Rs.648 lakh in 2003-04 to Rs.693 lakh in 2004-05.
- * Cost of management will be limited within 3.5% of the working capital against 1.66 in 2003-04.
- * Dividend on shares proposed at 10% out of net profit for the year 2003-04.
- * Income from non-fund business to reach Rs.1.50 lakh. Demand Draft pay order at par

cheques to be issued with tie up arrangement with different Banks.

Secret of Success of Credit Co.

Credit Co. is a growing organisation. The membership is increasing and recently it has opened one new Branch at Janapath, Bhubaneswar to meet the needs of the members. But it is functioning with its limited staff which needs to be strengthened. Apart from this it is performing well because of the following secrets of its success.

- (i) Strongly believes in the principle and philosophy of cooperation.
- (ii) Dedicated team of management with the spirit of service, honesty, dedication and hard work.
- (iii) Well qualified professionalised founder president Mr. Mahendra Kumar Nayak, who

is keen and vigilant about the day-to-day transactions of the society.

(iv) Every advance is being meticulously examined and doubtful cases are strictly refused.

Conclusion

In the era of total liberalization of financial sector reforms the success of "Credit Co." could be due to effective and efficient management and vigilance of the Chairperson. The success of the society is a reflection of the success of its members. This should, generate confidence in the people to establish such "Credit Co." so that the new generation cooperatives in the new millennium will become an exemplary one.

Courtesy : Annual Report of Credit Co-(2003-2004)



Hon'ble Chief Minister Shri Naveen Patnaik offering floral tributes to Late Pandit Nilakantha Das on the occasion of 37th Sraddha Divas function at Orissa Legislative Assembly premises on 6.11.2004. Shri Maheswar Mohanty, Hon'ble Speaker and Shri Biswabhusan Harichandan, Minister, Rural Development, Industries & Law are also present.

Institute of Co-operative Management Bhubaneswar

The Institute of Co-operative Management (ICM), Bhubaneswar is the oldest management institute functioning under the aegis of National Council for Co-operative Training (NCCT), New Delhi. Formerly named as Block Level Co-operative Extension Officers' Training Centre, this Institute was established at Gopalpur-on-Sea (Dist. Ganjam) as early as in the year of 1955-56 to impart training to the Co-operative Extension Officers of the State of Bihar and Orissa. During that period, it was under the control of the Central Committee for Co-operative Training constituted by Reserve Bank of India. Later in the year 1963 it was taken over by the Committee for Co-operative Training, New Delhi which was renamed to form National Council for Co-operative Training by enhancing the status as State Level Training College in 1968. Subsequently, It was shifted to its present location at Bhubaneswar in 1969 with an objective to have better liaisoning with the State Government and Apex Co-operative Organizations. Since 1991 the nomenclature of the Co-operative Training College has been changed to Institute of Co-operative Management.

The main objective of the Institute is to inject professionalisation of management in Co-operative enterprises. Based on the training needs and requirements of the co-operative

personnel, this institute designs programmes to update and sharpen their knowledge, skill and attitude.

Every year this Institute conducts core Diplomas like Higher Diploma in Co-operative Management, Diploma in Co-operative Audit and Diploma for LAMPCS Management for the personnel of Co-operative Department/Institutions. Besides the core Diplomas, it also conducts minimum 40 to 50 MDPs & EDPs in different areas of co-operation in particular and management in general.

Apart from this, the institute has diversified its activities and ventured to enter into educational programmes and introduced two-year full time MBA programme affiliated to AICTE, New Delhi and Utkal University. With the advent of Biju Patnaik University of Technology at Rourkela, Orissa now the MBA programme at our Institute is affiliated to it. Further, Institute's Computer Centre is an DoEACC Accredited one and imparts coaching for O and A Level aspirants drawn from the open market.

Infrastructural Facility

The Institute is having the privilege to be located at the heart of the city in Unit-8,

Bhubaneswar. It is functioning in its own building extending to an area of 3.4 acres of land. The present administrative and training block is a two storied one. Besides, it possesses a well-furnished hostel accommodating to 150 boarders. Most of the programmes conducted at this institute are residential.

The diversification of its activities from training to general education like MBA, Computer , Marketing etc. created the scarcity of classrooms and other infrastructural facilities. To meet the need, Annex two-storied Building having 4 large class-rooms has been completed, which was inaugurated on 07.09.2002.

Training Programmes Conducted During Last Five Years

Training is the most important function of this Institute. It caters the training needs of the middle level personnel of Cooperation and allied departments (Fishery, Animal Husbandry, Industry, Textiles etc.) as well as the Co-operative Institutions. The training programmes are designed and organized on various subjects with varying duration keeping in view the requirement of the user organization. The Institute also conducts seminars, workshops, conferences and undertakes research and publication activities.

Every year, we plan to conduct at least 40 programmes and train up 650 participants spreading over 84 training weeks. With this target, our progress during the last five years are as follows:

Year	No. of programmes conducted	Participants trained
1999-2000	45	1143
2000-2001	55	1377
2001-2002	57	1651
2002-2003	53	1304
2003-2004	58	1399

Library

The Institute is having a rich library equipped with more than 13,460 books on different areas of co-operation, management and other subjects. To have an access to the current development in all the relevant areas, it subscribes to as many as 81 reputed journals and periodicals. It is also having modern classroom equipments like audio-visual aids etc.

Computer Centre

At present, the Institute is having a modernized data bank and computer centre with 29 computer systems, out of which two are Pentium IV, two are Pentium III machines, 6 Pentium II machines with multimedia extension. Further, the Institute is equipped with 24 hours Cable Modem Internet connectivity from a local ISP, BSNL, Bhubaneswar. In addition to this, the Institute is having its own website which one can visit at www.icmbhubaneswar.nic.in.

Courtesy : ICM, Bhubaneswar

Short Term Co-operative Credit Structure in Orissa

Rabindra Narayan Dash

The Orissa State Co-operative Bank (OSCB) has once again excelled in its performance during the year 2003-04 in all parameters and the details of the achievement is as follows.

Financial results of 2003-2004 :

The bank continued to excel in all spheres of activities, which may be perused from the table given below.

(Rs. In Lakhs)

SI.	Particulars	2001-02	2002-03	2003-04 (unaudited)	Percentage of growth over previous year
1.	Share capital	3752.28	4382.07	498.32	13%
2.	Reserve Fund	109864.84	11435.01	12262.17	7%
3.	Own Fund	14645.22	15817.08	17220.49	9%
4.	Deposits	87482.18	88612.49	102601.38	16%
5.	Borrowings	52299.05	58580.78	75573.56	29%
6.	Working Fund	166996.06	178796.47	212573.28	19%
7.	Loans outstanding	91093.76	100905.81	109908.07	
8.	Per employee business	719.24	827.59	936.18	13%
9.	Per employee business	729.24	827.59	936.18	13%
10.	Net profit	749.53	1037.05	1372.00	32%
				(Provisional)	
11.	Dividend	10%	10%	10%	

Implementation of Kishan Credit Card Scheme :

The bank has continued its endeavor to popularize the Kisan Credit Card Scheme introduced with effect from Rabi 1998 to empower the farmer members to access timely and adequate credit from

the branches of DCCBs by issuing cheques. The bank has already issued 18,21,053 KCC as on 31.03.04 against target of 18,00,000.

Orissa State Co-operative Bank Excels in all Spheres of Activities

The Bank has continued to have its lion's share in dispensation of crop loans. During the year 2003-2004, the bank has disbursed record crop loans amounting to Rs.426.36 crore in Khariff and Rs.316.13 crore in Rabi aggregating to Rs.742.46 crore recording a healthy growth of 21% over the previous year disbursement of Rs.615.54 crore. 70% of the total crop loan financed in the State has come from the Short Term Co-operative Credit Structure. The bank has a plan to disburse Rs.500 crore for Khariff and Rs.350 crore in Rabi aggregating to Rs.850 crore for financing Seasonal Agricultural Operations. There has been phenomenal increase in per capita disbursement of crop loan from Rs.18,832/- in 1991-92 to Rs.8,513 in 2003-04.

Kalinga Kissan Gold Card and Silver Card Scheme :

The unique and innovative "Kalinga Kissan Gold Card Scheme" designed and launched by the Bank to recognize and reward the good repayment habits of KCC holders of PACS / LAMPS / FSS and provide them a package of facilities has been highly acclaimed by the farming community and the policy makers of the country. So far, the bank has facilitated issue of 71, 330 cards as on 31.3.2004 in the State.

The Kalinga Kissan Silver Card Scheme was designed by the Bank and launched on 20.11 2002 to motivate the farmer members having one year default free status to continue with the habit of repayment in the subsequent

years. The scheme envisages the facility of 2% less interest on loans and eligibility to get Kalinga Kissan Gold Card by timely repayment during the second year. 1,19,275 farmer members have availed the benefits under the scheme and the figure is likely to touch 1,50,000 by 31.03.2005.

The Kalinga Kissan Gold Card and Silver Card schemes have helped in creating a conducive recovery atmosphere in the State for which, the short term Co-operative credit structure has successfully broken the jinx of languishing of recovery at 45 to 50 per cent at grass root level. During the year 2003-04, the member level recovery was 69 per cent as against the last year achievement of 55 per cent

Introduction of anywhere banking :

Orissa State Co-operative Bank has become the first State Co-operative Bank in the country to introduce anytime and anywhere banking by connecting all its branches, extension counters and ATMs through BSNL lease line with ISDN backup. With introduction of this state of the art facility with effect from 31.01.2004, the customers of the branches of the bank have become the bank customers and can transact their business in any of the units of the bank.

Up-gradation of Extension Counters as full-fledged branches :

During the year 2003-04, Reserve Bank of India has granted license to the bank to convert the Alaka Extension Counter as Ashok Nagar Branch and CDA Extension Counter as Link Road Branch.

The campaign "Co-operatives at your door step":

For the first time in the history of Co-operative movement in the State, the OSCB

with the help of DCCB and PACS organized a statewide campaign to establish direct relationship of the PACS with the existing and prospective members with the objective of strengthening the short-term Co-operative credit structure of the State. The campaign was carried out in all the villages of the state from 01.08.2003 to 15.09.2003 with the following objectives:

- ◆ Creation of awareness among the farming community about the function of PACS and various services offered.
- ◆ Persuasion of the non-members to become members of the PACS, Collection of applications, initial shares capital and entrance fee from the interested farmers on the spot.
- ◆ Convincing the passive members to utilize the services of the PACS. Distribution of Kisan Credit Cards to the interested members.
- ◆ Ascertaining the reasons for non-utilization of the Kisan Credit Card by the passive members of the PACS and persuading them to avail the facilities. In case of default, persuasion to clear the default and to initiate steps to issue cheque book on clearance of default.
- ◆ Convincing the existing KCC holders to remain default free to avail the KKGC and KKSC to get the benefits envisaged in the schemes.
- ◆ Enrolling more number of depositors under the Mini Bank scheme and opening the new account on the spot.
- ◆ Besides, a survey on the status of all individual households in the villages was carried on by the PACS employees to ascertain the reasons of the wide gap between the

membership of the PACS and the actual users of the services. The data generated in the survey is under compilation, which would facilitate management decisions to strengthen the short-term Co-operative credit structure.

The campaign has helped in creating mass awareness throughout the State regarding the functioning of the PACS and achieved the following quantitative results :

No. of agricultural family in the State	50.04 lakh
No. of agricultural families contacted during the campaign	46.15 lakh
No. of agricultural families evinced interest to become members	6,14,857
New member enrolled	1,11,632
New KCC issued	3,06,457
Fresh loans issued to newly enrolled members	Rs.55.67 cr.
No. of members repaid their dues and became default free	31,452
Amount recovered	Rs.24.38 cr.
New deposits mobilized	Rs.8.31 cr.
Credit gap identified	Rs.1612.36 cr.

Computerization of affiliated DCCBs and PACS

As the apex bank of the State, it has taken a lead role to facilitate the DCCBs to make an inroad into the sphere of information technology to automate their retail outlets and the operations of the head offices. A software has been developed and provided free of cost to the implementing DCCBs. At present, Angul, Banki, Balasore, Berhampur, Boudh, Cuttack, Keonjhar, Mayurbhanj, Koraput, Samabalpur, Bolangir, Khurda and Sundargarh DCCBs are providing online customer service across their counters in the Main Branch. Other branches of the DCCBs are also taken up for computerization in a phased manner. It is expected that the Head office and Main Branch

of all the District Central Co-operative Banks will be fully computerized by 31.12.2004. On completion of automation, the bank offices of the DCCBs shall be connected with the OSCB to provide instant real time information for facilitating market driven decisions to consolidate the structure.

Computerization of the bank and the affiliated DCCBs has solved the manpower problem in a big way. There has been no recruitment in these banks during the last 10 years and there are large-scale vacancies in all the banks including OSCB. It was becoming extremely difficult to manage the operations with the existing manpower. The customer services were getting affected due to manual maintenance of accounts at a time when the commercial banks and the private banks were threatening to lure the existing clientele with improved automated customer service. Timely adoption of IT enabled services has helped the banks to take on the competition successfully.

The bank has developed a software for the computerization of PACS by its Management Information Systems department. 60 numbers of PACS will be automated. OSCB is providing assistance @ Rs.50,000/- for purchase of computer and other accessories for the purpose.

Treasury Management Cell (TMC)

The Bank is the third State Co-operative Bank in the country to have established a Treasury Management Cell (TMC) during May 2001 with the objective of deployment of its surplus resources in profitable avenues and trading in Government and other securities in the money market. The bank has installed Reuters Business Watch facility to get online data from the securities market.

The TMC is managing a portfolio of Rs.832.88 crore, which is subject to variation

on a day-to-day basis. The portfolio includes SLR investment of Rs.267.33 crore and non SLR investment of Rs.565.55 crores. The TMC has made a trading profit of Rs.18.53 crore during the year 2002-2003. The cumulative profit during the three years of operation of the TMC amounts to Rs.38.95 crores. In the era of financial liberalization and consequent fall in interest rates, the G-Sec market holds the key for profitability in the bank. The OSCB aims at increasing investment in this portfolio to deploy all its surplus resources in profitable avenues.

Turn around in the functioning of the DCCBs :

With the concerted endeavour of the OSCB to consolidate the functioning of the affiliated Central Co-operative Banks and continuous monitoring with initiation of timely corrective action, two Central Co-operative Banks namely Cuttack and Banki improved their performances during the year and complied with the provisions of the Section 11 (1) of the Banking Regulation Act, 1949 (AACS). As on 31.03.2004, 12 out of 17 DCCBs have complied the statutory provisions. The remaining banks are expected to turn around their performances by 31.03.2005.

Reduction of rate of interest on various loans :

1. Reduction in rate of interest on various loans at ultimate borrower level as under.

- * Crop loans -from 16-17% to 12%
- * Loans for Weavers Societies -from 14-16% to 12%
- * Schematic loans -from 14-15% to 12%
- * The bank has also enhanced the interest incentive from 1% to 2% in case of Kalinga

Kissan Gold Card and Silver Card holders. As a result of this initiative, the good borrowers of the PACS will get production credit at the interest rate of 10% per annum.

Introduction of Corporate Government :

Orissa State Co-operative Bank is the first bank in the Co-operative sector in the country to introduce sound practices of corporate governance to ensure transparency in its functioning. During the last three years, the following initiatives have been taken to follow good corporate practices by addressing a range of issues such as, protection of shareholders rights, enhancing shareholders value, disclosure requirements, integrity of accounting practices and strengthening the control system.

The employees of the bank can now expose any wrongdoing of the top management of the bank without any fear of reprisal. The Board of Management of the bank in its meeting held on 30.06.2003 has accepted the system for protection of whistleblowers adopted in USA and in Indian Companies like Wipro and Infosys. This facility would give protection to the staff, who expose irregularities, corruption, mal-practices etc. by the top management of the bank. Under this system, where any staff of the bank discovers information, which he believes shows serious malpractice, impropriety, abuse or wrongdoing, then the information should be disclosed without fear of reprisal. Following the spirit of the Sarbanes Oxely Act of the USA, which envisages protection for whistleblowers (staff who expose corruption), a similar policy has been adopted to enable the employees to raise concern about any irregularities and impropriety at an early state and in the right way without fear of victimization, subsequent

discrimination or disadvantage, OSCB has become the first bank in the country and possibly the world to have adopted such a policy. Employees are normally the first to realize that there is something seriously wrong with the Bank. Hence a policy which affords protection to the employees, who expose irregularities, corruption, malpractice etc. will go a long way in ensuring transparent management, setting standards, which the DCCBs shall be encouraged to emulate.

Corporate Agency for Insurance Business:

The bank has entered into an agreement with TATA-AIG Insurance Company to act as corporate agent to sell the insurance products. The commission agreed upon would range from 40% to 52% in case of life products and 15% to 18% in case of non-life products. This would help in increasing the profitability of the bank.

Action Plan for 2004-2005 :

- ◆ Deposits to grow from Rs.1,026 cr. to Rs.1,150 cr.
- ◆ Aggregate loans and advances to increase from Rs.1099 cr. to Rs.1343 Crores.
- ◆ Crop loans of Rs.500 Cr. in Kharif and Rs.350 cr. in Rabi aggregating to Rs.850 cr. will be disbursed.
- ◆ The cumulative issue of KCC will increase from 18.21 lakhs to 23.00 lakhs.
- ◆ Issue of KKGK will increase from 71,000 to 1,00,000.
- ◆ Issue of KKSC will increase from 1.19 lakhs to 1.50 lakhs.
- ◆ Investment to grow from Rs.832 cr. to Rs.1000 cr.
- ◆ Working Fund to increase from Rs.2125 cr. to Rs.2446 cr.

- ◆ There new branches to be opened at Rourkela, Rasulgarh at Bhubaneswar and Bidanasi at Cuttack. Besides the Kalinga Hospital Extension Counter will be upgraded as a full-fledged branch.
- ◆ The remaining District Central Coop. Banks will be taken up for computerization.
- ◆ 140 PACS will be computerized.
- ◆ Subsidy of Rs.60 lakhs will be provided for the Kalinga Kissan Gold Card and Silver Card Scheme.
- ◆ Recovery at PACS level will increase from 69% to 75%.
- ◆ Developmental and infrastructure assistance aggregating to Rs.388 lakhs will be provided to the DCCBs and PACS.

SRI THAKUR TAKES OATH AS THE GOVERNOR OF ORISSA

Hon'ble Chief Justice of Orissa High Court Mr.Sujit Burman Roy administered the oath of office and secrecy to Sri Rameswar Thakur as the Governor of Orissa in a function organized at Abhisek Hall of Raj Bhawan, Bhubaneswar on 17.11.2004 at 4.30 PM. Sri Naveen Patnaik, Hon'ble Chief Minister of Orissa and other dignitaries were present at the function. Dr.Subas Pani, Chief Secretary of Orissa with permission of the Governor-designate read out the letter of appointment issued from Rashtrapati Bhawan, New Delhi.



Revamping Co-operative Sector in Orissa

N.K. Dash

The history of co-operative movement is more than 100 years in Orissa. In spite of such a long history, Orissa has lagged behind many states in India. The state of affairs of Co-operative Societies in the state can be better understood from the statistical table given below.

As on 31.03.2003

Total No of Co-op.	Working Stage	Moribund Stage	Under liquidation
18282	7955	2538	7789

(Source : Co-operative Movement in Orissa 2002-2003, Issued by R.C.S., Orissa)

Thus more than 50% of the Co-operative Societies are either in Moribund Stage or in liquidation stage. Also it is reported by the R.C.S., Orissa that out of 3511 nos. of credit co-operatives, 2414 nos. incurred loss during the year 2002-03. Some Co-operative cold storages, spinning mills, sugar factories, consumer stores, housing societies were either closed or under process of liquidation or sold to private persons/companies.

But why ? Despite more than 100 years of existence, the co-operative movement did not succeed in the state. Are there lacunae or loopholes in the co-operative principles or Laws? Co-operative values eliminate profit as

a driving force and emphasise on social responsibility, voluntary membership with commitments, democratic administration etc. Whatever the case may be, basically co-operatives are business organizations. Profit maximization may not be an ideal principle for co-operatives, but in the fast changing economic reforms, the co-operative sector can no longer afford to be indifferent to the cost effectiveness and commercial orientation in the new millennium. Subsidy and patronage started withering away. The economy has given a clear signal to "perform or "perish". Profit in co-operative enterprises was considered a bad word whereas the changes in economy uphold the theory of the "Firm", i.e. , maximization of profit for sustenance and growth. With the entry of multinationals in the sphere of production and distribution armed with advanced technology has questioned the very relevance of the co-operative movement. Against the aforesaid backdrop, if the co-operative sector is to equip itself to operate energetically in the face of the competitive pressures of an open, liberalized and de-regulated market, it will have to rise to the occasion to convert the challenges to opportunities. The resources are the same in all three sectors-Public, Private and Co-operative. The Principles / science of

Management are also the same for the three sectors. Then why co-operatives lagged behind ?

Human factor is the most crucial determinant of the performance of an organization. Co-operatives are no exception to this. The human resource development, staff morale and motivation have so far, by and large the most neglected areas in the co-operative sector. If the co-operatives in Orissa are to successfully pick up, it is of paramount importance for them to invigorate the latent powers of their vast work force through development of new work culture and value based professionalism

(A) Developing a New Work Culture:

Culture of the organization which includes shared values, commitment to super- ordinate goals and general ethos of the organization, is an important factor of success. It is defined as "the integral sum of values which individuals, group of individuals and the society at large conceive and practice. Organization culture consists of underlying assumptions and orientations of a group of people. It is influenced by both external and internal factors. External factors include cultural, social, economic, political, scientific and technological systems in the society, where the organization is located. Internal factors include Management structures and processes, personnel policies, working conditions, top management behaviour etc. External factors do not directly influence work culture, rather organizational variables including top management behaviour play an important role in the impact of external factors and in shaping the culture of the organization"

(i) **Culture of Commitment:** Commitment of employees to the organization denotes

relative strengths of an individual's identification with and involvement in the organization has three elements.

- * A strong belief in and acceptance of the organization's goals and values;
- * A willingness to exert considerable effort on behalf of the organization;
- * A strong desire to maintain membership in the organization.

An organization with high employee commitment experiences reduction in absenteeism, turnover and increase in the sense of belongingness and job performance. But the co-operatives in Orissa have failed to realize the full potential of manpower as has happened in Japan. Japanese people are trained to work with a spirit of co-operation and mutual complementation. This is called synergic relationship. The concept of "KAIZEN" has contributed to the success of Japan. "KAIZEN" literally means change for better. In practice it means change for better through continuous improvement involving everyone. Everyone in an organization can contribute to its development and each employee has potential for improving further irrespective of the fact how big or how small is that improvement. If we canalize all such small contributions, they can result into something significant in an organization. This is like the saying "drops make the ocean". KAIZEN is a process oriented approach i.e., if we take care of the process, the result will come as a by-product and we need not concern about the results. One has to do what is expected to be done and he/she need not concern about the results. For instance, a student should emphasise the learning aspect more as compared to the marks aspect. If he takes care of learning, marks shall come as a by-product. If he emphasizes marks, the

learning process gets affected because the student may try to get marks by any wrong means like copying, memorizing etc. which undercuts the very basic purpose of education. This is quite similar to what Bhagawat Geeta Says- "Karmanye Vadikaraste Ma Falesu Kadhachana". If we take care of the process, the result will follow. But everything depends upon commitment of employees. It is the duty and responsibility of Management to find out ways how to ensure and extract commitment from employees.

(ii) **Group work :** In most of the co-operatives, bureaucratic style of administration is carried on. This style emphasizes on control and close supervision, rather than on autonomy and commitment. It lacks ability to innovate, shows little concern for customers and employees, places procedures above results and looks upon people as substitutes for machines. The social distance between levels of organizational hierarchy discourages open communication, prevents teamwork and promotes adversary relationship. But the Japanese concept "KAIZEN" is mostly based on group work. Different people are bestowed with different capabilities. Some may be good as critiques, some may be good as evaluators and so on. If we group their strengths together we will be able to achieve a result which otherwise would not have been possible for anyone of them individually. This is to say that ordinary people can achieve extra ordinary results. This kind of working together and then achieving an event has very positive motivating effect. There will be a sense of achievement, belongingness and a sense of glory in all those who participate in such activities. The KAIZEN approach strongly advocates the employees working together at least for a part of their total time, every week on a regular basis.

(iii) **Strategic Direction:** Pursuit of wrong policies, failure of managerial leadership and many short sighted practices have contributed to poor state of affairs in many co-operatives. Now it is required to move from negative orientation and helplessness towards positive thinking by utilizing some of the latest management techniques and re-engineering of procedures, methods/systems. There is nothing seriously wrong with co-operatives. Given the right kind of environment and leadership, they are capable of matching with the best in other sectors. While a detailed action plan is needed in the specific context of individual organization, an attempt is made here to provide a few ideas in the strategic direction

(a) **Corporate philosophy and leadership-** The top Management should believe that a co-operative organization exists for the benefit of members, customers and people at large. Employees must believe that the organization shall take care of their interest, when it is in good business performance. All other interests will have to follow these priorities. Corporate culture radiates from the top management. For better or worst, a Chief Executive can influence the culture and behaviour in the entire organization. He should set high standards in maintaining honesty, integrity, loyalty, punctuality and sincerity in the organization. A good leader believes in his followers and teach followers to have trust and faith on leadership Co-operative organizations with this kind of transformational leadership can transform themselves into excellent organizations.

(b) **Long term Perspective:** It is important to develop systems, procedures and practices which give priority to long term perspective and discourage short term orientation. Each

co-operative organization should perspective and discourage short term orientation. Each co-operative organization should prepare its development plan once in four or five years and try to achieve the development/expansion/growth target or year-wise by reflecting the same in annual budgets. Section 31(2) of OCS Rules required the annual budget of a society for a co-operative year shall be prepared by the Managing Committee and approved by the General Body prior to the commencement of the co-operative year. But how many co-operatives actually practice it ? A large number of co-operatives do not prepare any annual budget. Some other co-operatives prepare annual budget after commencement of co-operative year. This budget system shall ensure continuity in systems, procedures, curtail unnecessary expenditure and give direction to the employees towards the common goals and aims of the organization.

(c) **Personnel Policies:** Personnel policy is formulated to have a formal statement on corporate thinking which will serve as a guideline for action and to establish consistency in the application of the policies over a period of time so that each one in the organization gets a fair and just treatment. Personnel policies have two types of objectives-general and specific. The statement of general objectives find place in the corporate plan and express the top Management's basic philosophy of human resources and reflect its deep underlying convictions as to the importance of people in an organization i.e., personnel administration. The statement of specific objectives refer to the various activities of personnel administration connected with recruitment and staffing, training and development, career path and promotion, wage and salary administration,

employee services and benefits, motivation and morale etc. These are mentioned in the staff service Rules or codes of the organization, Section 33-A of O.C.S. Act, 1962 requires the R.C.S. to prescribe service conditions and rules for employees of a Co-operative Society. Section 28(1) (a) (vii) of O.C.S. Act, 1962 requires the Managing Committee of a society to assess the manpower position and to have manpower planning at the beginning of each year (i.e., Co-operative year). But it is observed that most of the Co-operative Societies (barring a few only) do not have any staff service Rules and conditions approved or prescribed by the R.C.S. and in most of the Societies, staff position is not reviewed or assessed by the Managing Committee in a routine manner at the beginning of the year. Rather there are a number of examples where recruitments have been made now and then at the sweet will of the members of Managing Committee without considering the need basis. It has resulted in overstaffing and extra-expenditure. Clearly defined personnel policies help.

- * To ensure that its employees are informed of these items of policy and seek their co-operation to attain goals of the organization;
- * To develop a sincere sense of unity with the enterprise and to carry out their duties in the most willing and effective manner;
- * To eliminate discrimination, nepotism, undue favour by enforcing discipline on the basis of a humane application of rules and regulations;
- * To create self confidence in employees by providing job security and career path etc;

Thus personnel policies play a major role in developing work culture in a co-operative organization.

(d) **Clarify and communicate values:** Work culture for excellence is based on set of shared, values and beliefs. Often, organizational values are implicit and can be observed from behaviour. It is, however, important that these values are made explicit and are communicated to all employees in the organization. This will help them in evaluating in the organisation's values. Communication of these values by means of systematic and continuous training programmes helps in sustaining commitment to these values. It is important that besides focusing on skill development, employee training also emphasizes right values and behaviour.

(e) **Employee participation:** An employee is the most important resource for an organization. Genuine concern for employee welfare and opportunities for his participation in relevant communication and decision-making processes ensures that his contribution and involvement will increase. In Co-operative Societies there is a large social distance between management and employees, which needs to be integrated in the work place. For example - Common people without having professional knowledge, experience and skill get elected / nominated to the Managing Committees. It becomes difficult on their part to take right decisions at the right time. Also law does not provide and scope for participation of employees (other than the CEO) in the Managing Committee meetings. It is required to evolve methods by which employees can suggest for better accomplishment of works and their follow up. A practice can be followed to allow heads of

various departments / senior officials (apart from CEO) to attend Managing Committee meetings to place their suggestions. For example -while taking investment decisions in co-operative Banks, the Managing Committee may allow the Investment Manager to interact with them. In Japan, the KAIZEN suggestion scheme has worked well to create a better work culture and ensure employee participation in the decision making process. The message given to the employee is that he should continuously think and suggest ideas for solving existing problems or for improvement of the existing systems and procedures. The scheme is based on process criteria and emphasis here is on the employee participation. The scheme generates a large number of suggestions from employees at lower levels. The management works hard to consider these suggestions and even incorporating them into the overall improvement strategy. The method can very well be adopted in Co-operative societies in Orissa in a well-articulated and systematic manner. The Managing Committee has to give considerable amount of time for listening to presentations of suggestions/activities by individuals, small groups. The Management should be willing to recognize the employees efforts for improvements and make their concern visible whenever possible.

(f) **Sharing the gains of productivity :** The reward system in the organisation has a major influence on work culture. If rewards are not perceived to be related to organization performance and employee contribution there is little incentive to excel. It must be established that employee's growth will be consistence with organization growth and the remuneration package will reflect the real sharing of gains of productivity improvement.

(g) Timely completion of works in a adherence to prescribed rules and regulations :-

It is an important feature of good work culture. But most of the co-operative works are not completed in-time due to complacency and ignorance. All the members of the management are not fully aware of Co-operative Laws, R.B.I. (NABARD)/ R.C.S. guidelines. For examples :-

1. Rule 36(6) of the O.C.S. Rules 1965 require the President of the Managing Committee of Society to cause minutes of each meeting to be recorded at the meeting itself and also to sign the same along with all members present in the meeting. The R.C.S. has also enlightened this rule vide circular No.8987 Legal 4 dated 30.06.2000. But in many Co-operative Societies, resolutions are not recorded at the meeting and resolution recordings are signed by the President and the Secretary (Chief Executive). The R.C.S. has lamented in this letter about instances of non-recording of note of dissents of members and even recording resolution beyond the subject matters of discussion. It is not only alarming but also it destroys the very co-operative spirit/principle.

2. R.B.I. vide circular no. PCB 55 dt 11.02.1994 has prescribed code of conduct (in shape of Do's and Don'ts) for Board of Directors of Urban Co-operative Banks. The State Govt. has vide order No.6662, dt. 12.04.1994 also enforced the code of conduct prescribed by the R.B.I., R.B.I's intention is to ensure discipline in administration. Practice of the same shall definitely improve work culture, but it is to be seen how many people abide by these guidelines.

3. Co-operative Audit system is not only examination of transactions like Company

Audit. The role of Auditor is to examine whether the transactions are according to provisions of Act, Rules, By-laws. Business Rules and various instructions/guidelines of R.B.I/NABARD/R.C.S./ AGCS etc way back in the year 1995, the R.C.S. vide circular No.3718 dt. 02.03.1995 had issued guidelines on concurrent Audit of Urban Co-operative Banks and directed the concurrent auditors to report minor irregularities to the Branch Managers for rectification within 3 days and to report the same to head office within a week, if not rectified by the Branch Manager and also to report major serious irregularities to head office and R.C.S. office immediately. But it is seen that most of the frauds, financial/administrative irregularities are not reported by the Auditors in time. These are reported after a considerable time gap as a result of which it becomes difficult to recover the misappropriated/ misutilised amounts. Another glaring example of bad culture in Co-operatives is that although the AGCS has, vide circulars no 11553 dt. 02.11.2001 No.3180 dt. 16.05 2002, made it obligatory on the part of Auditors to issue half margin memos/ objection memos, summons to Managing Committee members/ staff members before mentioning their names as responsible for any fraud/ misappropriation/ irregularity, but it is common habit that auditors do not follow this practice scrupulously. It has created misunderstanding between employees of Co-operatives and audit personnel of Co-operative department and prevents better work culture.

There are many more examples like these.

In this process of building a new work culture for excellence, the role of top management is the most crucial. Because they

are the most visible member of the organization and they are perceived as controlling such desired rewards as promotions, budget allocation and work assignment. In a nut shell, four dimensions of work culture can be highlighted -(i) Organizational discipline, (ii) Motivation (iii) Employees Participation, (iv) Team building. The detailed action plan for improving work culture may focus on the following aspects.

- * Improvement of formal and informal communication.
- * Reduction of absenteeism, through better planning and incentives.
- * Abolition of overtime.
- * Employee suggestion scheme.
- * Improvement in canteen and housing facilities.
- * Reduction in hierarchical levels.
- * Emphasis on human resource development at all levels and linking growth of employees with performance.
- * Strict enforcement to discipline, including technological discipline.

B) Value Based Professional Management : Co-operatives are business organization. Although the state has moved to a market economy and that we are now deregulated, it will be wrong to say that there is now no need for a Co-operative movement. This ailing sector needs a management and leadership that recognizes values of professionalism, competition and efficiency. That is why in Andhra Pradesh, the Expert Committee constituted by the State Govt. to suggest on the improvement of functioning of Co-operative Banks, has called for engaging professionals for proper management of Co-operative Banks in the state.

i) **Relationship with Others:** A leader without followers is not a successful leader. Hence an important quality of professionalism is human relationship skills. A co-operative organization has two sets of customers. External customers (member shareholders, depositors, loanees etc) and internal customers (Employees, subordinates, peers etc) The Management shall always remain vigilant about the quality and standard of products/ services offered to the external customers in comparison with that of other competitors. A vigilant and enthusiast management may introduce suggestion/feed back scheme to know the expectations and aspirations of customers. It may hold customers' meets or customers' awareness meetings as a part of relationship development programme. It is very often observed that co-operative organizations ignore the internal customers i.e. , employees and subordinates. But professional management requires that subordinates are provided opportunities for growth based on performance, the employees are given their due and takes care of the needs desires and problems. It ensures their participation in decision making and its implementation; It delegates effectively and supports it with both praise and reprimand as a feedback for workdone. Although section 28(1) (a) of the O.C.S. Act has clearly defined the powers and duties of the Managing Committee, but always it is not practically possible on the part of the Managing Committee to take decision on day to day activities on a day to day basis. Managing Committee, for the sake of quality administration should limit itself to policy decisions. It may consider to delegate / part delegate financial and administrative powers to the CEO and other senior officials with fixed rules for accountability and responsibility, so that it will set more time to

devote towards developmental and innovative activities. Decentralization and delegation of powers to the CEO and other officials shall benefit the organization in three ways-first, decision making can be quick and efficient, second, employee satisfaction can be ensured, because they will work with clarity of purpose and direction, third, professionalism can spread down the line, so that good managers can be produced to shoulder higher responsibilities and the organization in future.

ii) **Quality (Education, Experience, Skill) of the Members of Management :** The watchword of every professional management is quality. This quality philosophy should not only encompass product/ service quality, but quality as a way of life in the organization. But unfortunately, not only in Orissa but all over India, people treat co-operative organization as second category of business organization. Nobody voluntarily comes forward to purchase share-capital from co-operative organizations, same is the case of deposits of co-operative Banks. A rumour is very much in spread "co-operatives are failures or will fail in the near future". After liberalization of the economy, a time has come when the co-operative management has to ensure highest quality of work done at all steps and processes in the organization. A continuous and constant monitoring of all such practices would ensure the quality culture in the organization. The focus should be on everything from the quality furniture and stationery used right up to quality of manpower hired in the organization. But the question is how can it be done unless and until the management possesses that much quality. Cooperatives are democratic organizations and co-operative law does not prescribe any education, training / experience as a requirement to become member of the

Management. Any member (who is not debarred by Law) can contest elections to become member of the Managing Committee. Of course intention of farmers of Orissa Co-operative Societies, Act 1962 was not bad. They made the law in 1962 taking in to account the economic and social conditions of the society/ state at that time. Also it is condition of cooperative principles set by internal co-operative alliance to give equal status to all the members. But a time has come to review it. Now co-operatives are subjected to compete with more professionally managed business organizations in the public and private sectors. If the law cannot be amended, but under section 123-A the State Govt. in the greater interest of Co-operative sector, may issue directions to induct professionals to the Managing Committees. It is worth to mention here that R.B.I. has advised vide Circular No. POT 39 dt. 05.04.2002 to induct professionals like chartered accountants, retired bankers into Managing Committee of Urban Cooperative banks. Similarly other professional can be inducted to the Management of other cooperative organization depending upon the nature of function of concerned co-operative organization.

iii) **Honesty and Integrity :** This quality is a must for the management of a cooperative organization and is not compromisable. Highest levels of trust, fairness and honesty are expected while dealing with people both within and outside the organization. This includes the customers, shareholders, dealers, employees, the government and the society at a large. The Management of a co-operative organization should ensure that their organization's functioning is so clean and unbiased that it could be transparent to anyone such that ethical standards become a reality and not a myth.

iv) **Innovation and Creativity:** A professional management should possess a broad and open mind towards innovation and creativity. The Managing Committee should think beyond the obvious and encourage the employees to do the same. They have to ensure that the employees have a keenness for exploration and keep an open mind. Such a work culture is very conducive since there exists a minimal resistance to change and people look at innovations as a way of life. This ensures that the organization is always ready to look at opportunity for betterment and the search for new ideas, new practices, new products and services. This brings in a responsive culture in the organization, which is ideal as compared to a culture of resistance.

v) **Coping with changes:** It is often said "The only constant in this world is change". A professional management should have the ability and capacity to cope with change by implementing it at the work place. To implement change successfully, it is essential that employees are involved in the implementation of change. Further the positive and negative consequences of change need to be discussed and understood before implementation. Thus a professional management should have the attitude to accept change as a way of life and takes it in its stride.

vi) **Performance Management :** It is an important quality of a professional management. A management not only ensures that its performance is at peak but motivates

the entire team to do the same. This is done by ensuring a consistent quality of hard work and sincerity. Besides employees should be encouraged to undergo training updation as necessary so as to have their skills refined and develop conducive attitude at work, the management may follow an objective performance appraisal criteria by following a '7' step model.-

- * Objectives / Performance standards are set.
- * These are communicated to employees.
- * Review / Monitoring of the above.
- * Check actual performance vrs. standards set at a regular intervals of say 3 months or 4 months or 6 months.
- * Identify gaps if any.
- * Jointly decide on corrective action plan (as needed).
- * Reset objectives / Standards for next period.

If the factors discussed in this article are considered seriously, co-operative organizations in the state will be able to function successfully by developing a healthy work culture.

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Challenges Before the Co-operatives

Sudarsan Nayak

The Indian Co-operative Movement has earned distinction of being the largest in the world. This is true in terms of membership and Co-operative network which spread over almost all the villages in the country and the number of Co-operative Societies. In our country, there are about 5.5 lakhs of cooperative Societies with membership of more than 22 crores. It covers a wide range of commercial activities and nearly 50% of them are engaged in agriculture and agriculture related matters. Nearly 70% of the Indian population being dependant on agriculture, is thus, connected with agricultural Co-operatives. Co-operatives have covered 100% of villages and 67% of rural households. Co-operative sector contributes 50% of total agricultural credit and distributes 35% of total fertilizer consumption in the Country. They are procuring 60% of total sugar-cane. They are also playing crucial role in the agro-processing sector i.e. processing of sugar-cane, milk, cotton and oil seeds etc. Dairy Co-operatives have excelled in their area of operation and have enabled India to attain top position in milk production in the world. Edible oil marketed through Co-operative channel is estimated at 50% and handloom Co-operatives account for 55% of the total out-put.

But in spite of being largest movement in the world and strongest link, it faces number of challenges like lack of internal resources and poor mobilization of external resources, inadequate infrastructure, competitive tier structure, apathy of members towards management, lack of accountability increasing sickness, dormancy, low level professionalism, excessive government control, political interference, dominance of vested interest over the management, lack of human resources development, education and training.

Despite all challenges, Co-operatives have to be sustainable over a period of time for which professionalism is a must. Co-operatives have been looking for Governmental help. But they have been paying of it like official domination and interference in their day-to-day working etc. Dr. Kuriyan, an eminent co-operator in the country said recently that the Co-operatives have undergone a crisis of identity being neither government nor private. He further said that Co-operatives need to be more efficient and competitive, but at the same time they cannot sacrifice the basic tenets of co-operation. Inefficient Co-operatives will have to either pull up their socks or down their shutters. Co-operatives have many advantages in tackling problems of

poverty alleviation, employment generation and food security. They also have the potential to deliver goods and services in areas where both the State and Private sectors have failed. Over the past few years, steps like the enactment of mutually aided Co-operative Societies Act by some States and the Multi-State Co-operative Societies Act have been taken to give the Co-operative sector a boost. But I am aware that the Co-operatives registered under the Mutual Aided Act have certain constraints and deficiencies, which may be -

- (a) Lack of supervision and inspection by Registrar of Co-operative Societies resulting into financial misuse and disproportion institutional development.
- (b) Government is hesitating to entrust any important government work since it does not have any participation.
- (c) These Co-operatives are away from the mainstream. The Co-operative Banks and other important institutions are not prepared to admit them as members.
- (d) NABARD and RBI are not agreeing for conversion of Central and Urban Co-operative Banks.
- (e) R.B.I. has also objection about the use of word "Co-operative" since Banking Regulation Act uses the word "Co-operative Society".
- (f) Perhaps we are not prepared or educated or sensitized enough to work without control and supervision.
- (g) Mischievous persons may take advantage of the situation to cheat the general public.
- (h) When the Government are exploring the possibility of regulating the Non-governmental organizations having vast experience, it is

doubtful as to whether the mutually aided Co-operatives in various field can give desired result.

The circumstances and the situation give rise to the Co-operative Movement in the Country are still prevalent. The market is still not accessible to small and marginal farmers. Supply of agricultural credit is not adequate. About 50% of our rural and tribal household still have no facility for institutional credit. The Co-operatives are today at the cross road at their existence, particularly in view of the fast emerging economic liberalization and globalization. The Co-operatives still continued to function in a traditional way with poor governance and management, poor resource mobilization, outside interference, dependence on Government and lack of professionalization. The Co-operatives are neither member-driven nor functioned professionally in a transparent manner with accountability to members. In spite of all these, no doubt, the Co-operatives have contributed a lot to the agriculture development of the Country. We cannot afford to see that these institutions wither away. It needs reform. It is not-worthy to say that in the National Common Minimum Programme of present UPA Government it has been mentioned to bring constitutional amendment to ensure the democratic autonomous and professional functioning of Co-operatives. The constitutional amendment may limit itself with (a) timely conduct of elections (b) timely conduct of audit, (c) uniform tenure of managing committee (d) conduct of general body meetings (e) right of a member for access to informations and (f) the accountability of the management. In this context our strategies may be as follows. -

1. Co-operatives need be member-driven; stakeholders should have a command over its affairs and activities. There is need for more transparency, more of interaction and confidence -building measures.

2. Aggressive marketing strategy be adopted for sensitizing members and general public about the service and quality rendered by the Co-operatives. Commitment to best service and pursuit for excellence should be the hallmark of Co-operative. Every society should adopt their customers' or members' charter and should meticulously adhere to this charter.

3. Co-operative should compete with other players in prevailing market forces without any protectionist or discriminator approach.

4. In respect of short-term, medium-term, long-term sector and Urban Bank sectors, restrictions have been stipulated by Reserve Bank of India, NABARD in respect of finance. These restrictions need be liberalized which would help Co-operative to optimize its lendable resources and provide finance to members.

5. Strengthening information and database of Co-operatives if of utmost importance. MIS need be adopted by the process of computerization and inter-connectivity to provide best services to members and customers with any time and anywhere service.

6. Professionalisation of management is one of the basic prerequisites of Co-operatives.

Both the personnel as well as directors of committee of management should be exposed to regular training, interaction and orientation.

7. Adoption of scientific planning for deployment of human resources on the principle of 'right man for the right post at right time' would help Co-operatives to accelerate the pace of reforms. Human resources need be proactive. Motivation, recognition for good work and leadership be inculcated for augmenting productivity.

8. Basic tenets corporate governance be adopted like fair play, transparency and accountability.

The PACS, as the foundation of the Co-operative system are meeting the development needs of the farmers by providing credit, inputs and storage and processing and marketing facilities. The Co-operative federated at the district and State level constitutes the Co-operative system. But it is found that the Apex institutions have grown stronger whereas the primaries and in some cases, Central Co-operatives have gone weaker. The situation has to be changed and the primaries have to grow stronger. The business of the Primary Societies have to be diversified.

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Great Heritages of Orissa

Dr. Hemanta Kumar Mohapatra

Etymologically, 'heritage' is anything that is or may be inherited. In such case 'heritage' covers everything that is seen around the human civilization. Heritage is thus natural or created or has evolved in the course of history. It is natural or man-made. Of the man-made heritages some are already made and existing and others are in the process of making. But everything what we inherit or may be inherited can not be heritage in the proper use of the term. To assume the dimension of heritage such features must have influenced the socio-economic and cultural life of the people. It must have substantially influenced the imagination and life style of the human beings. A society or civilization is known and become unique by its own tradition. It gets its identity by its own heritages.

Heritage is something which is specific and typical of a place, area, region or country on the one hand and of a family, community or people on the other. It may broadly be categorised under two heads. They are (a) Natural, (b) Cultural. Natural heritages include all the natural features like mountain, peaks, valleys, forests, deserts, water bodies, landscape, flora and fauna. In it we can include everything that is gifted to human being by nature good or bad, peaceful or terrible.

Cultural heritages are the creation of human beings, who have created it by virtue of their innovative power, creativity, skill and artistic ability.

Cultural heritages may be tangible or intangible. Archaeological heritages may be otherwise called tangible heritages. The intangible ones may be called living heritages. But for better comprehension and convenience we have discussed the cultural heritages in entirety under the following sections.

(a) Archaeological heritages (b) Literary heritages (c) Religious heritages (d) Performing art heritages, (e) Heritage festivals (f) Art and craft heritages (g) Modern heritages of Orissa.

The cultural dimension of Orissa is varied and wide. Every bit of Oriyan culture and tradition is not included in this discussion. But the existing monuments and the cultural activities which had shaped or is shaping the life style of the Oriya people are included in the perview of this feature. From this discussion the identity of the Oriyas and Orissa can evolve in a proper and distinct form. However at first let us have a discussion on the natural heritages of Orissa.

Great Natural Heritages of Orissa

Nature has given everything to Orissa. Nature's bounties and glories are distinctly expressed through its gifts like beautiful beaches, mighty rivers, water streams and falls. In Orissa we have spectacular mountains and valleys as well as sprawling green field of plains. In Orissa nature is also bountiful for its wide varieties of flora and fauna.

The widespread sandy sea beaches with roaring sea can best be observed at Puri, Gopalpur and Chandrabhaga (near Konark). Chandipur at sea has a special attraction. Here Bay of Bengal recedes and proceeds 5 km. everyday. It is a peaceful sea-side resort. At Puri, the Bay of Bengal is known as *Mahodadhi* and on the sea shore there is a place called *Swargadwar* which is very sacred for performing funeral rites.

Orissa is rich with sacred rivers like the Mahanadi, Brahmani, Baitarani, Subarnarekha, Rushikulya and Indravati. Mountains like Deomali and Gandhamardana are well known. Deomali is the highest mountain peak of Orissa and Gandhamardana is a sacred one. It is rich with rare species of flora and fauna. On the one side of Gandhamardana hill there is Harishankar and on the other side there is Nrusinghanath. Gonasika hills in Keonjhar district is known for the origin of the river Baitarani.

There are a number of beautiful waterfalls in Orissa. They are Bada-Ghagara, Sana-Ghagara and Khandadhara in Keonjhar district, Barehipani waterfall in Similipal National Park, Pradhanpat (Deogarh), Phurli Jharan in Kalahandi, Duduma of Malkangiri etc. Khandadhara is the loveliest waterfall of Orissa. The known natural hotspots of Orissa are Atri (Khurda), Taptapani (Ganjam) and Deulajhari (Angul).

To maintain the eco-balance and to protect the flora and fauna, national parks are earmarked at Similipal and Bhitarkanika of Orissa. Besides these national parks, Orissa has a number of wildlife sanctuaries. Similipal National Park in Mayurbhanj district is known for its Tiger Reserve. It has other wild animals and 231 species of birds. Bhitarkanika National Park (Kendrapara) which sprawled over 367 square km. is known for its protected mangrove forest. It has a wide variety of animals and crocodiles. Gahiramatha beach is well known for its sea-turtles. Gharial sanctuary of Satkosia Ganda (Gorge) at Tikarpara is well known. Ushakothi wild life sanctuary near Sambalpur is known for its elephants, leopards, bisons and black panthers. Belghar (Phulbani) and Chandka (Khurda) are known for elephants.

Though Puri, Chandipur and Gopalpur are well developed summer resorts, the real natural summer resort and hill station is situated at Daringbadi of Kandhamala district. Daringbadi is nicknamed as the Kashmir of Orissa, especially due to the snowfall in the winter-season.

However the greatest natural heritage of Orissa is the beautiful Chilka. Originally it is a salty lagoon.

Utkal Kamala Bilas Dirghika - Maralamalini Nilambu Chilika, Utkalra Tuhi Charu Alankara-Ae Biswabhubane Shobhara Bhandara.

Thus said the great Oriya poet Radhanath Ray in his Kavya "Chilika", spread over 1100 square km. Chilika is the largest inland lake of India. It is dotted with a number of small and big islands. It has the richest variety of aquatic fauna. Its "Nalabana" is famous for its migratory birds in winter. One can see the Irrawady Dolphins in this lake at Satapara area.

Chilika is also well known for its fishing and boating. The other two lakes of Orissa are Sara and Ansupa.

The famous Nandankanan Zoological Park and the Botanical garden adjacent to it have turned to be great heritages of Orissa. Endowed with a natural lake, it is known for the rare white tigers and migratory birds which nest here during winter. It has India's largest lion safari as well as a white tiger safari.

Archaeological Heritages of Orissa

Orissa has around 4000 monuments and archaeological sites. They include prehistoric remains, Buddhist monasteries and structures like chaityas and stupas, Jain caves and temples, important inscriptions, Hindu temples and sculptures, ancient and medieval forts, palaces as well as colonial architecture.

Cave paintings of Neolithic age is seen at Yogimath of Kalahandi district. Another prehistoric site is also located in the same district. The site is at Gudahandi and is known for cave painting. In the district of Keonjhar at a place called Sitabinjhi one can see ancient fresco paintings on a rock shelter called Ravan Chhaya.

The Asokan inscriptions of Dhauli (near Bhubaneswar) and Jaugarh (Ganjam) had shaped the life pattern of Kalinga people in the ancient days. The hillock of Dhauli and the sideby river Daya reminds of the heroic Kalinga militia which showed great valour and courage preferring death to surrender. They fought the great Kalinga battle, were defeated at the hands of Magadhan soldiers but their heroism and sacrifice compelled the Magadhan emperor Asoka to renounce war once for all. A viswa Santi Stupa has been erected at Dhauli by the Japanese Nippan Baudha Sangha to

memorise the great event of Asoka's change from Chandasoka to Dharmasoka and his acceptance of Buddhism from Upagupta, a Buddhist Bhiskhyu.

At Khandagiri and Udayagiri near Bhubaneswar rock-cut caves are seen. These caves were originally built for the Jain monks. The double storeyed Ranigumpha is the largest cave of this series and has ornate carvings. The Hatigumpha has the chronicle of King Kharavela carved on it. The glorious days of powerful Kalinga empire under Kharavela are very much enlivened by this inscription in Pali language.

Ratnagiri-Lalitgiri-Udayagiri hills near Kendrapara and their environs comprise a remarkable Buddhist complex around it. Hiuen Tsang, the chinese pilgrim found it to be the seat of a flourishing Buddhist university called Puspagiri. It had equal status with Takshyashila and Nalanda. Extensive ruins of brick pagodas, sculptured stone portals and esoteric Buddhist images testifying its ancient glory, have been unearthed. Ratnagiri is the gem of the complex. The magnificently carved door jamb of the Vihar and the superbly finished Buddha images form perhaps the greatest concentration of the post Gupta period Buddhist sculptures.

The Kalinga style of temple architecture flourished from 7th to the 13th century A.D. The most important monuments of this period can be seen in and around Bhubaneswar and Puri. In Bhubaneswar alone there are more than 500 temples and rightly it is called the 'temple city of India'. Bhubaneswar was a Saiva Pitha (centre of Saivism) and in most of the temples of this place, Siva is being worshipped as the principal deity. The Parasurameswara Temple built in 7th century A.D. was the earliest one. Other richly decorated and remarkable temples

of Bhubaneswar are Svarnajaleswar temple, Vaital temple. Mukteswara temple and its famous makar torana was built in 10th century A.D. The beautiful Rajarani temple was built in 11th century A.D. The great Lingaraj temple of Bhubaneswar was built in the same 11th century by Somavamshi ruler Jajati Keshari.

The Great temple Srimandira of Lord Jagannath is another great monumental heritage of Orissa. Ganga ruler, Chodagangadev started the building of this temple and it was completed during the reign of Anangabhimadev. This was built in 12th century A.D. The architectural marvel, reached its zenith with the building of the Sun Temple at Konark by Ganga ruler Narasinghadev. In fact it was the last specimen of the matured Kalinga style of architecture. This temple was designed as the chariot of the God Surya (Sun) and this chariot had 24 wheels. The Konark wheels, the Konark horses are the greatest symbols of Orissan sculptural achievements.

Besides these important monumental heritages the Oriyas were very much influenced by other architectural marvels as well. Chausathi yogini temple of Ranipur Jharial in the district of Balangir is a wonder in the world of archaeology. Nrusinghanath in the district of Sambalpur was built in the 15th century A.D. The architectural monuments of Prachi Valley which includes the Yogini temple of Hirapur have substantially influenced the lifestyle of the Oriyan people around it. This Yogini temple of Hirapur is one of the four such temples in India. It has beautiful Yogini images carved from black chlorite.

The other temples of Orissa with archaeological value are the temples of Chandrasekhara Siva on the hill top of Kapilas (Dhenkanala), the Dhableswar temple in the

Mahanadi island on the north west side of Cuttack, the cluster of temples at Sonepur (Suvarnapur) and Bhawanipatna.

The archaeological remains of the forts and palaces found in Orissa are valuable heritage sites. These forts and palaces had influenced the life-style of the Oriyas in the past. They are the mute witnesses of past heroism of the Oriyas. The prominent of these forts were Barabati fort of Cuttack, the fort at Chatia (Amaravati Cuttack), the fort of Sarangagarh, walled capital centre of Sishupalgarh (near Bhubaneswar), Asurgarh fort (Kalahandi) and Raibania fort (Mayurbhanj). The palaces of erstwhile feudatory states also stand as mute witness to Gadajati rule in the pre-independence era.

The Grand-road(Badadanda) of Puri is a great heritage of Orissa. It has in itself the Saradhabali, Balagandi and a number of important places. This Badadanda is a mute witness to many a rise and fall of Oriya race. It has also seen a number of saints and sadhus and become sacred with their foot prints. It has also seen teerthayatri from different parts of world during their pilgrimage to Jagannath Dham. The Orissa State Museum of Bhubaneswar is also a potential heritage centre.

Great Literary Heritages of Orissa

Without going to the technical controversies we can safely assume that Charyapada or Baudhagana Doha formed the earliest rudiments of Oriya literature. And naturally they are the basic literary heritages of the Oriyas.

Oriya literature with most of its vibrant characters emerged only in 12th century A.D. Some of the scholars considered *Sishurveda* and

Saptanga belonging to this century. The *Sishurveda* and the *Saptangas* were the works of Natha cult. One can see the amalgamation of Buddhism and Saiva cult in it.

Rudrasudhanidhi of Abadhut Narayan Swami, which is a prose work composed in a poetic style, was a 13th century creation. It is religious and romantic describing the marriage between Siva and Parvati.

However Oriya language in its rich and stylish form appeared in the magnum opus of Oriya literature, the *Mahabharat* of Sarala Das. Sarala Das is called the Adikabi of Oriya literature. His *Mahabharat* was never a translation of the Sanskrit *Mahabharat* of Vedavyasa. The theme was the same but it was completely oriyanised by the great poet of Orissa. This Sarala Das also composed the *Chandi Purana* and *Vilanka Ramayan*. The *Kesab Koili* is another great piece of Oriya literature which had influenced the cultural life style of the Oriyas.

Some of the Oriya inscriptions of 13th, 14th and 15th centuries are also valuable pieces of Oriya literary heritages. Such prominent inscriptions are -

1. Laxmi - Narasingha Temple (Simanchalam) inscription of Bhanudev (1263-1269)
2. Tamil-Oriya Bilingual Inscription of Narasinghadev-IV (14th century)
3. Puri Inscription of Anangabhimadev III 1226 and 1237 A.D.

Another great literary heritage of Orissa is of course the '*Madalapanji*', the temple chronicle of Sri Jagannath Temple. *Madalapanji* is a combination of history, legends and heresays. The Bhakti literature of

late 15th century and 16th century developed by the Panchasakha poets of Orissa (Jagannath, Balam, Achyuta, Anant and Yasovanta Das) became the life line of the contemporary and laterday Oriyas. The Bhagabat of Jagannath Das became a part and parcel of every Oriya household. Likewise the Ramayan of Balam Das also caught the imagination of Oriya people.

Oriya poetry continued to be the most powerful cultural force even after the Panchasakhas. In Ritiyuga poetic laws, canons, dictums got more importance. It became difficult for comprehension. But they continued to be popular. Especially the poems of Kabi Samrat Upendra Bhanja overcame almost all the spheres of Oriya life. It was sung by the scholars in the royal court. It was sung by the travellers on the road. The farmers recite his poems when ploughing in the corn-field. His songs were also sung in the inner chambers of the royal palace as well as by the prostitutes when dancing.

Gae tumbha gita sabhare pandita pathe pantha hrustamana / bile bole chasa, Antapure josa nrutyarange barangana// (Utkalmani Gopabandhu)

"*Baidehisa Vilas*", "*Labanyabati*", "*Kotibrahamanadasundari*", "*Premasudhanidhi*", "*Kalakautuka*", "*Subhadraparinaya*" were most notable creations of Upendra Bhanja.

Other medieval poets, whose poems must be included in the list of "Oriya Literary Halls of fame" are Kabisurya Baladev Rath, Bhakta Charan Das and Brajanath Badajena. Brajanath Badajena is more known in Oriya literary circle for his prose '*Chaturavinod*'. After the Ritiyuga there was a spectacular decline in the development of Oriya literature.

However the revival movement of Oriya literature started with Vyasakabi Fakir Mohan Senapati. He is also nick named as the Kathasamrat (the emperor of fiction). His novels and short stories not only influenced the style of Oriya literature, but also the life-pattern of Oriya society. His great novels were *Chhamana Athagunth*, *Mamun*, *Lachama* and *Prayaschit*. His stories were edited in *Galpaswalpa*. His autobiography *Atmajeevanicharita* may be considered as a piece of contemporary history.

The great Oriya poets of this time were Radhanath Ray and Madhusudan Rao. The Kavya 'Chilika of Radhanath' formed the life stream of the Oriya people. Radhanath Ray composed many Kavyas as well as responsible for development of modern prose literature. Madhusudan Rao was a devotional poet and is known as Bhaktakabi. Swabhavakabi Gangadhar Meher, produced the sweet songs of Tapaswini which is known for its lyrical value as well as heartening theme of the banishment of Sita depicted in the Ramayan. The literature of later "Sabuja Yuga" and the romantic writings of Mayadhar Manasingh had created sensation in Oriya social life and naturally to be protected as heritage materials. The patriotic songs of the days of freedom struggle must be compiled and protected as great literary heritages of Orissa. The composer of such songs were *Jatiryakabi* Birakishore Das and Banchhanidhi Mohanty.

In modern times the novels of Kanhu Charan could catch the imagination of the people. His novels, which became obviously, the literary heritages are *Baliraja*, *Haa-anna*, *Kaa*, *Shasti* etc. The Oriya literature was flooded with his popular novels, which are more than 60 in numbers. Kanhu Charan's younger brother Gopinath Mohanty is not as

popular as his elder brother. But from the critics point of view his writings are superior for which he was awarded Jnanapitha for his novel 'Mati Matal'. But in literary circle he is more known for his novels like *Paraja*, *Danapani*, *Dadibudha* etc. Manoj Das is a story writer and could write with equal comfort in Oriya and English. His short stories are naturally the great heritages of Oriya literature. Sachi Routray received Jnanapitha, for a later book. But his poem "Chotamora Gaanti is a heritage poem and he is remembered in Orissa as a Chotamora Gaanti poet. The poems and the research articles on the tribals of Sitakanta Mohapatra has endeared him in the Oriya literary circle. The Jnanapitha prize awarded to him put him in the category of great Indian writers.

Historical novels of Oriya literature like *Nilasaila*, *Niladrivijaya*, *Krishavenire Sandhya*, *Sultana*, *Kharavela*, *Suryavamshi* and *Rajanandini* have influenced the cultural life pattern of the Oriyas. Novels on mythological plot like *Yajnaseni* has also a special place in Oriya literary heritage. Popular novels of Bibhuti Patnaik and Prativa Ray have tremendous impact on the average Oriya readers. Naturally by way of their popularity they acquired heritagial value.

Literary Heritage of Orissa in Sanskrit is richly displayed by the great Sanskrit works like the *Panchatantra* by Vishnusarma (5th Century AD) and the *Geetagovinda* of Sri Jayadev.

Religious Heritages of Orissa

In the past Orissa had experienced the warmth of all the major religious streams. Orissa has basically a tribal religious tradition which moves round the worshipping of natural features as well as invisible forces which

creates sensation, fear and devotion in the minds of simple tribals. The multi-dimensional religious tradition of the tribals of Orissa must constitute a major force in the Religious Heritages of Orissa.

By now Buddhism and Jainism have little impact on Oriyas. But the monuments connected with such religions must be preserved as our tradition of great religious heritages. The capital city of Bhubaneswar is surrounded by Buddhist relics such as the Asokan monuments at Dhauri. The modern santistupa at Dhauri is another Buddhist heritage. In Jagannath cult itself one can see Buddhist influence. Ratnagiri, Lalitgiri and Udayagiri are well known for Buddhist culture. In Boudh the presence of a huge Buddha image has carved out a niche for the place in the Buddhist map of Orissa. Khandagiri and Udayagiri caves are the relics of Jaina tradition in Orissa.

The Sakti-cult of Orissa is well manifested by the presence of so many Shaktipithas in Orissa. Such Shaktipithas are spreaded all over Orissa. Goddess Vimala of Sri Jagannath temple complex, Puri, Goddess Mangla of Kakatpur, Maa Sarala of Jhankad, Maa Biraja of Jajpur, Goddess Charchika of Banki, Maa Bhagabati of Banapur, Maa Samaleswari of Sambalpur are the prominent among them. The other Saktipithas are located at Konark (Ramachandi), Brahmagiri (Baliharachandi), Cuttack (Cuttack Chandi), Chilika (Maa Kalijai), Bhattarika (Goddess Bhattarika), Purushottampur (Tara Tarini), Ghatgaon (Tarini), Bhawanipatna (Manikeswari), Balangir (Pataneswari). There are also yogini temples at Hirapur and Ranipur Jharia. Vaital temple of Bhubaneswar is known for its goddess Chamunda.

Saivite monuments and Saivism developed around it are found scattered throughout Orissa. Most of the temples of Bhubaneswar are Saiva shrines and God Siva is worshipped here in different form and manifestation. The prominent Siva temple of Bhubaneswar are Kedareswar, Parsurameswar, Mukteswar, Swarnajaleswar, Megheswar, Brahmeswar and Lingaraj temples. In Puri we have Sriloknath temple. Another great Saiva *pitha* of Orissa is Dhableswar near Cuttack. Paramahanshanath Siva temple near Cuttack is also a known Saiva Pitha. The other well known Saiva pithas of Orissa are Panchalingeswar (Nilagiri), Akhandalamani (Aradi), Chandaneswar, Bhawanisankar (Bhawanipatna), Pataleswar (Budhikumna-Kalahandi), Lord Birupakshya (of Chakapad-Phulbani), Harisankar (Balangir) Gupteswar (Koraput) and Shiva temple of Huma.

The Vaishnavism of Orissa has its greatest manifestation in the Sri Jagannath of Puri. Besides, Vaishnav shrines can be seen at Bhubaneswar (Ananta Vasudev Temple), Remuna (Khirachora Gopinath), Sakhigopal (Sakhigopinath), Sabar Srikshetra, Koraput (Jagannath), Niali (Madhav), Jajpur (Sveta Varaha), Kendrapara (Balabhadra, Jagannath, Suvadra at Tulasi Kshetra) etc.

The headquarters of Mahima cult is situated at Joranda (Dhenkanal). Mahima cult is an independent religious sect of Orissa and was popularised first by Mahima Gosain and then by the Mahima Sadhus. Bhima Bhoi, the poet, played a prominent role in popularising the philosophy of this religious cult. Ganapati is also worshipped in the Jagannath temple complex and at Mahavinayak pitha of Chandikhol. In most of the temple complex of Orissa one can find an image of Sri Ganesh.

Besides, in Orissa Hanuman is widely worshipped. Sidha Mahaveer of Puri and Siruli Mahaveer near Puri and Panchamukhi Hanuman at Cuttack are the most prominent Hanuman Pithas of Orissa. Hanuman Vatika of Rourkela is a modern day phenomenon. When Hanuman is worshipped, his lord Rama is also worshipped with veneration and devotion.

Performing Art Heritages of Orissa

Orissa has a rich heritage of music, instrumental as well as vocal. She has her own style of music called Odissi. Champu, Chhanda, Chautisha form the basic material for this Odissi music. The vocal music performed by Nimain Charan Harichandan, Singhari Shyamsundar Kar, Balakrishna Das, Raghunath Panigrahi, Bhikari Bal and Sunanda Patnaik can be preserved as our traditional musical heritage. In Palligeet and modern vocal the songs of Akshaya Mohanty can be best preserved. Other great modern Oriya singers include Pranab Pattanaik and Sikander Alam.

Odissi dance is one of the great classical dance styles of India. It is a refined form of Gotipua and Mahari dance. The great exponents of this dance are Nrityaguru Kelucharan Mohapatra and Guru Pankaj Charan Das. Sunanda Panigrahi, Kumkum Mohanty and Sonal Mansingh are most famous Odissi dance performers. It is so popular world wide that Indians as well as foreigners are attracted to perform this dance by learning with the help of the Nrityagurus.

Chhau is a sub-classical martial dance style. Mayurbhanj Chhau like its two other counterparts, Sareikella and Purulia Chhau, is another heritage wealth of Orissa. Orissa is also proud of a number of folk dances. The best known folk dances of Orissa are Ghoomra, Sambalpuri, Karama, Ghodanach,

Chadheianach, Kandheinach, Gaudanka Laudi Khela and Paik Nacha. Pala and Daskathia are very much indigenous to Orissa. The main singer of Pala is a Gahana or Gayak supported by a Bayak (the Player of Mridanga) and three or four palias (followers). Daskathia is performed by a Gahana and a palia. Daskathia is a musical instrument prepared from two pieces of wood producing rhythmic sound. The main gayaks of Pala and Daskathia must master the traditional poetry of Sanskrit and Oriya literature. Namasankirtan is another type of song drama performed by the Oriya Vaishnavas, being influenced by Srichaitanya, the great Bhakti saint of India.

In Orissa the tradition of Suaanga and Geetavinaya is very old. Baishnav Pani and Balakrishna Mohanty are well known for their Yatra Suaangas. Baishnava Pani himself wrote Suaangas and directed its stage performance. His Geetvinayas are well accepted by applauding Oriya audiences. The Operas, based on mythological, historical and social themes are performed by yatra troops in open air pendal. It is even now a days, very popular among the Oriya people. Amateur artists perform theatre on experimental and traditional topics in Orissa. There were also a few professional theatre groups like Annapurna and Janata Rangamancha. They are dead. We failed miserably to preserve such traditions.

Mughal Tamsha of Bhadrak, Prahallad Natak of Ganjam, and Ramaleela are also well known in Orissa. The Mughal Tamasha was written by Banshiballav Goswami. It was a caricature of the Mughal administration in Orissa and the dialogues were written in a mixed language (Sanskrit, Oriya, Bengali, Hindi, Persian and Urdu).

Great Heritage Festivals of Orissa

Orissa has her indigenous festivals like Makarasankranti, Panasankranti, Asokastami, Ramanavami, Raja, Rath Yatra, Bata Osha, Gamha Punei, Khudurukuni Osha, Bhai Jauntia, Ganesh Puja, Dasahara, Kalipuja, Gajalaxmi Puja, Kumar Purnima, Kartika Habisha, Bada Osa, Kartika Purnima / Boita Bandan, Basanta Panchami, Sivaratri, Manabasa, Dolaparva, Holi, Prathamastami, Janmastami and Sambadasami etc.

Yatras, Melas and Mahotshavas are celebrated with much pomp and grandeur during such festivals or otherwise. The famous yatras of Orissa are as follows. Baliyatra of Cuttack and Paradeep are celebrated with Boita Bandana on Kartika Purnima day in the memory of the sea-trade of the Kalingan Sadhabs. Thakurani Yatra in Brahmapur celebrated with much pomp. In this yatra the goddess leaves the temple sanctum and come to a common household as a mark of daughters home coming to her fathers home. Sitalasasthi Yatra of Sambalpur is celebrated in the form of social marriage function of Siva and Parvati. Dhanuyatra of Baragada in enacted in open stage. The legend of Krishna visiting Mathura to see the Dhanuyatra of uncle Kansha is performed here. Amapalli village on the otherside of river Jira became Gopapur. Jira became Yamuna and Baragarh became the Mathura city of Kansha. Ratha yatra of Puri is well known. Following its spirit and tradition Ratha yatra is celebrated in different parts of the province as well as in other places of the world. Rukunarath yatra of Bhubaneswar is celebrated on Asokastami Day. Dola Melana (congragation) is another tradition of Orissa. Harirajpur Melan is famous for its colourful cracker works. Ramanavami yatra of Asureswar is also well known for its cracker

works and colourful procession of Rama, Laxman and Janaki escorted with hundreds of Hanumans.

For holy baths, Chandrabhaga Maghasaptami Mela, Vyasasarovar Mela, and Dasawamedhaghat Snan of Jajpur are famous. The Oriyas also have their holy dip in the sacred tanks of Bindu Sagar (Bhubaneswar), Narendra and Indradyumna tank of Puri.

Mahasivaratri Utshab is an annual festival being celebrated in almost all the Saivapithas of Orissa. This festival of Mahasivaratri falls on the 14th day of the dark half of Phalguna and is observed by the devotees by keeping fast and burning the sacred lamp till the Mahadeep reaches at the temple top in the midnight.

The Gajalaxmi puja of Dhenkanal and Kendrapara, Dassahara of Cuttack, Jhulana Purnima of Puri and Cuttack, Kalipuja of Bhadrak and Jajpur are also equally famous throughout the state. Taratarini Mela on the hill top (bank of the river Rushikulya) attracts thousands of devotees in the month of Chaitra.

Among the tribals, Puspuni and Makar are celebrated with traditional festivities enriched with tribal dance and songs. Makarmela festival can best be observed at places like Kalijai, Atri, Ghatgaon, Keonjhar, Jashipur and Jagatsinghpur. Chaitra Parab (April) is celebrated with Chhau festival at Baripada on Mahavisuba Sankranti Day.

Some of the Melas and Mahotshavas are organised by the government or sponsored by different organisation to attract tourists or to remind the world of the cultural heritages of Orissa. In this discipline "Lok Mahotsava" is organised every year in the month of January at Gangadhar Mandap in Sambalpur.

Sambalpuri folk dances and musics are performed here for three days.

In collaboration of Department of Tourism and Culture, Government of Orissa, the district administration of Koraput organises "Parab" in the last week of the month of January every year. Odissi, different types of folkdances, tribal dances are performed here. The tribal art and craft of Koraput also are displayed here.

The Beach Festival of Puri in the month of February and the Konark festival in the month of December are well attended by the foreign tourists and the local spectators. These new festivals are fast becoming powerful tradition and heritages of Orissa. In course of time Konark Dance Festival is assuming the dimension of a national dance festival.

Great Art and Craft Heritages of Orissa

Orissa is also known for her superb art and craft heritages. Traditional art of Orissa is best manifested in the paintings of walls and floor of the households. Such traditional art form is known as *jhoti* or *chita*. The walls and floors of Oriya household are beautifully decorated with *jhoti* especially in the festive occasion like Dussahara and Manabasa (The worship of Laxmi). The colour material prepared for the purpose is from the rice-paste and one earth paint called "Dhau" is used to decorate it with red colour.

In the month of Kartika, Muruja (a colour powder) is prepared and pictures are drawn on the pedestal of tulasi plant (chaura). Chitakutta or tattooing is another art form of Orissa. A tattoo mark on a woman is believed to symbolise chastity. Some believe that it is a shield against the torture of Yama, the God of death, or a means to salvation.

Miniature paintings in Orissa are well displayed in "Pattachitra". Pattachitras are based on religious themes. The artists of Pattachitra use traditional materials to prepare durable and bright colours. The Pattachitra or Raghurajpur is praised throughout the world. The entire village folk of Raghurajpur are fine artisans and sculptors. Raghurajpur is a world heritage village. Palm-leaf manuscripts of Orissa also contain beautiful pictures of miniature paintings.

The tribals like Saura, Kondhas and Santals decorate their houses with motifs of flowers, birds and geometrical designs. On the occasion of animal sacrifice, the Sauras draw *Ittals* on their walls. Dream sequences are depicted through these *Ittals*.

Rock paintings in Orissa are found at Ulaparh and Vikramkhola in Sambalpur district, Manikmada and Ushakothi of Sundargarh district, Gudahandi and Yogimath of Kalahandi district, Ravana Chhaya at Sitabanjhi in Keonjhar district.

Paintings on temple walls is another art style of Orissa. These paintings mostly follow the mural tradition. Allegorical, mythological and historical themes are depicted in these mural paintings. The two most important paintings inside the Jagannath temple complex are Kanchi Vijaya and Buddhavijaya. Dashavatara murals are also painted on the temple walls of different temples. The Anantasayana scene of Vishnu is also displayed in temple walls.

In Orissa, painting tradition is broadly divided into three categories. They are Puri-style, Daskhin school and Champamala school. The Dakhini tradition is observed in places like Ghumusar, Khallikote, Dharokote, Tikkali and Manjusha. The Champamala school prevails in Sonapur and Sambalpur.

The handicrafts of Orissa having heritage value are the silverware and filigree works of Cuttack, terracotta and pottery work, applique work of Pipili and horn work of Cuttack. Orissa has a rich heritage of producing artistic handloom sarees. Sambalpuri sarees, Bamkei and Berhampuri *patta*, Khandua and Bapta sarees have mature and beautiful style. They have nation wide demand. In stone the sculptors of Orissa prepare decorative figurines like Alasa Kanya, Salabhanjika, Surasundari, Lekhika etc. Now a days the images of Ganapati, Radhakrushna, Hanuman are in great demand. Other handicrafts of Orissa are sola pith work, lacquer work, zari work, glass beads, cloth garlands, camphor garlands, jute carpets, rush mats etc.

The Modern Heritage Centres of Orissa

The life pattern of Oriya people is greatly influenced by newly established heritage centres. A centre of education started in the 19th century, Ravenshaw College may be called as a premier heritage centre of Orissa. The Satyavadi school at Sakhigopal which was established by Utkalmani Gopabandhu was another centre of learning and heritage. In this school, scholars like Acharya Harihara, Krupasindhu Mishra taught the pupils. Gopabandhu tried to develop a very different type of education system here. Utkal University came into existence only a few years before the independence. Other centres of excellence like OUAT (Orissa University of Agriculture and Technology), Sambalpur and Berhampur universities came after independence. By now after the establishment of Sri Jagannath Sanskrit University at Puri, University of Culture at Bhubaneswar and two Universities (North Orissa University, Baripada and Fakirmohan University at Balasore), Biju Pattnaik

University of Technology (BPUT) Rourkela the number of Universities in Orissa comes to a sum total of 9. Other premier centre of learning and research in Orissa are CRRI (Central Rice Research Institute, Cuttack) CIFA (Central Institute of Freshwater Aquaculture, Kaushalyaganga). Regional Research Laboratory, Institute of Physics, Institute of Life Science, Regional Institute of Education, Pathani Samanta Planetarium are located at Bhubaneswar. National Institute of Technology is a premier technical institution situated at Rourkela. They are all shaping the life of the Oriyas for the future and are great heritage materials. Regional Plant Research Centre, Ekamra Kanan, Bhubaneswar is well known for its research in cactus. Kalanagar at Bhubaneswar is known for research and training in handicrafts.

Besides these, a few major projects which changed the life style of the Oriyas in the modern times are the Hirakud Dam Project, Duduma Project and the recently developed Upper Kolab and Indravati projects. The big factories like RSP, NALCO, MIG Factory at Sunabeda are other great heritages of modern time. The INS Chilka, the Missile Testing Centre of Chandipur, the Charbatia air base and the Ordnance factory of Saintala are some of the great defence establishments located in Orissa. Barabati Stadium is the biggest sports complex in Orissa and very much proud of its heritage in connection with games and sports. Jawaharlal Nehru Indoor Stadium of Cuttack is another milestone in the development of sports in Orissa. Birsa Munda Sports Hostel is known for producing world class hockey players for India.

Paradeep Port, a major sea port of India, adds to the glories and greatness of the Oriyas.

It had opened the flood gate of sea trade and prosperity of Orissa. Gopalpur and Dhamra are two minor ports of Orissa.

Such heritages give the Oriyas self-respect, pride and self-confidence. These are our valuable possessions. We inherit them and we should preserve them well so that we can gift them to our future generation. We can utilise our natural heritages for economic and humanitarian benefit. But our natural heritages must continue to be unpolluted, undamaged and unexploited. It will be suicidal if we try to disturb the eco-balance out of greed and mindlessness. Our archaeological as well as some natural heritages can be exposed to tourism. But utmost care must be taken to maintain their originality and naturality. We must preserve our natural features, our flora and fauna. Necessary care must be taken to protect our archaeological monuments. If damaged in the course of the ravages of the

time they can be rebuilt in tune with their original architectural style. We have architects, sculptors and artisans amongst us. Due patronization must be offered to our living cultural activities. There is a trend of diminishing aesthetic sense amongst us. We are fast becoming materialistic and balancing everything in the term of money. But the cream of our culture must be protected irrespective of its monetary value. Market should be explored for the art and craft products so that the artisans can earn their livelihood and their artistic skill shall survive. We must protect our heritages for ourselves and for our next generation. Protection of our heritages is our naturally inherited responsibility. We must preserve them for our future generation. It is a sacred obligation.

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Hon'ble Chief Minister Shri Naveen Patnaik unveiling the statue of Dr. Harekrushna Mahatab at Orissa Legislative Assembly premises on 3.12.2004. Shri Maheswar Mohanty, Hon'ble Speaker, Shri Biswabhusan Harichandan, Minister, Rural Development, Industries & Law and Shri Balabhadra Majhi, Minister, Scheduled Tribes & Scheduled Castes Development (Scheduled Tribes Development) are also present.

Bondage

Gopinath Mohanty

I was amid stranger in a distant place of Tripura bordering Bangladesh. The place is Akhura Road check post which controls traffic to either country. It was dusk and the Sun was on the verge of setting. The western part of the horizon was crimson-red. A long stretch of barbedwire fencing continued to extend on either side of the road leading to Dhaka from Agartala and ending in horizon. Trees, bushes and vast patches of green paddy fields are on either side of the fence. So also the Border Security forces were on either side. Sentry was alert, but some were busy in playing cards and some were watching us with bemused smile. Vehicle with red light, army people escorting me were not new to these people.

I got down from my vehicle and took a stroll eyeing on the surroundings. Although it was Summer season, the climate was good. Cold breeze made the weather more pleasant. Hardly there was a human being on either side of the border, but a lamb and a goat-ling were grazing carelessly there. They were free, sometimes they were playing together and even were having mock fight. They both were free and fearless and crossing the border with ease without tension. It drew my attention accidentally. When the area is forbidden to human beings to cross the border it was queer to notice two young kids of animal world,

devoid of thought power and intelligence were merrily dancing around it and easily crossing either side. No violation of International Law, no border security forces restrict them to do so. But, how strange, the human beings possessing all prudence, conscience and intelligence are incapable to do so.

My security personnel were following me. I made them stay behind and went towards the tiny-tots stealthily. I caught both of them, patted them and kissed on their head. They glanced languishly at me with wide eyes mixed with fear and ignorance. Both were overwhelmed with my love and tenderness. I sat their beside a raised platform. They both started grazing near my leg. Intermittently glancing at me and finding no danger they nestled against me.

At that point of time, I was in a different world. Filial love filled my heart. Their tender limbs and bodies flashed back memories of my sons while they started crawling. They were coming very closer to the parents without fear and reposed centering confidence. The whole world was very close to them. Really it was a satisfied life. Such is the case with these two kinds who have reposed their confidence, as if they are very near to their parents.

I woke up from my deep rumination and found me alone. Both the kids were frolicking,

running after each other and crossing the international boundaries with ease. There was no enforcement of international laws, no border security forces have detained them. They were running like flying birds to both the sides oblivious of human restriction imposed by civilized world.

I felt like running after them, but lo ! Security personnel were pointing their rifles at me. I felt powerless and again sunk to my seat.

In my desperation I heard the kids, tried to understand their words, interpreted them. They were in agreement that man, the wonderful creation of God has wisdom and intelligence, but they cannot produce milk nor they lay eggs. Bullocks pull the plough and he cannot run like rabbits. Man has become prisoner to laws created by him. He could not cross the boundary as animals did.

It struck me, I returned to my senses, stood up and came to Circuit House where I was staying.

Next day, I went around the constituency to look after the poll arrangement. Again I came across a border area between India and Bangladesh. The place is called Kamala Sagar. There was a big tank called Kamala Sagar and a big Kali temple of exquisite beauty. Tripura Tourism Development Corporation has built a tourist guest house near the tank. The temple is located on a hillock and the guest house is in between the tank and the temple. The natural scenery of the place is very much attractive. There is barbed wire fencing on the other side of the tank which divides geographically the Nations. A small temple is there on the bank of the tank which is inside Bangladesh territory. There is a gap of about 50 feet width along the fence. Cattles of either Nations are grazing

along the line and crossing the line as per their convenience.

We got down from the car, paid our obeisance to the deity. Then I walked along the bank of the tank, talked to local people. I was told they were having their annual festival on the other side of the bank which is now in Bangladesh. Because of restriction imposed by two Governments the annual festival has lost its charms. People are hesitant to visit the other side because it may attract punishment once legal authorities notice their illegal entry.

To my utter surprise I found two calves, running hither and thither and crossing the international boundaries at their sweet will. I sat there looked at the other side and the Hindu temple, although small in size but standing majestically symbolizing the religious belief of the people living in that side. I was told Nuakhali is close to this place. Hindu population was very high before partition in this part of Bangladesh. When fanatics perpetrated heavily on Hindu it sent tremors to all parts of India that engulfed the Indian subcontinent with fanaticism causing colossal loss to humanity both in men and wealth and presently a few Hindus families are residing there. Partition gave birth to fanaticism unheard of. Those fanatics on either side let loose terror in the form of killing innocent men, women and even children, rape of young ladies, looting and terrorizing. An old man in his eighties was recounting his practical experience during partition. He was shedding his tears, his eyes swollen and throat suffocated. There was a time when both Hindus and Muslims were gathering on the bank of the tank to celebrate their annual festivals. Hindus were participating wholeheartedly in the festivals of Muslims and in return Muslims were also joining their hands

with their Hindu brothers. But today, not only they have lost their men and wealth, but also the people on either side have lost their mutual trust.

I found it is different with calves and animals. They are unaware of human sentiments, restrictions, boundaries and even International laws that divide two Nations; I went towards them, caught hold of their neck, they were running with raised tail, but they were also coming to me for a patting. The old man was standing behind me with old poignant memories in his heavy heart. He also started caressing the calves. Tears trickled down from his old eyes. It seems he was patting his sons, daughters and relations who were butchered by fanatics. He started sobbing.

Innocent young calves were looking at him and me. They were puzzled. They could not fathom the grief that besieged human beings, proud of their superiority over the animal and plant world. They have created tradition, framed rules and regulation, invented religion and established social norms, but alas ! They are today scapegoats of their own making. Where as animals, devoid of intelligence and thought power have nothing to worry. They are gay and happy and they have no instinct for future. They only live in the present.



Hon'ble Chief Minister Shri Naveen Patnaik giving prizes to the physically-challenged children in a function organized by Women & Child Development Department at Bhubaneswar on 3.12.2004.

The Sun has gone down the hillock. Darkness appeared to cover the land. Day's activities have come to an end, cows have their loud lowing. The calves have gone away with their mother one to Bangladesh and the other to India. But the old man was still standing on the bank of the recent past. As the darkness started getting thicker, he was working hard to unearth the past poignant memories. Suddenly I put my hand across his shoulder and pulled towards me.

It was human bondage. I too was human and retrieved what I read in my history books. He clasped my hands and started groaning, sobbing and I too, the Election Observer, equipped with security personnel and personal staffs and all modern ammunition felt his griefs and shared them.

Darkness was pitch black. I wiped my tears and left the place in my car, but my heart bled for those who lost their everything. This is due to the man-made partition. That wound is still oozing with blood and pus frequently. I pray the Almighty to cure the wound and strengthen the bondage.

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Mycorrhiza and Its Significance in Sustainable Forest Development

Dr. B.B. Mishra

Dr. S. N. Mishra

Mycorrhiza meaning fungus-root association implies a true symbiotic relation between fungi and plant roots, which is similar to that of nodule bacteria in legumes. This sort of association helps both the partners i.e. fungus and its host plant to be mutually benefited by each other as the fungus absorbs water and nutrients from soil and supplies the same to the plant and in turn derives its nutrition (carbohydrates and photosynthates) from the host plant for its growth and multiplication. The mycorrhiza is of three types i.e. (i.) ectotrophic mycorrhiza (ii) endotrophic mycorrhiza and (iii) ecto-endotrophic mycorrhiza.

Ectotrophic Mycorrhiza

This is an association of the fungus and the feeder roots (root hairs) in which the fungus grows predominantly intercellularly in the cortical region penetrating the epidermis by secreting proteolytic enzymes and develops extensively outside the root forming a network of hyphae which is called 'hurting net' or the 'fungus mantle'. The mantle is of variable thickness, colour and texture surrounding the rootlets. Ectomycorrhiza absorbs and stores plant nutrients like nitrogen, phosphorus, potassium and calcium etc. in their mantle. Besides it also converts some organic molecules into simple, easily available forms.

In the infected roots the hyphae radiate from the mantle into the soil. It changes the morphology of the root system with repeated dichotomous branching and elongation of the ectomycorrhizal fungus. The infected roots get brightly coloured depending on the colour of the fungal symbionts. The fungus mantle shields the feeder roots from the soil borne pathogens. They are also known to produce some growth promoting substances like cytokinins. This type of mycorrhizal association is commonly found in some forest trees belonging to the families Fragaceae, Butalaceae, Salicaceae etc. The common genera of the plant species include Eucalyptus, Papulus, Salix, Cedrix, Pinus and many others. Most of the ectomycorrhizal fungi come in the class basidiomycetes and the common genera are Amanita, Fuscoboletinus, Lecimum, Boletus, Cortinarius, Suillus, Pisolithus and Rhizopogan etc. Besides, the tuffle like fungi of the class ascomycetes is also known to form ectomycorrhiza.

Endotrophic Mycorrhiza

This is an association between fungus and roots of a plant in which the fungal hyphae infects the roots and remain up to the cortical region (parenchyma of roots) by secreting cellulolytic enzymes. It grows predominantly intracellular i.e. within the root cells. The

hyphae form coils and swellings that eventually disappear as a result of digestion of the invaded cells and the hypha follows the advancing meristematic root tips while its mycelium extends far away in soil and thus increases the surface area for absorption of nutrients. It also occurs in many forest plants including Texas, Podocarpus, Cupresus and Araucaria etc. The fungi forming endomycorrhiza mostly belong to the class zygomycetes and family endogonaceae. The important genera of such fungi include Endogone, Gigaspora, Acculospora, Glomus and Sderocystis etc. Most of the endomycorrhiza commonly occurring in various economically important plants are characterized as vascular-arbuscular-mycorrhiza(VAM) recognized by the presence of 'vesicles' (terminal spherical structures containing oil droplets) and ' arbuscles ' (complex structures formed by repeated dichotomous branching of hyphae in cortical cells of the feeder roots).

Ectotrophic cum Endotrophic Mycorrhiza

This is an association of the fungus and the roots of a plant representing a condition where typical ectotrophic intercellular infection is accompanied with intracellular penetration of hyphae. They are found sometimes in the root system of beech, lodge pole pine and pondersa pine. This sort of mycorrhizal association is considered to be transitional between ectotrophic and endotrophic forms, where infection is typically ectotrophic (intercellular) alongwith endotrophic penetration of hyphae. They are mostly found to occur on the root system of many horticultural crops and tropical trees.

Benefits from Mycorrhiza

It is now well established that mycorrhiza fungi provide their host plants with

a wide range of benefits. They are known to increase the solubility of minerals in soil, improve nutrient uptake of host plants and protect the roots against soil borne phytopathogens with their antagonistic effects. Such beneficial qualities of the mycorrhiza can be well utilized for better crop stand, establishment of high yielding forests, land reclamation and introduction exotic plant species. Mycorrhiza has greater applicability in enhancing plant growth under tough environmental conditions. For example, the association of mycorrhizal fungus Pisolithus tinctorius with the roots of pine trees has been found to improve the plant growth even under unfavourable situations such as minimal soil fertility and acid conditions. Some of the major benefits rendered by mycorrhizal association to the associated plants are briefly discussed below.

Nutrient uptake by plants

Experimental findings suggest that mycorrhizal association with forest plants, vegetables and field crops improves the absorption of almost all the nutrients required by them for their growth such as phorus, copper, zinc, sulphur, magnesium, manganese and iron etc. Evidences show that mycorrhizal plants in nutrient deficient soils absorb larger amount of nutrients than the non-mycorrhizal ones.

Solublization of plant nutrients

More root exudates are secreted by the mycorrhizal roots system in the rhizosphere resulting in enhanced activity of useful rhizospheric microbes such as phosphate solublizing microorganisms, organic matter decomposers and symbiotic as well as non-symbiotic biological nitrogen fixers etc. The fungal hyphae associated with mycorrhizal

plants can ramify root system of a plant in the rhizosphere over a large soil volume and provide a greater surface area for nutrient absorption than the roots of a non-mycorrhizal plant.

Stress Tolerance

There are evidences that the plants with mycorrhiza are more tolerant to stress such as soil salinity, alkalinity, acidity and drought conditions. Moreover, by exploitation of larger soil volume, extended root growth and increased absorptive area, the mycorrhizal plants exhibit better growth than the non-mycorrhizal ones especially in the arid and semi arid regions where low moisture and high temperature are very critical for survival and growth of the plants. Mycorrhizal plants are also more tolerant to toxic heavy metals than the non-mycorrhizal plants.

Utilization of fixed phosphates and insoluble phosphates

Recent advances on mycorrhizal research suggest that the symbiotic mycorrhizal association can lead to more economical use of phosphate fertilizers and better exploitation of cheaper and less soluble rock phosphates. The better utilization of sparingly soluble rock phosphate is explained by the hyphae making closer physical contact than the roots with the ions dissociating at the particle surface.

Protection of plants from attack of pathogens

In some cases mycorrhiza is found to offer adequate protection to the root system from the attack of pathogenic fungi. For instance, the mycorrhizal fungi such as *Lectaricus deliciosus* and *Boletus* sp. antagonize *Rhizoctonia solani*, *Lectaricus camphorates*, *Lectaricus* and *Cortinarius* sp. have been

found to produce antibiotics known as 'chloromycorrhiza' and 'Mycorrhizin A' which are antifungal to the phytopathogens like *Rhizoctonia solani*, *Pythium debarynum* and *Fusarium oxysporum* etc. Besides the fungal mantle in the mycorrhizal roots also offers physical resistance to various soil borne pathogenic fungi if the mycorrhizal fungus gains entry into root system prior to infection of root by the potential pathogen. In pine seedlings, the fungus mantle has been found to restrict the penetration of *Phytophthora cinamuni*. Moreover some insoluble polysaccharides are known to accumulate in the cell wall and lignin production is enhanced in the mycorrhizal roots. In such tissues the growth of pathogens like *Fusarium oxysporum* and *pyrenochaeta terrestres* etc have been found to be considerably restricted. It has now been well established that inoculation of mycorrhizal fungi particularly the ectomycorrhizal ones can protect the roots from soil borne pathogens and nematodes by forming a sheath around the roots and stimulate the plant growth by reducing the severity of diseases.

Production of growth hormones

Studies have revealed that plants with mycorrhiza exhibit higher content of growth regulators like cytokinins and auxins as compared to the non-mycorrhizal ones.

Conclusion

Methodology has been developed for preparation and use of vascular-arbuscular-mycorrhiza for seed treatment in form of slurry application, soil treatment and seedling treatment. The inoculum cultures are maintained at IARI, New Delhi, different Agriculture Universities and ICAR institutes. In view of the significant contribution of mycorrhiza to enhance plant growth, there is need of further

researches on development and utilization of more potential fungal strains capable of mycorrhizal association and standardization of protocol for their utilization with economically important agricultural and horticultural crops as well as in plantation of forest trees.

Advantages of Mycorrhizal Bio-fertilizer Inoculation

- ◆ It leads to saving of 20-40 kg of inorganic phosphates per hectare.
- ◆ 1 ton of VAM is equivalent to 24 tons of phosphorus with the application dose of 0.5 kg/ha spore suspensions.
- ◆ Solubilize and absorb phosphate and sulphur and increase availability and uptake efficiency of plants for secondary and micronutrients which are relatively insoluble and immobile.
- ◆ Provide plant nutrients like phosphorus, potassium, calcium magnesium sulphur, iron, manganese, zinc and copper etc at a very low cost. Enhances plant growth by release of vitamins and hormones and plant growth substances like auxins and cytokinins etc. Increase in crop yield has been recorded by about 20-40% with their use.
- ◆ Controls soil borne microbial pathogens and nematodes.
- ◆ Improves the physical, chemical and biological properties of soil by organic matter decomposition and soil aggregation.
- ◆ Helps survival and proliferation of beneficial microorganisms like phosphorus solubilizers, organic matter decomposers and nitrogen fixers etc.

- ◆ It has no harmful residual effect on soil fertility and plant growth. It sustains productivity as an ecofriendly input.

- ◆ It is required in very small amount and also becomes available to the subsequent crop. Helps in nutrient recycling.

- ◆ Hastens seed germination, flowering and maturity with increased production.

Future Prospects

Further researches are required for an understanding of the physiology and ecology of the association and host specificity (which cultivars mostly likely to be benefited from which strain of mycorrhiza) under different agro-climatic conditions. It needs screening and selection of the most efficient fungal endophytes.

Development of suitable protocol for production of inoculants on large scale, simplified techniques for their utilization in the field and assessment of the field situations where mycorrhizal use would be most beneficial need to be studied. Suitable protocol needs to be standardized to derive utmost benefit from the dual culture of VAM fungi and biological nitrogen fixers together. Factors which are deleterious to mycorrhiza such as pesticides, high level of inorganic fertilizers and poor aeration etc. need to be thoroughly investigated.

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Women Empowerment in India

Siddhartha Dash

Throughout history and in many societies including India, gender inequality was part and parcel of an accepted male-dominated culture. Atrocities and discrimination are the two major problems, which the Indian women face in the present day society. The traditional mentalities of India assume that the place of women is mainly concentrated to the household activities like kitchen work and upbringing of the children. They have been considered as the sex-object and inferior to the men in different spheres of knowledge. The 'Sati Pratha', 'Pardah System', 'Child Marriage', 'Dowry System', etc. have been some form of atrocities and discriminatory attitudes against the women.

Even after fiftyseven years of Indian independence, women are still one of the most powerless and marginalized sections of Indian society. The 2001 Census shows that the sex ratio for India is 933, which is lowest in the world. Percentage of female literacy is 54.16 (2001 Census) against male literacy of 75.85 per cent. In India, women's representation in Parliament and in the State Assemblies has never beyond 8 and 10 per cent respectively. Most of the working women remain outside the organised sector. A mere 2.3 per cent women are administrators and managers, 20.5 per cent professional and the technical workers all of whom collectively earn 25 per cent of

the shared income. Violence against women is on the rise.

The democratic process in India created the awareness among the women about their plightful condition. The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women, but also empowers the state to adopt measures of positive discrimination in favour of women. The 73rd and 74th Amendments (1993) to the Constitution of India provided for reservation of seats (at least one-third) in the local bodies of Panchayats and Municipalities for women. Another Constitutional Amendment (84th Constitutional Amendment Act 1998) reserving 33 per cent seats in Parliament and State Legislatures is in the pipeline.

The Indian Government has passed various legislations to safeguard Constitutional rights to women. These legislative measures include, the Hindu Marriage Act (1955), The Hindu Succession Act (1956), Dowry Prohibition Act (1961), Medical Termination of Pregnancy Act (1971), Equal Remuneration Act (1976), Child Marriage Restraint Act (1976), Immoral Trafficking (Prevention) Act

(1986) and finally Pre-natal Diagnostic Technique (Regulation and Prevention of Measure) Act (1994) etc.

Apart from these, various welfare measures have been taken up by the Government from time to time to empower to the women. They are, the support to Training for - Employment Programme (1987), Mahila Samridhhi Yojana (1993), the Rashtriya Mahila Kosh (1992-93), Indira Mahila Yojana (1995), DWACRA Plan (1997) and Balika Samridhhi Yojana (1997). On 12th July, 2001, the Mahila Samridhhi Yojana and Indira Mahila Yojana have been merged into the integrated self-help group programme i.e. Swayam Siddha.

The Government of India in 1953 established a Central Social Welfare Board with a nation-wide programme for grants-in-aid for women, children and under-privileged group. A separate department of women and child development was set up at the Centre in 1985 to give a distinct identity and provide a nodal point on matters relating to women's development. National Commission on women was created by an Act of Parliament in 1992. Besides these, India has also ratified various international conventions and human rights

instruments committing to secure equal rights of women. Key among them is the ratification of the Convention of Elimination of All Forms of Discrimination Against Women (CEDAW) in 1993.

The emancipation of women is not a simple matter. It requires the attitudinal change of the husband, other family members and society as a whole to the women. The community consciousness and bureaucratic efforts are integral parts of the implementation of the programmes. The first and foremost priority should be given to the education of women, which is the grassroot problem. The struggle for gender justice will be slow, strenuous and protracted, as the change cannot be brought about easily. It has to be fought at emotional, cognitive and action levels. The struggle has to be carried on within caste, class, race, religion, everywhere in which man-woman relationships figure and matter.

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Shri Nagendra Kumar Pradhan,
Minister, School & Mass Education
inaugurating the state-level 103rd Birth
Anniversary function of Late
Nabakrushna Choudhury held at
Jayadev Bhavan on 23.11.2004.

Tutelary Goddess of Chauhan Dynasty

Dr. C. B. Patel

Chauhan dynasty ruled over erstwhile Sambalpur kingdom from 14th century A.D. Tradition says that one Hammira Deo was ruling over Mainpuri in North India. He was killed by the Sultan of Delhi. His widow Asavati who was pregnant at that time fled to Bolangir-Patna and took shelter in the house of one Chakradhar Panigrahi of Patna. She gave birth to a son named Ramai Deo. At that juncture Patna was ruled by an oligarchy of *Astamalik*-eight headmen. Ramai Deo killed them and succeeded to the throne of Patna. In course of time Chauhans extended their sway over Sambalpur and other adjoining areas. The Mainpuri branch of the Chauhans were connected to Gar-Sambhar of Rajasthan which was related to Prithviraj Chauhan-III. Thus the Chauhans had a hoary antiquity of glorious legacy.

In the middle of 16th century A.D. Narasingh Dev of Patna gave over the territory of Sambalpur to his brother Balaram Dev in recognition to his meritorious service. The Ang

river was the dividing line of Patna and Sambalpur kingdoms. According to Jayachandrika of Prahlad Dubey Balaram Dev's territory was initially known as Huma kingdom with capital at Bargarh on the bank of Jira river. He subsequently shifted his capital



Sambaleswari Temple, Sambalpur

to Sambalpur on the left bank of Mahanadi and fortified the capital. The Hathigate near Samlai temple still stands in grandeur reminding one of the heydays of Chauhan ascendancy. He installed Samalai the popular deity of aboriginal local inhabitants and made her the tutelary deity of his family.

Sambalpur has a hoary past of Shakti worship. Great luminaries like Laxmikara and Luipa etc. flourished in 8th/9th century A.D. in this part. Several tantrik deities of Vajrajana and Saivism were popular here. Interestingly the Chauhans leaving aside their traditional tutelary deity Asapuri Devi, worshipped the local Sakta deities.

Ramai Deo established the temple of Pataneswari at Patna fort and worshipped the

deity as his family deity. She was in fact an emanation of Durga. Five villages namely Deulgaon, Kalangapali, Diadumber, Uchvali and Ghunghutipali were assigned for the worship of the deity. These villages are still enjoyed by the priest families.

As hinted earlier Balaram Deva accepted Samalai as his family deity and made a temple for her worship inside his fort. It is thus evident that the early Chauhans greatly esteemed and extolled the deities of the local people wherever they expanded their kingdom. This religious strategy helped them a lot for an enduring and farflung empire.

Patneswari temples are found at Patnagarh, Bolangir and Sambalpur. The temple of Patna was built by Ramai Deo in the middle of 14th century A.D.. The Patneswari temple of Sambalpur was built by Balaram Dev in the 16th century A.D.. The Patneswari temple of Bolangir was built in the 19th century.

The worship of Samalai however became more popular later on in whole of Sambalpur region and at present we find a seat or temple of the deity in almost each and every village. The most important ones are found at Sambalpur, Sonepur and Barpali. The deity occupies a pivotal position in the religious life of the people. She is generally worshipped in the form of a piece of stone under a tree in the vicinity of every village. Interestingly, She was made a witness in the Copper plate grant of Jayant Singh (1790). Gangadhar Misra has

made graphic reference about the deity and her *mahima*. Legend says that when the priests of Puri fled with the image of Jagannath to Sonepur, Kalapahad the turbulent Muslim invader followed them. At this juncture deity Samalai appeared in the guise of a milkmaid and offered milk and curd to his soldiers who in turn ran in disarray. Taking advantage of this king Balabhadra Dev drove away Kalapahad.

The origin of Samalai deity is surrounded in mystery. Because of phonetic semblance, the word Samalai has been derived from *Simul* a silk cotton tree as is believed by a group of scholars. Sambalpur District Gazetteer edited by King accept this theory. Gangadhar Mishra also supports this in his *Kosalananda Mahakavya*. Balaram Dev established the

deity after seeing an unusual incidence of a hare repulsing his hound at the present site of Samaleswari temple at Sambalpur

Samalai of Sonepur is represented in a very fierce form in sharp contrast to Samalai of Sambalpur and Barapali . The image of Samalai of Sambalpur presents a serene conception. In fact, the deity is a unique sculpture and it does not conform to any known iconic form of Hindu iconography. It is a big block of stone in the middle of which we find a projection with depressions on both sides and a narrow groove looks like her mouth. When dressed with ornaments its countenance looks like a Sakta deity. Beglar who visited Sambalpur in 19th Century describes that “it



Twenty Armed Durga,
Sambaleswari Temple

is a large block of stone in the middle of which is a projection resembling the mouth of a cow. The extremity of this projection has a groove of thread breath which is called the mouth. At both sides of the projection there are depressions over which beaten gold leaf is placed as a substitute for eyes.” This image does not resemble any known Sakta deity found in Orissa. It is believed that she is a non Aryan-deity worshipped by the local aboriginals. Balaram Dev accepted this local deity as his royal deity. Siva Prasad Das says that Pitabali is a Parsva Devata of Samalai. Pitabali is the goddess of Khonds. Sahara caste people worship Samalai in Sambalpur district. Buffalo sacrifice is recommended during religious rituals. All these factors indicate that the deity has a primitive origin. In Sambalpur it seems that Balaram Dev established this deity in the middle of 14th Century. However, the present temple was built by Chhatra Sai about the year 1691 A.D. For the maintenance of the deity he was known to have granted 40 villages.

“The temple is of the Gothic order. The plinth is about 16 feet high. Above the plinth the building is square, 21 feet 7 inches x 21 feet 7 inches. The arched roof commences at a height of 18 feet, and then tapers to the height of 35 feet, where the gradual diminution of the bulk has been abruptly interrupted by a hip-knob, over which a gold pot and spire are

placed. The arch is supported by abutments, each of which is gradually diminished, one inch in size, by each successive layer. The arch is an oblong vault, or half of an ellipse, with regular longitudinal furrows and elevations throughout the whole surface. Commencing from each corner at the base project four subordinate buildings eleven feet square, they are so situated that if the sides of the square base of the temple be produced, they will only touch two extremities of each of the buildings.



Hati Gate, Sambaleswari Temple Complex

Each of them has a domed roof, supported by six pillars. A hip-knob, pierced by an iron spike, adorns the top. Between these domes there are flat roofs supported by pillars, thus forming a square *veranda* on each side of the temple, with four domes at the corner, in the

midst of which the steeple rises above all with a gilt pot and spire glittering in the sun-shine.”

“The temple is built of a kind of stone as durable as granite, cemented with lime mortar. The whole building is plastered, but in the course of time the surface has become mouldy.”

As a rule the Samalai temple generally faces to the north while Patneswari to the south. The latter has a sanctum with a circular court which acts as circumambulation path. The Samalai temple is more elaborate and spacious. It consists of two structures, the sanctum and a pillared hall. It has a covered path of circumambulation round the sanctum. In

between the sanctum and the outer hall there is an open yard which serves as the link between the two structures. The Samalai temples of Sonepur and Barapali have similarity with the Khajuraho group of temples adorned with miniature temple motifs. The image of Patneswari of Patnagarh is a representation of ten-armed Mahisamardini Durga. The deity holds the war weapons like sword and shields, bow and arrow, thunderbolt and a snake as well as a long trident. These types of images are common in Orissa. The sculpture is beautifully carved on the eastern *Torana* of Samalai temple of Sonepur. In Gopalji temple it is an isolated figure. In sharp contrast Patneswari of Sambalpur has an image of goddess Kali. Such a figure is also found in Barapali.

Samalai of Sambalpur is a shapeless rock-made deity. Siva Prasad Das opines that Samalai is a deity of the Sabara community who is worshipped almost in every village. She is worshipped alongwith Kandha deity and other deities named after nature. All these deities are simple pieces of stone. What they represent is a subject matter of further research. The institution of Jhankar, the hereditary village priests are given free land holdings for the ritualistic service of the deity. Thus the tutelary deity of the Chauhans of Sambalpur, Samalai is a popular deity of the masses as well.

Dr. C.B. Patel is the Superintendent of Orissa State Museum, Bhubaneswar.



A girl NCC cadet pinning the flag on the dress of Hon'ble Chief Minister Shri Naveen Patnaik on the occasion of Armed Forces Flag Day at Naveen Nivas on 7.12.2004.

Orissa News

TATA GROUP COMMITS MAJOR INVESTMENTS IN ORISSA IN STEEL, IT AND TOURISM SECTORS.

The Tata Group committed major investments in Orissa in steel, tourism and IT sectors. Three separate MoUs were signed to this effect between the representatives of the Tata Group and the Government of Orissa in the presence of Shri Naveen Patnaik, Chief Minister, Orissa and Shri Ratan Tata, Chief of the Tata Group.

Tata Steel signed an MoU for setting up a green field integrated steel plant at Duburi with a capacity of 6 million tonnes of saleable steel per annum in two modules of 3 million tonnes each. The plant will complete its first phase in a period of 48 months. The project will involve an investment of Rs.15,400 crores in both phases.

The State Government has agreed to provide 2000 acres of land at the present industrial complex at Duburi and allocate an additional 400 acres for its township from the second phase of Duburi industrial complex. The State Government has also agreed to provide required power and

water. Iron ore requirement for the plant in its two modules has been assessed at 250 million tonnes for a period of 25 years. The State Government has assured making available adequate iron ore for the plant after taking into account the total requirement of Tata Steel and the iron ore reserve available with the Group. Arrangements in this regard will be worked out after the Tata Group have made sufficient progress in the implementation of the project and crossed specific milestones relating to firm orders on award of civil and structural contracts and for supply of machineries and equipments. The plant is expected to become operational by 2008 and is expected



to take advantage of the port facilities being developed at Dhamra in which Tata Group has taken a stake.

With the setting up of the steel plant, Duburi will soon emerge as the largest steel city of India. The State Government taking in to account current developments have already had preliminary discussions with the School of Planning and Architecture at Delhi for preparing a comprehensive master plan for Duburi Steel Complex and associated township. This will involve a 300 meter central corridor, railway siding, water supply, power supply, EHT substations, road linkages and other civic amenities.

The MoU was signed by Mr. B. Muthuraman, MD, Tata Steel on behalf of Tata Steel and Shri Bhaskar Chatterji, Pr. Secretary, Steel & Mines, Government of Orissa on behalf of the State Government.

A separate MoU was signed between the TCS and the IT Department of the State Government for starting a major IT development Centre of TCS at Infocity, Bhubaneswar. TCS is the largest and the oldest IT company in India and one of the most respected in the world. TCS has committed for development of an integrated development centre covering software and IT enabled services in the Infocity over an area of approximately 45 acres. It is expected that this centre will have world class amenities with supporting infrastructures such as auditorium, training facilities, residential hostels, indoor and outdoor facilities apart from core Information and Communication Technology (ICT) infrastructure required for various services to be offered by this centre. The State Government will provide necessary infrastructural support and facilitate all clearances required for implementation of the project through its single window organisation namely Orissa Computer Application Centre backed by the Department of IT. This centre is expected to have developers and other professionals numbering about 1000 in the first phase.

Bhubaneswar has already emerged as an important ICT centre in India over the last 10 years and has current software exports of the order of Rs.400 crores. With the setting up of the TCS facilities and arrival of few other IT majors, the Infocity, Bhubaneswar is all set to cross Rs.1000 crore export mark in IT and related services within the next 3 years.

The MoU for the IT venture of Tata Group was signed by Mr. Ramadurai, MD on behalf of the TCS and Shri A.K. Tripathy, Secretary, IT on behalf of the State Government. The Tata Group, which is a major player in the hospitality industry in the country also committed major investments in tourism sector of Orissa by signing a separate MoU for setting up of 4 units of their budget category hotels under the brand name indiOne. These 4 hotels will be set up at Bhubaneswar, Konark, Puri and Paradeep and to start with will have a capacity of 100 rooms each.

The State Government attaches very high importance for development of tourism in the State and the international airport at Bhubaneswar is expected to become fully operational in less than a year and availability of these additional hotel accommodation fits well into the overall strategy of the State Government to give a boost to domestic and international tourism. Tata Group will also help the State Government in preparing a concept plan and a vision document for developing special tourism areas on the Chilka side in the Puri across Mangala river and near

Konark. With the simultaneous signing of these three MoUs a new landmark in the economic development of Orissa has been achieved covering the key areas of growth in the manufacturing and service sectors.

SPECIAL DEVELOPMENT PLANS FOR GOPALPUR

The TATA Group had earlier planned to set up a steel plant at Gopalpur and had signed an MOU with the State Government to this end in August, 1995. It had then been envisaged that a separate dam will be constructed over river Rushikulya at Pipalpanka to make required quantity of water available for the steel project. On account of a variety of factors such as non-availability of forest clearance in time the project did not materialise. However, approximately 3700 acres of land had been acquired for the project and a rehabilitation colony had also been set up for the settling the affected displaced persons. In the changed context TATA steel has decided to set up an integrated steel plant at Duburi where availability of water is not a constraint. However, the TATA group has committed to participate in the development of Gopalpur Industrial area in the land already available with them. About 500 acres of land will be utilized for setting up a plant to produce cold rolled sheets. This will be in the nature of a forward integration project to utilise finished products produced at the Kalinga Nagar (Duburi) plant of TATA steel. This will involve an investment of approximately Rs.500 crores. It is to be noted that the Steel - based industry proposed at Gopalpur will have minimal requirement of water.

The TATA group has also committed to work jointly with the State Government for promoting the Gopalpur Industrial Complex through a Special Purpose Vehicle (SPV) to be specifically set up for this purpose. A pre-feasibility study to this end has already been prepared by the TATA group through the Tata Economic Consultancy Services. State Government's industrial promotion organisations will make efforts along with the TATA group to promote various economic activities in this Industrial Complex.

It is noteworthy that the State Government has already floated Global Tenders for development of the Gopalpur Port and has received offers from bidders including some international companies. The first phase of the scrutiny of the bids has been completed and it is expected that a final decision with regard to choosing the developer of the port will be taken through the prescribed procedure within a period of next six months. This will provide much needed fillip to the development of the Gopalpur region.

The TATA group has already started construction of an Industrial Training Institute at Gopalpur and has committed to take up training of 200 boys and girls every year and prepare them for employment in the Steel & related industries inside and outside the state. The first batch are expected to be selected and trained at the beginning of the next academic session in 2005. First preference will be given to the children of displaced families in the selection of trainees as well as in the recruitment by the TATA group for its steel plant. This will be in continuation of training of displaced persons by TATAs at their SNTI, Jamshedpur where 238 persons have so far been trained for employment in steel and other industries.

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EDITORIAL



Co-operatives play a significant role in effecting changes in the economy. And the change is for economic prosperity embedded in joint efforts put together in a cohesive manner. Starting from grassroots the concept of co-operative has produced amazing results. The history of co-operative stands as the testimony to the tested system which remains quite sure-footed. There is an imperative need to diversify the co-operative sector in establishing a proper linkage between the co-operative credit institution and market facility. The strength of rural economy largely hinges on smooth, timely and adequate credit flow to the needy farmers. Professionalisation of co-operatives is a must alongwith modernisation of their operational procedures so as to facilitate their development as self-reliant and economically viable rural financial organisations after ensuring better managerial skill with efficient risk management safeguarding against market imperfections. Transparency, accountability, quality services as well as achieving higher recovery should be embedded in the co-operative movement to make it stronger for further economic development of the commoners, especially the rural people.

The December issue of Orissa Review has focussed all these ideas to provide pertinent information to our esteemed readers on a sector that affects common life considerably. We trust, our readers may find these useful.

Navankar Sekhar Panda