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INDEX

Page Nos.

Editorial **05-05**

GRAM SABHA: THE FOUNDATIONAL STRUCTURE OF GOVERNANCE IN INDIA
Chandan Kumar (Ph.D. Scholar),Department of Political Science, University of Delhi. ***6-13***

PEDAGOGICAL MANAGEMENT OF HEIs: AN EMPIRICAL STUDY OF SELECTED UNDER-GRADUATE COLLEGES AFFILIATED TO THE UNIVERSITY OF CALCUTTA
Dr. Swati Chakraborty, Lecturer, Royal Thimphu College.
Dr. Priyotosh Khan, Principal, B.P. Poddar Institute of Management & Technology.
Prof. Sudipti Banerjea, Professor & Director, IQAC, University of Calcutta. ***14-22***

CRITICAL ANALYSIS ON SOCIAL AND EDUCATION BACKGROUND OF ENTREPRENEURS (A Case study of entrepreneurs of selected districts of Odisha)
Dr. Prakash Kumar Pradhan,Assistant Professor,School of Management, Centurion University, Khordha,Khurda ,Odisha-752050. ***23-28***

WATER SCARCITY IN IRRIGATED AGRICULTURE:CRITICAL ISSUES CONCERNING FUTURE NEEDS
Prabeer Kumar Parhi,Assistant Professor,Center for Water Engineering and Management, Central University of Jharkhand, Ranchi-835205. ***29-37***

AN ASSESSMENT OF BETA THALASSEMIA TRAIT AND IRON DEFICIENCY ANEMIA BY USING AUTOMATED HAEMATOANALYZER AND HPLC- VARIANT AT TERTIARY CARE HOSPITAL RAJENDRA INSTITUTE OF MEDICAL SCIENCES, RANCHI
Chandrahas Prasad[1], S.B.Singh[2], Tulsi Mahto[3], Shanti Praksh[4] ,Satish Chandra[5] [1]Associate Professor, Department of Laboratory Medicine, [2] Lecturer Cum Statistician, Department of Preventive and Social Medicine,[3] Professor of Forensic Medicine and Director RIMS , [4]Associate Professor, Department of Anesthesiology ,[5] Professor, Department of pharmacology, Rajendra Institute of Medical Sciences (RIMS), Ranchi. ***38-48***

MICA INDUSTRY OF JHARKHAND: PROBLEMS AND CHALLENGES
Dr. Sk. Mujibar Rahaman ***49-53***

FUTURE OF E-RETAILING IN YOUNG INDIA
Kumari Sneha, Ph.D Research Scholar, Dept. of Commerce, Ranchi Univ. Jharkhand.
Vikas kashyap, Ph.D. Research Scholar, Dept. of Commerce, Ranchi Univ. Jharkhand ***54-59***

AN UNTAPPED POTENTIAL OF JHARKHAND TOURISM
Dr. Kamini, Asst. Prof. Faculty of Commerce, Jamshedpur Women's College, Jamshedpur, Jharkhand ***60-65***

THE IDIOM IN 'NECTAR IN A SIEVE' AND 'THE COFFER DAMS'
Minakshi Pandeya, Ph.D Research Scholar, Dept of English, Ranchi University ***65-68***

EDITORIAL

Dr. Mithilesh Kr. Choubey

Mithilesh / **18/2/2014**

GRAM SABHA: THE FOUNDATIONAL STRUCTURE OF GOVERNANCE IN INDIA

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Introduction

The story of self-governance is a long history. Researchers have sketched the beginning of self-governance to ancient India and also traced its evolution during contemporary period. The actuality is that whether in the form of self-governance or Panchayats or in other informal institutional arrangements, rural India had systems of local governance particularly for local dispute resolution. They did not look to provincial or central government for their day-to-day living. The progress of the formal Panchayati Raj structure, its forms and authority have however, not been so continuous.

The Gram Sabha means a body involving of persons registered in the electoral rolls covered within the area of Panchayat at the village level in India. In the Panchayat Raj System Gram Sabha is the only permanent unit. In the Duration of Panchayat Mukhiyas and other members of Panchayat continue only for 5 years from the date appointed for the first meeting, but the villagers do not change and it is providing representation to all adult residents or registered voters of the area under its jurisdiction. The Gram Sabha best exemplifies democracy at the local level. It becomes a remarkably inclusive political platform, which would function as an accessible device to execute direct democracy.

The 73rd Amendment Act of constitution of India conceives of the Gram Sabha as the foundation of the Panchayat Raj System to execute functions and powers delivered to it by the State Legislatures. The amendment delivers for a three tier Panchayat Raj System at the village, intermediate and district levels. Article 243A provides that the Gram Sabha may exercise such power and perform such functions at the village level as the Legislature of a state as the law may provide. Gram Sabha is expected to be a prototype of participatory and direct democracy and is the only body, which should provide valuable inputs to Gram Panchayat to lead local government successfully. At the same time, Gram Sabha is also to act as a watchdog in the interest of village communities by monitoring the functioning of the Gram Panchayat.

The Idea of Governance and Gram Sabha

Governance is the fundamental stem of any democratic political system. The major challenges before the democratic political system is how to cover and finally to understand the conceptual goals of governance in day to day life of the people. This entails the process of tracing the different routes of the idea of governance. Initially the centralised state administration in India was the main mechanism of governance and the failure of centralised and top-down attitude for the policy planning to re-think the idea of governance.

Now the system appreciated the importance of multiple democratic institutions to ensure people's participation at the different layers of institutional governance. The initiate task was how to make PRIs more and more participatory. The 73rd amendment was the result of this new imagining. Through it made Gram Sabha more effective than into earlier functioning. It has still not accomplished the constitutionally enshrined goals. The present paper attempts to address this question in order to understand the difficulty and wide gap between concept and its practical implementation and realisation.

Gram Sabha: An Overview of Progress

Indian villages are not simply a place where people are only living. First, it has a design in which is reflect the basic values of Indian

civilisation and second, the rural civilisation and the urban civilisation are totally different things, one depends on machinery and industrialisation, the other rests on agricultures and handicrafts. Mahatma Gandhi, J.L. Nehru and B.R. Ambedkar were the three most important and central leaders of modern India, but they have different views about Indian villages.

It was perhaps in 1894 that Mahatma Gandhi for the first time invoked the idea of the Indian village as a political symbol. Gandhi had spoken of a Gram Swaraj (Village republic) in which the government would be annually elected by adult villagers and which would have the authority and jurisdiction in the fields of legislation, judiciary and executive decision making without interference from the state government. Gandhi understood panchayat as a perfect democracy and which is based upon individual freedom. But Nehru had very different views on panchayat. While Gandhi thought that villages could largely be self-sufficient and rejected the modern cities for their being a sign of colonial domination, Nehru saw industrialisation as being inevitable. Industrial development and urbanisation would help in reducing the burden on land and therefore would be good even for those who would be left in the village.t B. R. Ambedkar has other views about village panchayat and he realized, "This is the village republic of which the Hindus are so proud. What is the position of the untouchables in this Republic? They are not merely the last but are also the least...in this Republic there is no place for democracy. There is no room for equality. There is no room for liberty and there is no room for fraternity. The Indian village is a very negation of Republic. The republic is an Empire of the Hindus over the untouchables. It is a kind of colonialism of the Hindus designed to exploit the untouchables".

Finally this has been incorporated in the Constitution of India in Article 40 as a Directive Principles of the State Policy and that "the states shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them function as units of self-governments".

The first planned effort to tackle the difficult of rural India was made through Community Development Programme in 1952. The programme was based on an integrated approach to the various aspects of rural development. The programme made provisions for appointing Block Development Officers (B.D.O.) and Village Level Workers (V.L.W.). This programme was proposed to bring socio-economic development of the rural masses on democratic lines, but failed to take off along the expected lines due to the absence of an effective instrument for people's participation. In 1957 Balwantrai Mehta Committee was the first Committee set up to look into the problems of democratic decentralisation in independent India. Committee pointed out that the community development programme was not successful because of absence of local participation and local interest. The recommendations of the Balwantrai Mehta Committee came into effect on 1st April 1958. On 2nd October 1959 Rajasthan was the first state to implement democratic decentralisation in Naguar district.

The Janata government appointed the Ashok Mehta Committee in 1977 to look into the issue of poor performance of Panchayati Raj Institutions. The committee suggested two tire system of Panchayati Raj consisting of Zilla Parishads at the district level and Mandal Panchayats at the grass root level. The committee recommended constitutional protection to the Panchayati Raj Institutions and further decentralisation of power at all levels. But, due to the fall of the Janata government, the Ashok Mehta Committee recommendations were not implemented.

G. V. K. Rao Committee appointed in 1985 and Dr. L. M. Singhvi Committee appointed in 1986 to look into local governments issues. The G.V.K. Rao committee recommended the renewal of Panchayati Raj Institutions and suggested greater responsibility of planning, implementation, and monitoring of rural development programmes. Dr. L.M. Singhvi Committee recommended that the Panchayati Raj Institutions should be constitutionally recognised and protected.

The Prime Minister of India Rajiv Gandhi then introduced the 64th Amendment bill on local government on the 15th May, 1989 in the Parliament, but it failed to get the required support. In September 1990 a second attempt was made to pass the bill in the Parliament and again it was not even taken up for consideration. The Prime Minister of India P. V. NarasimhaRao than introduced a fresh bill on Panchayati Raj in September 1991. It was passed in 1992 as the 73rd Amendment Act 1992 with minor modifications and came into force on 24th April 1993.

The 73rd Constitutional Amendment Act of India and PRIs

The Article 243(a) of the 73rd Constitutional Amendment Act of India has given the backing to make structure of Gram Sabha mandatory in the states. But the power and functions of the Gram Sabha have been left to pleasure of the state legislatures. The 73rd Amendment included Gram Sabha or village assembly as a thoughtful body to decentralised governance along with a three-tier structure of Panchayats from village to the district. Article 243(b) defines Gram Sabha as "a body consisting of persons registered in the electoral rolls relating to a village comprised within the area of the Panchayat at the village level" and in clause (g) village means a village specified by the Governor by public notification to be a village for the purpose of "Part IX The Panchayats" and includes a group of villages so specified.

Though, the amendment had provided with a list of functions under the provisions of 11th Schedule, it has not mentioned clearly about the level of PRIs which would perform the particular type of functions. In conformity to the 73rd Amendment Act, all the states have amended their respective Panchayat Acts and enlisted the functions assigned to the different levels of PRIs in the respective states. Here, in this juncture, it is essential to discuss the functions at different levels of PRIs across the states. The functions enlisted in the different states Panchyats Acts are classified into three categories: (i) General Administrative Functions (ii) Developmental and social and (iii) Maintenance.

Functional Responsibilities of Gram Panchayat (G P)

At this level, administrative functions include: (i) Preparation of annual plans for the development of the village Panchayat; (ii) preparation of annual budget ;(iii) mobilizing relief in natural calamities;(iv) removal of encroachment on public properties;(v) organizing voluntary labour and contribution or community works ;(v) maintenance of statistics of village;(vi) any other functions entrusted by the Panchayat Samiti, Zilla Panchayats or state or central government on an agency basis, is most commonly found across the states. Apart from this, village defence, information and publicity and the constitution of Nyaya Panchayt were found in Andhra, West Bengal, Bihar and Maharastra. The developmental and social activities, agriculture, social forestry, animal husbandry, rural housing, education etc are main work of its. Next is a maintenance function which includes rural electrifications, rural sanitation and conservation.

Block level (PanchaytSamiti – P S) functions

At this level, general administrative functions include –providing relief in natural calamities and other works entrusted by the Zilla Panchayt. Some of the functions like trusts, social education and village defence corps (Gujarat alone). Publicity and information (Gujarat and Maharastra) and statistics (Gujarat, Maharastra, and Rajasthan) were very common. Regarding developmental social activities concerned are agriculture, animal husbandry, fisheries, social farm and forestry. Among the maintenance functions, the market and fair maintenance, health, family welfare, sanitation and medical and cultural activities and sports were common responsibilities of PS in many states.

Zilla Parishad(Zilla Panchayat – Z P) level functions

At this level, the major responsibility of general administrative function is of overall supervision, coordination; consolidation, integration and

implementation of development schemes at block and district levels. Preparation of plans for economic development and social justice of the entire district and securing the execution of plans, projects, schemes or other Panchayat Samiti works were commonly found in almost all the states. Amongst the developmental variety the agriculture including extension and horticulture, animal husbandry, dairying and poultry, social forestry, fuel and fodder education were quite common among all the states. Most of these functions are performed by the Gram Panchayat only. In sum, with respect to development and social variety of functions the demarcation of the areas of responsibilities in the state Acts are not defined clearly.

The Provisions of the Panchayats (Extension to the Scheduled-V Areas) Act, 1996 (PESA)

The provisions of the Panchayats (Extension to the Scheduled-V Areas) Act, which came into force on 24th December 1996. The Extension Act has not only made the gram sabha a strong body, but also put 'jal, jungle and jamin' (water, forest and land) under its control. The working group on decentralised planning and PRIs observed on this issue that "One of the significant achievements of the provisions of the 73rd Amendment Act concerning reservation of seats and political offices in favour of women and the disadvantaged sections of the rural community are that it had improved their awareness and perception levels and has created an urge in them to assert their rightful share in the decision-making process at the local level".The Provisions of the Panchayats (Extension to the Scheduled-V Areas) Act, 1996 (PESA) provides special place and the following roles for Gram Sabha in Scheduled Areas:

- Establishment of a Gram Sabha for every village comprising of persons whose names figure in the electoral rolls.
- Empowering the Gram Sabha to safeguard and preserve the traditions, customs and cultural identity of the people, community resources and to settle local disputes by customary methods.
- Approval of plans programmes and projects for social and economic development of the village Panchayat by the Gram Sabha.
- The Gram Sabha should identify and select beneficiaries for poverty alleviation and other programmes.
- Every village Panchayat must obtain a certificate of utilisation of funds from the Gram Sabha for the projects and programmes of social and economic development under the state poverty alleviation and other programmes.
- The acquisition of land for development projects and rehabilitation or resettlement of persons affected by such projects in the Scheduled Area has to be done in consultation with either the Gram Sabha or the Panchayat at the appropriate level. Planning and implementation of the projects will be coordinated at the state level.

Thus PESA has mandated provisions for empowerment of Gram Sabha, a forum for deliberative democracy and decision-making body by the people themselves.

The Concept of Gram Sabha: A Democratic Decentralisation Routes

The Panchayat is the executive committee of Gram Sabha. The membership of the Panchayat varies from five to thirty one. Members of the Panchayat are called Pnches and are elected by the Gram Sabha by secret ballot. The President is directly elected by the people in Orissa; by the Gram Sabha in Assam, Bihar, Punjab, Uttar Pradesh and West Bengal, and by the Panches in Andhra Pradesh, Gujarat, Jammu and Kashmir, Kerala, Madhya Pradesh, Maharashtra and Karnataka. The President can be removed from the office by a majority of two-thirds of votes of the members of the panchayts present and voting. Every state are providing for reservations of a specified number of seats for women as well as members of Scheduled Castes and Scheduled Tribes. The tenure of the Panchayats is fixed for the five years.

Gram Sabha is about government closest to the common people. Gram Sabha is about government that involves the day-to-day life and problems of common people. Gram Sabha

believes that local knowledge and local interest are essential elements for democratic decision-making. They are also necessary for efficient and people-friendly administration. It is convenient for the people to approach the local government for solving their problems both quickly and with minimum cost. It is at the level of local government that common people can be involved in decision making concerning their lives, their needs and above all their development.

- **Funds to the panchayats:-** Thus, strengthening Gram Sabha or local government is like strengthening democratic decentralise processes. Giving functions to panchayats without providing adequate funds is meaningless. This in fact happened with the state panchayat acts. Before listing the functions to be performed by the panchayats, the states have introduced certain qualifying clauses. Only two states, Karnataka and Sikkim, have devolved funds to the panchayats for all the 29 subjects listed in 11th Schedule of the Constitution.

- **Socially deprived and economically oppressed: -** For the purpose of reaching development benefits, top priority is given to the socially deprived. Often the quantum of benefits like the grants, subsidies and reservations to jobs are higher for the socially deprived than for others. The economically oppressed get the next priority. In fact, all the central schemes are meant for the economically oppressed. In many cases, in the implementation of these central schemes, there is an overlap between the socially deprived and the economically oppressed. In such cases, priority is assigned to the socially deprived.

- **Gram Sabha as a live institution or not: -** Gram Sabha has always been a central issue in the discussions among the academic circle. Seeing the importance of this institution in local governance, Union Government had declared the 1999-2000 and 2009-10 as the Year of Gram Sabha. But the declaration confined to paper because exception in a few states, nothing valuable was happened in making Gram Sabha as a live institution at local level. Proxy representation, absence of power, lack of awareness, apathy of the villagers, lack of enthusiasm and absence of freedom on the part of this body and the caste and class difference have further reduced this body as a local government.

Functions of the Gram Panchayat

The Mukhiya or Sarpanch is responsible for convening the meeting of Gram Sabha, maintenance of the records of Gram Panchayat, financial and executive administration, supervision over the work of Gram Panchayat employees and transaction of business. The Gram Sabha shall, in such manner as may be specified by the State Government from time to time, perform the following objectives:-

- Promoting literacy, education, health and nutrition.
- Promoting of unity and harmony among all sections of the society in such area.
- Approve the plans, programmes and projects for social and economic development in order to priority.
- Identification or selection of persons as beneficiaries under the poverty alleviation and other programmes.
- Exercise social audit in respect of plots allotted to the weaker sections.
- Formulating and approving development plans for Abadi lands.
- Mobilising voluntary labour and contribution in kind or cash or both for the community welfare programmes.
- Planning and management of minor water bodies.
- The management of minor forest produce.
- Control over institutions and functionaries in all social sectors.

Table: 1 Functions assigned to Gram Sabhas in different states

Sl. No.	Functions	States
1	Examine annual statement of account and annual report	Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Madhya Pradesh, Punjab, Rajasthan, Sikkim, A&N Islands
2	Discuss report on the administration of the preceding year	Andhra Pradesh, Bihar, Gujarat, Karnataka, Madhya Pradesh, Rajasthan, A&N Islands
3	Review programme of work for the year or any new programme	Andhra Pradesh, Bihar, Gujarat, Karnataka, Madhya Pradesh, Punjab, Rajasthan, Sikkim, A&N Islands
4	Consider proposal for fresh taxation or enhancement of existing taxes	Andhra Pradesh, Bihar
5	Select schemes, beneficiaries and locations	Andhra Pradesh, Assam, Bihar, Karnataka, Kerala, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh
6	Mobilise voluntary labour and contributions in cash and kind for community welfare programmes	Bihar, Karnataka, Kerala, Punjab, Rajasthan, Sikkim, Tamil Nadu
7	Render assistance in the implementation of development schemes	Assam, Bihar, Karnataka, Kerala, Punjab, Rajasthan, Sikkim, Uttar Pradesh
8	Undertake programmes for adult education, family welfare within the village	Bihar, Karnataka, Kerala, Punjab, Rajasthan, Sikkim, Uttar Pradesh
9	Promote unity and harmony among all sections of society	Bihar, Karnataka, Kerala, Punjab, Rajasthan, Sikkim, Tamil Nadu, West Bengal
10	Seek clarifications from the head and members of the Gram Panchayat about any particular activity, scheme, income and expenditure	Bihar, Punjab, Rajasthan
11	Examine last audit note and replies made thereto	Bihar
12	Consider the budget prepared by the Gram Panchayat and future development programmes and plans for the Sabha area	Gujarat, Haryana, Karnataka, Madhya Pradesh
13	Consider and scrutinise the existing schemes and activities of the Panchayat	Haryana, Kerala
14	Maintain a complete register for all development works undertaken by the Gram Panchayat or by any other government department	Haryana, Kerala
15	Scrutinise the completed works and all kinds of activities of the Gram Panchayat	Haryana, Kerala

Source: http://www.Panchayats.org/downloads/SALR%20Situation%20Analysis.pdf.

Gram Sabha has been described as the institution for direct democracy, for participation of the local community in decisions on their concerns, programmes and projects, fixing priorities, selecting beneficiaries, receiving annual reports and accounts, approving the coming year's programmes, conducting social audit, etc. But the enthusiasm of scholars and policy makers has not caught the imagination of the local citizens and the extent of participation has

remained a matter of concern. Measures suggested and sometimes even implemented e.g., smaller size of Gram Sabha, holding meetings in the ward/village as PalliSabha, Ward Sabha, appointing nodal officers to ensure that Gram Sabha meetings are conducted on the days/dates every quarter or six months fixed in different states and even changed. While participation has been described in the Indian context, not only as a means to an end but also an end in itself, the results are not seen in increasing this participation. It remains a centrally provided, centrally driven exercise even after 20 years. Where some civil society efforts have been made for mobilisation, the impact has not been sustained after the mobilisation phase.

Economic and social differences are interrelated. The power structure is determined in the hands of the dominant castes or classes. They dominate activities of the village as well as their own community. The lower castes face constant discrimination in their day to day life and activity. Among them the women are worst victims. Without any asset base, and several social disabilities, they are unable to sustain any economic activity, and have to depend on others for means of livelihood. Consequently, they are exploited, and live at subsistence levels without any savings. Poverty is directly related to land holdings as agriculture and its allied sectors are the main source of income.

The socio-economic and political realities of rural area in India, with illiteracy, prevailing caste and gender biases, the rigid caste hierarchy and the powerful patriarchal norms are also not conducive to legislations bringing desired changes. So there is urgent need to discuss the measures to strengthen and empower Gram Sabha. But there have been various factors affecting Gram Sabha and these are: - (1) Proxy representation on reserved seats. (2) Lack of awareness among Gram Sabha members and their rights. (3) Lack of education at village level. (4) Unethical politics and infighting at Gram Panchayat level. (5) Lack of interest in people about the village activities due to their livelihood reasons. (6) Lack of information and awareness about various Government schemes. (7) Over dependency by villagers on Panchayat members.

How to empower the Gram panchayat ?

1. Awareness programs for governments plan and functions.
2. Motivating Gram Sabha members through non-government organisations and government's agency for attending meeting.
3. Government's Agency ensures this meeting should be inclusive and decision making process should be democratic.
4. NGO, Electric Mediya and Governments Agency should be part of active participation of this meeting and motivated people for meaningful participation.
5. Corporate's and company should be promoting and supporting Gram Sabha for economic development and social justice.
6. We can also use urban area youth for build local governance as a useful institutions. And I believe that they will enjoy this work.

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PEDAGOGICAL MANAGEMENT OF HEIs: AN EMPIRICAL STUDY OF SELECTED UNDER-GRADUATE COLLEGES AFFILIATED TO THE UNIVERSITY OF CALCUTTA

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Abstract

NAAC uses 7 criteria for assessment and accreditation of HEIs tuned to the philosophy of pedagogical management. This is an empirical research on the pedagogical management in selected under-graduate colleges, affiliated to the University of Calcutta, for assessing the nature and importance of governance and leadership and analyzing the effectiveness of the weight allotted to governance and leadership. 30 NAAC-accredited (out of 76) and 10 non-accredited (out of 52) colleges could finally be covered. The primary data have been collected by administering structured questionnaires. The secondary data have been collected from various government/semi-government agencies. Data analysis has been done in a criterion-wise manner. The statistical techniques used are One-Way ANOVA and Partial Correlation Analysis. Only criterion II (Teaching-Learning and Evaluation) and criterion VI (Governance and Leadership) result in a significant difference in the performance of the colleges. Partial Correlation Coefficient has been worked out, taking criteria II and VI as independent variables and criteria I, III, IV, V and VII as dependent variables. Criterion VI has a greater effect on the performance of the colleges than criterion II. The analysis reveals that most of the colleges are not adequately aware of the significance of the role of top management. The findings call for a change in the weight allotted to each criterion by NAAC.

1.1 Introducing the Theme

Pedagogical Management calls for management of teaching, learning, and evaluation of students' performance, apart from sustaining the credibility and ensuring the responsibility of any HEI. The term pedagogy refers to the study of being a teacher. The term generally refers to strategies of instruction, or a style of instruction. It is also occasionally referred to as the correct use of instructive strategies. In tune with those instructive strategies, the instructor's own philosophical beliefs of instruction are harboured and governed by the pupil's background knowledge and experience, situation, and environment as well as learning goals set by the student and the teacher. A teacher is the main service provider for any HEI. Hence, it is the responsibility of the top management of any HEIs to ensure right quality of teaching and learning. For this, the top management needs to appreciate and internalize the basic managerial functions right from planning to control. The effective managerial activities for the continuous progress of an HEI put together can be also termed as pedagogical management. In this connection, it may be mentioned that the NAAC has worked out 7 criteria for the assessment and accreditation of the HEIs tuned to the philosophy of Pedagogical Management. This paper is essentially focused on the basics of Pedagogical Management in the *context of the HEIs.*

1.2 Literature Review

The term *organization* means persons (or committees or departments, etc.) who make up a body for the purpose of administering something (**Kotler** and **Hesketh**, 1992; **Hervey-Jones**, 1989; **Marshall**, 1991; **Schein**, 1992). The set of assumptions, beliefs, values and norms that are shared by the members of an organization is known as the organizational culture. Knowledge of the organizational culture helps newer employees to interpret what goes on inside the organization by providing an important context for events that would otherwise seem confusing. Cultures are distinctive, stable, implicit, and symbolic.

Education has been given the epithet of a system in which (i) the *inputs* are students having varied types of qualifications, the services of teachers, and all other usual kinds of material and service inputs, and (ii) the *outputs* are graduates having various types of qualifications. The *value added* by the conversion process may be defined as the amount and type of knowledge acquired and/or the capabilities developed by the students when they come out of the said process. As in any other system, it is be very interesting to investigate into the *inputs* and *outputs* and their inter-relationships in the field of higher education. Such investigation may shed some light on the *internal effectiveness* of higher education as a system and may suggest the possibilities in terms of improvement in students' development, effective utilization of teachers, infrastructure and learning resources, etc.

At present, the importance of management is increasingly felt in the services sector also and an important component of the services sector is the academic world. In the field of academics, the HEIs are the institutions which impart education beyond the higher secondary level, especially education at the college or the university level. To assess and accredit institutions of higher learning in the country, the NAAC was established in 1992 under the UGC Act, as a result of recommendations from 'National Policy on Education--- 1986' which emphasizes the need to maintain and improve quality of higher education in the country. The NAAC has identified the 7 steps to quality.

It is the responsibility of the management to maintain and improve the quality of an HEI. For this, the management has to decide the right kind of curricula to be adopted, ensure right kind of teachers and teaching techniques, encourage research and consultancy, provide the right kind of infrastructure and learning resources, ensure support to students and their progress, and encourage innovative practices. This is possible only when the management is stable, efficient, effective and aware of the latest developments. In other words, the management is the most important factor for the continuous progress of an HEI. Hence, it comes as a surprise that NAAC has not given maximum weightage to the concept of *governance and leadership*.

The history of research on higher education in West Bengal reveals that, except for the remarkable research done by **Dutta** (1974), there is no such notable documented research work as regards the state of higher education in the state.

Against this backdrop, this work is a modest attempt to analyze the nature and degree of impact of management on the progress of HEIs in West Bengal.

1.3 Objectives of the Study

This research work is an analytical study of *pedagogical management* of the HEIs with special reference to the under-graduate colleges affiliated to the University of Calcutta. To be very specific, the major objectives which follow from the above-mentioned focus have been stated below.

- *to assess the nature of, and importance attached to, governance and leadership in the target HEIs*
- *to analyze the effectiveness of the weightage given on governance and leadership by NAAC*

1.4 Research Methodology

For the purpose of this research, some under-graduate degree colleges affiliated to the University of Calcutta have been selected. Different categories of stakeholders (e.g., students of different academic departments, teachers of different academic departments, non-

teaching staff and members of the governing bodies) have been covered in the study.

A thorough analysis of the impact of existing systems in such colleges has been done. Based on such analysis, an attempt has been made to identify the flaws in their existing systems and improvement-oriented changes accordingly. However, in a broader sense, the primary determinants of such changes continue to be the attitudes of, and the roles played by, the University of Calcutta, the West Bengal State Council of Higher Education, the Government of West Bengal, and the society in general. The impact of such changes has been studied with respect to the selected under-graduate colleges. The evaluation of those changes has been done in two ways: *firstly*, by observing the shifts in attitudes, beliefs and values, and *secondly*, by evaluating success in terms of results. Observations have been drawn as to whether such changes are positive in nature.

Based on such analysis, an attempt has been made to come out with specific conclusions and to develop an appropriate model that can be used by the educational administrators with a view to managing the HEIs better. Under optimal conditions, if an appropriate model is availed of, the educational administrators may become equipped enough to appreciate and measure the effect of changes on the achievement level of an HEI with a vision for performance-improvement. The statistical techniques which have been used for this purpose are (a) *One-Way ANOVA* (*Analysis of Variance*) and (b) *Partial Correlation Analysis*.

The primary information has been collected from the different categories of stakeholders of the selected HEIs by administering a structured set of questionnaires. Along with such questionnaires, the prospectus of each of those colleges has also been considered for this purpose. The secondary information has been collected from various government/semi-government agencies, e.g., *Annual Reports of the Department of Higher Education (Government of West Bengal)* and *West Bengal State Council of Higher Education, Bulletins of the NAAC*, and the *Annual Reports of the UGC.* The nature of data collected is both quantitative and qualitative. The data have been collected, keeping in mind the 7 criteria put forward by NAAC for assessment and accreditation of HEIs.

The population under consideration is the 128 under-graduate degree colleges affiliated to the University of Calcutta. Out of those colleges, 76 colleges are NAAC-accredited and 52 colleges are non-accredited. All the said colleges were approached but only 40 colleges provided the researcher with the required information. Out of those 40 colleges, 30 are NAAC-accredited colleges and the rest 10 are non-accredited colleges. The names of those colleges have not been disclosed, keeping the request of those colleges in mind.The period of field survey was 6 months (April –September 2010).

1.5 Data Analysis

\Data analysis has been done with the help of the NAAC Score Sheet, which consists of all the 7 criteria for assessment and accreditation of any HEI. Each of these criteria has been given weightage by the NAAC (**Table 1**).

Each of these 7 criteria has been further sub-divided into components, with appropriate weightage. The *Key Aspects* and the *Key Aspect-wise* differential weightages under each criterion have also been specified[1] [see **Annexure]**. Each of the 40 colleges has been evaluated and assessed, based on the Score Sheet of the NAAC, with the help of all the information provided by the individual colleges. The scoring pattern is based on Likert's Scale.

- Excellent--- 4
- Good---3
- Average---2
- Poor---1

Using the above scoring pattern, data analysis has been done in a criterion-wise manner (**Table 2** and **Table 3**).

NAAC, 2007

TABLE 1
Criterion-wise Weightage for NAAC Assessment and Accreditation

Serial Number	Criteria	Affiliated Colleges [Weight and Percentage (%)]
1	Curricular Aspects	50 (5%)
2	Teaching-Learning and Evaluation	450 (45%)
3	Research, Consultancy and Extension	100 (10%)
4	Infrastructure and Learning Resources	100 (10%)
5	Student Support and Progression	100 (10%)
6	Governance and Leadership	150 (15%)
7	Innovative Practices	50 (5%)
Total Score		**1000**

TABLE 2
Criterion-wise Average Scores for each of the NAAC-accredited Colleges

Serial No.	Curricular Aspects	Teaching-Learning & Evaluation	Research Consultancy & Extension	Infrastructure & learning Resources	Student support & Progression	Governance & Leadership	Innovative Practices	Overall Grade given by NAAC
1	3.2	3.17	3.35	3.65	3.6	4.0	3.7	B+
2	2.2	2.17	2.2	2.65	2.9	2.73	2	C++
3	1.5	2.48	1.45	1.85	1.6	1.23	1	B
4	1.5	1.81	1.4	1.75	1.6	1.23	1	C++
5	1.5	1.81	1.4	1.75	1.6	1.23	1	B+
6	2.2	2.17	2.2	2.65	2.9	2.73	2	B+
7	1.9	2.77	2.2	2.75	2.9	1.5	2	B+
8	1.7	1.91	1.8	1.85	1.9	1.5	2	B
9	1.5	2.62	1.8	2.3	2.9	1.5	2	B+
10	2.7	3.17	2.3	2	2.6	1.5	2	A
11	1.7	2.68	2.55	3	2.5	1.5	2	B++
12	1.5	1.21	1.45	1.75	1.6	1.27	1	C++
13	2.4	3.47	1.65	2.95	2.6	1.5	1.3	B
14	2.3	2.77	1.8	2.75	2.3	1.6	1.3	B+
15	1.5	1.91	1.4	1.75	1.7	1.23	2	B
16	1.2	2	1.4	2.75	2.6	1.6	1.7	B+
17	2.2	2.86	2.45	2.75	2.6	1.67	2.6	B+
18	1.7	1.93	1.8	2.1	1.6	1.43	1.4	B+
19	1.7	1.93	1.4	1.85	1.6	1.63	1.4	B
20	1.5	1.81	1.4	1.9	1.6	1	1.4	B++
21	1.7	1.93	2.05	2.1	2	1.43	2	B+
22	1.5	2.58	1.65	3	3.5	1.67	2	C++
23	1.5	2.58	1.8	3	2	1.23	1.4	B++
24	2.5	2.89	2.75	3.65	2.5	1.53	2	A
25	1.5	1.98	1.4	2.05	1.6	1.3	1	B+
26	2.2	2.78	1.8	3	2.9	2.73	2	B+
27	3.2	3.91	3.4	4	3.6	4	3.7	A
28	2.2	2.72	1.8	3.65	3.6	1.3	2.1	B++
29	1.5	2.08	2.05	1.9	1.6	1.23	1	C++
30	1.5	2.08	1.8	1.9	1.6	1.23	1	B+

Source: Field Survey

TABLE 3

Criterion-wise Average Scores for each of the Non-accredited Colleges

S. No.	Curricular Aspects	Teaching-Learning & Evaluation	Research Consultancy & Extension	Infrastructure & learning Resources	Student support & Progression	Governance & Leadership	Innovative Practices
1	2	1.98	2.5	3	2.3	1.43	1.3
2	1.2	1.08	1	1.75	1.6	1.43	1
3	2.7	3.7	3	3.65	3.6	2.27	2.7
4	1	1.21	1	1.75	1.3	1.23	1
5	1.9	2.08	1.8	3.15	2.3	2	2
6	1	2.08	1.4	1.75	1.6	1.33	1
7	1	1.91	1.45	1.4	1.6	1	1
8	1.5	1.91	1.4	2.75	1.9	1.67	1.7
9	2	2	1.4	2.6	2	1.93	2
10	1	1.91	1	1.75	1.6	1.23	1.3

Source: Field Survey

Data analysis has been done by taking **Table 2** and **Table 3** into consideration. The entire analysis is divided into two steps.

1. One-Way ANOVA
2. Partial Correlation Analysis

Step I: ***One-Way ANOVA***

The colleges are categorized into four sub-groups.

Group I: All A and B++ grade colleges
Group II: All B+ and B grade colleges
Group III: All C++, C+ and C grade colleges
Group IV: All non-accredited colleges

Taking the above four groups into consideration, ***One-Way ANOVA*** has been done by performing F-test.

The results of ***F-test*** are shown in **Table- 4**.

TABLE 4

One-Way ANOVA---Results

Criterion	Significant Difference	Absence of Significant Difference
I	**---**	**YES**
II	**YES**	**---**
III	**---**	**YES**
IV	**---**	**YES**
V	**---**	**YES**
VI	**YES**	**---**
VII	**---**	**YES**

Source: Worked out on the basis of **Table 2** and **Table 3**

Based on **Table 4**, it can be concluded that only criterion II (*Teaching-Learning and Evaluation*) and criterion VI (*Governance and Leadership*) result in a significant difference in the performance of the colleges. It is to be seen now that, out of these two criteria, which one has a greater effect on the performance of the colleges. For this, initially *Multiple Correlation*

Analysis was done but it failed to give any significant results. Hence, *Partial Correlation Analysis* has been done taking criteria II and VI as independent variables.

Step II: *Partial Correlation Analysis*

The *Partial Correlation Coefficient* has been worked out taking criteria I, III, IV, V and VII as dependent variables with respect to criteria II and VI as independent variables. The results of ***Partial Correlation Analysis*** are presented in **Table 5**.

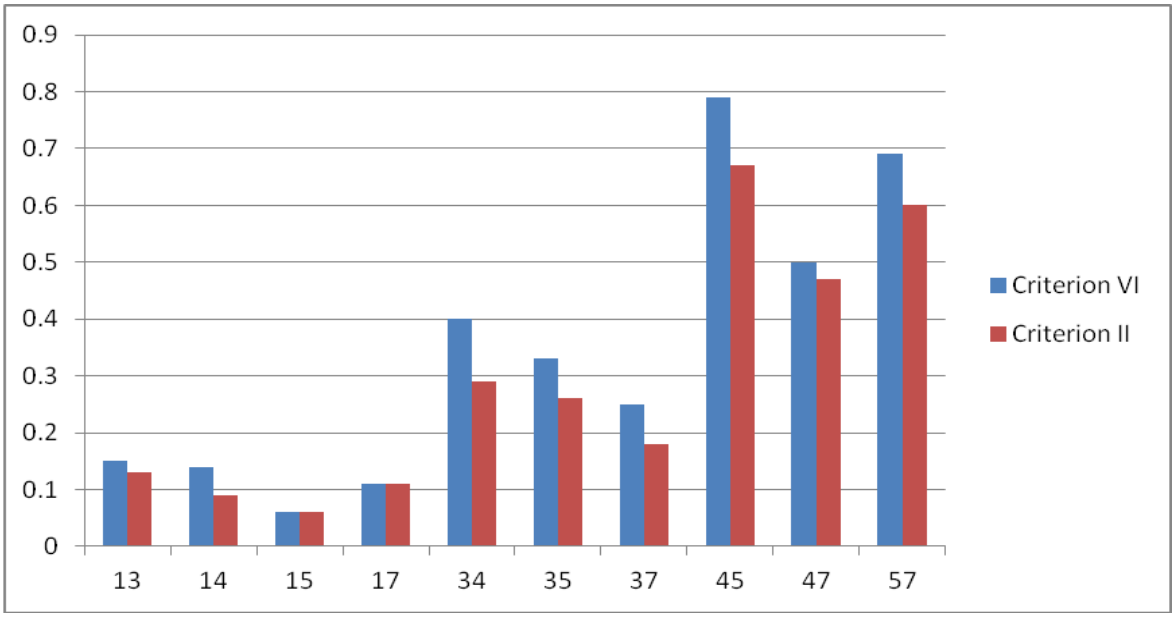
TABLE 5
Partial Correlation Coefficient---Results

Serial No.	Independent Variable: Criterion VI	Independent Variable: Criterion II
1	$r_{13.6}$=0.15	$r_{13.2}$=0.13
2	$r_{14.6}$=0.14	$r_{14.2}$=0.09
3	$r_{15.6}$=0.06	$r_{15.2}$=0.06
4	$r_{17.6}$=0.11	$r_{17.2}$=0.11
5	$r_{34.6}$=0.40	$r_{34.2}$=0.29
6	$r_{35.6}$=0.33	$r_{35.2}$=0.26
7	$r_{37.6}$=0.25	$r_{37.2}$=0.18
8	$r_{45.6}$=0.79	$r_{45.2}$=0.67
9	$r_{47.6}$=0.50	$r_{47.2}$=0.47
10	$r_{57.6}$=0.69	$r_{57.2}$=0.60

Source: Worked out on the basis of **Table 2** and **Table 3**

Table 5 can also be diagrammatically presented with the help of *bar graphs* in the following **Diagram:**

Partial Correlation Coefficient---Results



Note: X-axis=> dependent variables
Y-axis=> r values

From the above diagram, it can be concluded that criterion VI has a greater effect on the performance of the colleges as compared to criterion II.

It is obvious from the analysis that the progress of an HEI depends on *Governance and Leadership*. In other words, it can be said that it is *pedagogical management* that matters and not just *pedagogy* as put forward by the NAAC. To make *pedagogy* effective, *pedagogical management* has to be stable, dynamic and effective. This implies that maximum weightage should be given on *Governance and Leadership*. The importance of *Governance and Leadership* has been somewhat less emphasised by the NAAC. A possible solution to this problem is reassigning the relative weights attached to each of these 7 criteria, resulting in a re-modelling of the NAAC Score Sheet. This would ultimately lead to a more appropriate evaluation of the HEIs.

1.6 Concluding Observations

The purpose of this research has been to examine the importance of *pedagogical management* in the HEIs. The data analysis based on the survey conducted reveals the fact that most of the HEIs are not adequately aware of the importance of the role of management. Even with the availability of excellent facilities, the progress of any institution gets hampered due to *poor governance and leadership*. An effective management, on the other hand, can help in remarkable progress of the institution, even with average facilities. Availability of resources for an institution is not enough. The most important fact is the effective deployment and maintenance of such resources. This is possible only when the management of an institution is robust, stable and dynamic. It should be well-versed with the on-going changes in the society and be able to take effective decisions as and when required.

This raises a question regarding the validity of the weightages allotted to the criteria identified by NAAC for the assessment and accreditation of any HEI. The importance of *pedagogical management* has not been adequately dealt with by NAAC. The data analysis establishes the importance of *pedagogical management*.

From the entire data analysis, it is clear that the most crucial factor for the progress of any academic institution is the concept of *Governance and Leadership*, i.e., the management. The Curricular Aspects (Criterion I) should be in tune with the present demands of the society. There should be appropriate Infrastructure and Learning Resources (Criterion IV) to support the Curricular Aspects. This would also enable good Research, Consultancy and Extension activities (Criterion III). Along with this, there should also be proper Student Support and Progression (Criterion V), and continuous Innovative Practices (Criterion VII). Proper integration of all these with a view to improving the quality of an HEI depends, to a very large extent, on the effectiveness of *Governance and Leadership* (Criterion VI).

1.7 Suggestions

In the light of the findings of this research work, it can be suggested that the NAAC can review its existing assessment and accreditation system with a view to coming out with better performance measurement. There is a need for a revision in the weight allotted to each criterion, identified by the NAAC, for the purpose of assessment and accreditation of any HEI. In this context, the Higher Education Departments of different States and Union Territories also have a vital role to play. The state-level monitoring bodies may also put forward suggestions to the NAAC for an improved assessment and accreditation system in the light of the findings of the study.

1.8 Limitations of the Study

- The overall effect of *Governance and Leadership* on the other criteria has not been analyzed.
- The impact of *Governance and Leadership* on the sub-criteria of the other criteria has not been analyzed.
- Relative importance and impact of the sub-criteria of the criterion VI (i.e., *Governance and Leadership*) on the functioning of HEIs covered have not been analyzed.

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ANNEXURE-1

Criteria	**Key Aspects**	**Differential Weightages** (for affiliated colleges)
I. Curricular Aspects	1.1 Curricular Design and Development	10
	1.2 Academic Flexibility	15
	1.3 Feedback on Curriculum	10
	1.4 Curriculum Update	05
	1.5 Best Practices in Curricular Aspects	10
	Total	**50**
II. Teaching-Learning and Evaluation	2.1 Admission Process and Student Profile	30
	2.2 Catering to Diverse Needs	45
	2.3 Teaching-Learning Process	270
	2.4 Teacher Quality	65
	2.5 Evaluation Process and Reforms	30
	2.6 Best Practices in Teaching, Learning and Evaluation	10
	Total	**450**
III. Research, Consultancy and Extension	3.1 Promotion of Research	15
	3.2 Research and Publication Output	25
	3.3 Consultancy	05
	3.4 Extension Activities	40
	3.5 Collaborations	05
	3.6 Best Practices in Research, Consultancy & Extension	10
	Total	**100**
IV. Infrastructure and Learning	4.1 Physical Facilities	20
	4.2 Maintenance of Infrastructure	10

Resources	4.3 Library as a Learning Resource	35
	4.4 ICT as Learning Resources	15
	4.5 Other Facilities	10
	4.6 Best Practices in the Development of Infrastructure and Learning Resources	10
	TOTAL	**100**
V. Student Support and Progression	5.1 Student Progression	30
	5.2 Student Support	30
	5.3 Student Activities	30
	5.4 Best Practices in Student Support and Progression	10
	TOTAL	**100**
VI. Governance and Leadership	6.1 Institutional Vision and Leadership	15
	6.2 Organizational Arrangements	20
	6.3 Strategy Development and Deployment	30
	6.4 Human Resource Management	40
	6.5 Financial Management and Resource Mobilization	35
	6.6 Best Practices in Governance and Leadership	10
	TOTAL	**150**
VII. Innovative Practices	7.1 Internal Quality Assurance System	20
	7.2 Inclusive Practices	15
	7.3 Stakeholder Relationships	15
	TOTAL	**50**

CRITICAL ANALYSIS ON SOCIAL AND EDUCATION BACKGROUND OF ENTREPRENEURS

(A Case study of entrepreneurs of selected districts of Odisha)

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Abstract

Entrepreneurship, of late, has attached much public interest since it is the focus of bringing industrial growth and had been receiving the attention of the planners, policy-makers, social scientists, economists, industrialists, financial institutions, administrators and academicians. It is regarded as the most crucial factor in the economic development of a country. Educationists have also long been aware of the importance of education in the development of human resources. It may be noted that education, entrepreneurship and development are interrelated. The present paper makes an attempt to study the role of education in the socio economic origin of entrepreneurs and offer suggestions for fostering entrepreneurship in small scale industries of selected districts of Odisha. The authors are of opinion that education can play a great role in the development of entrepreneurship in small scale industries in Odisha.

Key words: Entrepreneur, Age, Education and Generation

Introduction:

An entrepreneur is a person who combines various factors of production, processes the raw material, converts the raw materials in to a finished product and creates utility in the product and sells the product in the market in order to earn profit. It is the extended form of self-employment. As a self- employed person generates employment for himself, an entrepreneur generates employment for himself as well as for others. The entrepreneur possesses employability or employment generation capacity. It is an economic concept. An entrepreneur represents a high level of achievement motivation as well as certain skills, capabilities, attitudes, values and beliefs. It is a pressing need in our economy to promote entrepreneurship as the best career choice. Entrepreneurship of late has attracted much public interest since it is the focus of bringing industrial growth and had been receiving the attention of planners, policy makers, social scientists, economist, industrialists, financial institutions, administrators and academicians. Entrepreneurship is regarded as the most crucial factor in the economic development of country. If some states like Odisha have remained underdeveloped today, it is obviously because of the dearth of entrepreneurship. In underdeveloped regions only few men with growth prospective would come forward for changing the stationary inertia and creating pre-conditions for industrializations, since they are motivated for higher achievements rather than financial gains. Small scale industries contribute significantly to social and economic development objectives such as labour absorption, income distribution, rural development, poverty eradication, regional balance and promotion of entrepreneurship. It generates immediate employment opportunities with relative low capital/investment, promote more equitable distribution of national income, makes effective mobilization of untapped capital and human skills and leads to dispersal of manufacturing activities all over the country, leading to growth of villages, small towns and

economically lagging regions. Educationists have long been aware of the importance of education in the development of human resources. It may also be noted that education entrepreneurship and development are inter-related. Thus, a formal education is always considered as important asset of an individual in building an occupational career. The formal education is expected to increase the supply of entrepreneurs by making available more skills necessary to entrepreneurial endeavor.

Objective of the study

- To study educational qualification of entrepreneurs of area under study.
- To study the age of the of the entrepreneurs at the time of entry
- To know the generation of entrepreneurs the sample area.

Limitations of the Study

- The study is restricted to the selected cities of Odisha only.
- The sample is limited; it may not represent scenario of all the entrepreneurs in Odisha.
- The period of study conducted for the period of 3 months i.e. August to November 2013.

Research Universe and Methodology

With reference to the selection of the research universe the state of Odisha has been selected with specifications to the compulsions of the geographical territory, linguistic boundary, and administrative settlement commonness. Odisha is an Eastern Indian state, the state boundaries are on the Bay of Bengal Sea. South- Andhra Pradesh, West Chhattisgarh and Jharkhand, North- West Bengal having a total area of 1,55,707 Square Kilometers with total population of 36,706,920 (as per Indian census survey-2001) , population density 236 per Square Kilometers, Sex Ratio 972 literacy rate of 63.61%. The state is comprising of 30 districts (Administrative Divisions) and 58 Sub-Divisions.

Sampling plan

In support to the objective of the research there is a primary research through questionnaire administration method in the field through stratified random sampling method covering the state through regional, geographical, economic, cultural, lingual and settlement wise and to analyze the data and derive results from it percentage method used. This method is easy to use and taken as suitable method to compare, keeping in view the objective of the study.

Table-1

Area under study	Questionnaire served	Response	% of response to total response
Berhampur	40	20	19.61
Sambalpur	40	17	16.67
Khordha	40	35	34.31
Cuttack	40	30	29.41
	160	102	100

Source: Compiled from field survey

Analysis of data:

1. Study of Entrepreneurs' educations: City wise classification

Table-2: Entrepreneurs' education: City wise classification

Educational qualification of entrepreneurs		Area of Study				Total
		Berhampur	Sambalpur	Khordha	Cuttack	
Under 10th	Frequency	4	2	3	5	14
	% of qualification with in district	20.00	11.76	08.57	16.67	13.73
10th class	Frequency	3	5	7	3	18
	% of qualification with in district	15.00	29.41	20.00	10.00	17.65
Under Graduate	Frequency	4	3	9	7	23
	% of qualification with in district	20.00	17.65	25.71	23.33	22.54
Graduate	Frequency	6	5	7	8	26
	% of qualification within district	30.00	29.41	20.00	26.67	25.49
Post Graduate	Frequency	3	2	9	7	21
	% of qualification within district	15.00	11.77	25.72	23.33	20.59
Total		20	17	35	30	102

Source: Compiled from field survey

Interpretation: Entrepreneurs' education at the time entry into entrepreneurship can be seen and analyzed in Table-2. It is interesting to note that 25.49% are graduates, 20.59% are post graduates, particularly some in engineering and from other technical disciplines. While under graduates constitute 22.54%, 10th pass constitute 17.65% and rest belongs to the under 10th class. In other words, a low level of education has not thus deterred the under 10th to be ahead of the industrial entrepreneurship. City wise found that in case of Berhampur 20% constitute under 10th, 15% constitute the 10th class, 20% constitute the under graduates, 30% of graduates and rest are post graduates. In case of Sambalpur 11.77% consists of post graduate, 29.41% for graduates, 17.65% of under graduates, 29.41% are of 10th class and rest are under 10th class. For the Khurda, 26.67% belongs to graduate, 25.72 for post graduates, 8.57% for under 10th class and rest are of 10th class. Similarly, for the Cuttack, 16.67% constitute under 10th, 10% of 10th class, 26.67% consists of graduates and rest are post graduates.

2. Entrepreneurs Qualification: Age at the time of entry

Table-3: Entrepreneurs Qualification: Age at the time of Entry

Age at the time of entry		Educational Qualification of Entrepreneurs					Total
		Under 10th	10th	Under graduate	Graduate	Post graduate	
20-30	Frequency	3	2	3	6	3	17
	% of qualification with in district	21.43	11.11	13.04	23.08	14.29	16.67
30-40	Frequency	5	4	7	8	10	34
	% of qualification with in district	35.71	22.22	30.43	30.77	47.62	33.33
40-50	Frequency	4	7	6	9	5	30
	% of qualification with in district	28.57	38.89	26.08	34.62	23.81	30.39
More than 50	Frequency	2	5	7	3	3	20
	% of qualification with in district	14.29	27.78	30.45	11.53	14.28	19.61
Total		14	18	23	26	21	102

Source: Compiled from field survey

Interpretation: On examining the educational level of entrepreneurs across their age at the time of starting their industrial units, one can understand whether there is any influence to push them into industrial entrepreneurship by their level of education. It may be observed from Table-3, that 16.67% of total sample size are age group of 20-30, 33.33% consists of age group of 30-40, for the age group 40-50 it is 30.39% and rest are of more than 50 years age. Thus it is clear that majority consists of graduates, followed by post graduates and others. These observations make necessarily one feel that education plays a vital role to the cause of furtherance of entrepreneurship. Educated people who have joined the industry in their prime age can do lot of good work in the development of nation. It is that age where people can face challenges boldly with more determination and seize the opportunity offered to them. Hence, it can be concluded that people with higher educational level are finding their entry into industry earlier.

3. Entrepreneurs' education: Generation of entrepreneurs

Table -4: Entrepreneurs' education: Generation of entrepreneurs

Educational qualification of entrepreneurs		Generation of entrepreneurs			Total
		First	Second	Third	
Under 10th	Frequency	12	2	0	14
	% of qualification with in district	14.63	12.50	00.00	13.73
10th	Frequency	13	4	1	18
	% of qualification with in district	15.85	25.00	25.00	17.65
Under graduate	Frequency	19	3	1	23
	% of qualification with in district	23.17	18.75	25.00	22.55
Graduate	Frequency	22	4	0	26
	% of qualification with in district	26.83	25.00	00.00	25.49
Post graduate	Frequency	16	3	2	21
	% of qualification with in district	19.52	18.75	50.00	20.58
Total		82	16	4	102

Source: Compiled from field survey

Interpretation: An attempt is made to examine whether there is any relationship exist between entrepreneurs' education and generation they belongs to. Table -4 observes that in case of first generation entrepreneurs, 23.83% consists of graduates, 23.17% consists of undergraduates 19.52 % are of post graduates followed by 10th class and under 10th class. In case of second generation 10th class and graduates jointly leads the table followed by under graduates and post graduates and rest are under 10th. Similarly for third generation post graduates leads with 50% and rest is shared equally by 10th class and graduates. It is interesting to see that there are no respondent who comes under third generation entrepreneurs in case of under 10th and graduates.

Concluding Note

Educational qualification provides only theoretical knowledge of a particular area, which may not useful, even in carrying on producing of the same type of products. In order to run enterprise on efficient line, proper training, motivation and wide exposure become extremely important. It is universally accepted that entrepreneurs can be taught and not made. India in general and Odisha in particular, illiteracy has been main stumbling block for entrepreneurship development. Therefore, the first step to adopt is to provide suitable education and training to the people. The encouragement and development of entrepreneurship culture should become the core part of our education system, so that the young men and women can become job givers and not the job seekers. It also important that the entrepreneurs should develop a proper industrial plan before starting a unit. Undertaking of feasibility study either by him or through outside agencies can be very helpful in this regard. Further, the entrepreneur should take proper training through the government and non-governmental agencies before starting a unit; this enables the entrepreneurs to protect their units from sickness. Low level of education should not deterred one to start an industrial venture. Though, it is a fact that people with higher educational levels are finding their entry into industry earlier. Moreover, higher the level of education, the greater is the chance to start

industry as a first generation entrepreneur. Everyone cannot be a successful entrepreneur. An individual must have certain values and traits to be a successful entrepreneur. The traits and values are need for achievement, need for power, positive work value; moderate job anxiety, risk taking propensity, internal control orientation, high level of aspiration and preference for participative and nuturant-task styles of leadership.

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WATER SCARCITY IN IRRIGATED AGRICULTURE: CRITICAL ISSUES CONCERNING FUTURE NEEDS

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Abstract

Due to the fact that irrigated agriculture accounts for 90 percent of total consumptive use and present the global irrigation efficiency is around 40 percent, there exists significant scope to raise irrigation efficiency by reducing the losses which are not used by plant for productive purposes through canal lining, micro irrigation, irrigation scheduling etc considering consumed and non-consumed fractions of water withdrawal assessed per catchment and not only at individual farm level. Optimal use of water for maintaining or even increasing total crop productivity can be achieved through management of soil water and irrigation scheduling to minimize the negative effects of water deficits on yields. Genetic approaches and crop breeding also have greatest impact on increasing water productivity. Weeds being the major non beneficial consumers of water use of mulches for weed control may reduce non beneficial evapo-transpiration and soil evaporation. Supplemental irrigation and use of advanced irrigation technologies, precision agriculture tools and state-of-the-art delivery systems, if fully implemented for successful deficit irrigation management, can increase water productivity to an appreciable extent. Geographically relocating certain crops to their most productive areas and soils creates an option for most economically efficient use of resources. Application of anti-transpirant materials or reflecting materials can reduce daily ET up to 5% to 10% successfully for about two weeks under rainless weather conditions. The shift of water from less to more beneficial uses can significantly enhance the productivity of water. Investing in rainfed agriculture as part of a water scarcity coping strategy has high potential to improve productivity where yields are still low. Possibilities also exist to grow crops in places where climate enables high water productivity at lower cost and trading them to places with lower water productivity.

Keywords: Irrigated Agriculture, Future Water Need, Water Management, System Optimization, Productivity

1.1 INTRODUCTION

It is the irrigated agriculture, which has shaped the economies of many semiarid and arid areas, permanently coloring the social fabric of numerous regions around the world. The irrigated agriculture constituting approximately 17% of the world's total cultivated farmland produces nearly 40% of total food and fiber production (Evans and Sadler, 2008). The agricultural sector accounts for 70 percent of global freshwater withdrawals, and more than 90 percent of consumptive use. It is also the sector with the largest scope or potential for adjustment (FAO, 38, 2012). It is estimated that as a major consumer of the total freshwater, irrigated agriculture alone accounts for about four fifths of the total freshwater available worldwide (Evans and Sadler, 2008). Further, steady economic development has also raised the demand for a more varied diet, including meat and dairy products, putting additional pressure on water resources. Situation becomes further complex due to rapid urbanization, environmental consciousness, recreation, tourism, and related concerns. Considering rise in the per capita demand for food due to increase in rapid urbanization and steady economic development, it is expected that 60 percent more food will be needed between 2012 and 2050 to satisfy the demand of an eventual population of more than 9 billion (UN-Water, 2012). As per

FAO estimation the global agricultural production would need to grow by 60 percent between 2006 and 2050 to keep up with growing food demand (Bruinsma, 2009). It is also expected that both the proportion of cropland under irrigation and the share of irrigated production will increase, resulting in greater demand for agricultural water (Bruinsma, 2009). The net result is that agricultural water use will be increasing significantly. Hence agriculture will become both a cause and a victim of water scarcity.

It is projected that 60% of the global population is going to suffer from severe water scarcity by 2025 (Qadir et al., 2007). Recently, the United Nations in its report have estimated that increased cropping intensity to meet world food needs will require an increase of 40% in the area of harvest crops by 2030, and that the amount of water allocated to irrigated agriculture must increase correspondingly by 14% (U.N.E.S.C.O, 2006). However, it is not assured that the needed water will be available by that time.

In addition, as environmental flow is a term used to describe the quality and timing of water flows required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these (Brisbane Declaration, 2007), maintaining a prescribed regime of environmental flows may also reduce the amount of water available for withdrawal of water upstream or transfer availability downstream.

Further, Global warming has its potential impacts on temperatures, annual precipitation levels, and regional rainfall distribution patterns and leads to uncertainty in the spatial and temporal availability of water supplies. Also timing of precipitation and runoff from mountain snowmelt differs from historical records, leading to more frequent and sustained intense weather events such as droughts and floods. These hydrological uncertainties may be compounded leading to modifications in precipitation and temperature having larger effects on crop evapo-transpiration (ET) in near future. The combination of these factors may also force changes in the distribution of existing cropping patterns. Hence, the pressure on water resources will be alarming and various issues related to water will be the primary natural resource issue of the 21st century (Seckler and Amarasinghe, 2000). As irrigated agriculture is the largest consumer of available fresh water globally, there will be economic and social pressures on all water users to reduce irrigation water use.

Furthermore, climate change is expected to alter hydrological regimes and the availability of freshwater, with impacts on both rainfed and irrigated agriculture (UN-Water, 2009, 2012; FAO, 2008; FAO, 2011a). Projections show due to climate change there are possibilities of higher variability in rainfall distribution, an increase in the frequency of extreme events, reduction in river runoff and aquifer recharge affecting the availability of water and adding pressure on water resources. A combination of reduced river base flows, flooding and rising sea levels are predicted to affect highly productive irrigation system (FAO 38, 2012).

In the above context there is an acute need to seriously search novel approaches to indicate how agricultural water management can play a more proactive and effective role in response to increasing concerns over global freshwater scarcity as agriculture will continue to be the most important user of water. Hence, the present study will focus on various approaches of water management in irrigated agriculture to maximize benefits from a given amount of water in the context of increasing concerns over global warming and related climate change effects with emphasis on environmental sustainability.

1.2 WATER MANAGEMENT APPROACHES IN IRRIGATED AGRICULTURE

Various approaches of water management to ensure that a given supply of water is distributed to intensify agricultural production while maintaining or even increasing total crop productivity reducing environmental degradation can be discussed as follows:

1.2.1 Reduction of Water losses in Irrigated Agriculture

As global estimate of irrigation efficiency are around 40 percent (FAO 38, 2012), there exists significant scope for water savings by reducing water losses by way of various

management strategies. So far as irrigated agriculture is concerned it has been widely accepted that, on average about 40 percent of the water supplied for irrigation purposes, a large part of these is lost (not used by plant for productive purposes) and returns to the river basin in the form of return flow or aquifer recharge (FAO 38, 2012). Hence water losses in irrigated agriculture can be referred to that part of supplied water which is not used to meet the evapo-transpiration of plants for productive purposes. From the engineering concept of water use efficiency which is defined as the ratio between the amount of water evapo-transpired by plants for productive purposes and the amount of water withdrawn or diverted from its source (Keller and Keller, 1995; Keller et al., 1996; Seckler, 1996; Perry et al., 2009; Frederiksen and Allen, 2011; Gleick, Christian-Smith and Cooley, 2011), it is ascertained that water losses can be minimized by maximizing water use efficiency.

Further, part of the water 'lost' between the source and final user finds its way back into the hydrological system, either through percolation into the aquifers or by return flow into the river systems (Perry, 2007). The share of water lost through non-beneficial consumption, either through evaporation or drainage into low quality water bodies or to the sea, varies extensively according to local conditions. A clear understanding of the scope for real gain in reduction of losses is therefore necessary to avoid designing costly demand management options that will have little effect on the availability of water for the hydrological unit considered as a whole.

The components of water withdrawal at field level that must be considered when designing irrigation water management programmes can be divided into consumed and non-consumed fractions (Perry, 2007; Perry et al., 2009; 2030 water resources group, 2011). The consumed fraction consists of the part of water withdrawn which evaporates, either directly from the soil or through plant transpiration. The non-consumed fraction leaves the field, either through deep percolation or flow to downstream land and watercourses. Part of the consumed fraction is put into beneficial use through crop transpiration or retained as crop water content, while non-beneficial consumption is lost through bare soil evaporation. Of the non-consumed fraction, a non-recoverable part will be lost to further use, either flowing to inaccessible groundwater sources, salt sinks or to the sea, or its quality will be affected to the extent that it cannot be used further, while the rest will flow downstream as return or recoverable flow and is available for further use (Perry, 2007; Perry et al., 2009; 2030 water resources group, 2011).

Hence measures to reduce losses must be assessed per catchment, and not only at individual farm level. Effective interventions to reduce losses in irrigation therefore require a careful evaluation of all the elements of the water balance over a given hydrological system, identifying in particular the share of water supplied that is lost through evaporation, the part that returns to the river or the aquifer and is or can be re-used downstream, the part that is put into beneficial use through evapotranspiration by crops, and the part which is not consumed and is not recoverable (Molden, 1997; Hsiao, Steduto and Fereres, 2007).

1.2.1.1 Measures to Reduce Water Losses

Canal Lining

The most widely promoted conservation measures to reduce water losses include canal lining and conversion from gravity to pressurized irrigation, in particular localized irrigation. Canal lining in large surface irrigation schemes can be considered as most suitable approach to reduce losses in irrigation. Canal lining when designed for areas with large, continuous unconfined aquifers, such as the Ganges basin in India, such interventions may be designed to improve water control and may reduce local leakage. However, this may not necessarily induce significant water saving across the whole command area. Further, with increasing importance of conjunctive use of surface water and groundwater through the digging of shallow groundwater wells in individual farm plots, gravity irrigation systems with poor conveyance efficiency play an increasingly important role in terms of aquifer recharge. Hence canal lining may be considered justified and efficient in minimizing losses when it is required to improve water control, or in areas where conveyance losses are high.

Micro Irrigation

Micro-irrigation is the slow rate of water application at discrete locations at low pressures, and includes trickle or surface drip, subsurface drip, micro sprinklers and bubblers. It has made tremendous strides over the past three decades, and has become the modern standard for efficient irrigation practices for water conservation and optimal plant responses. These systems have small diameter tubing laid in the field, either on the surface or underground, with small water application devices that apply water (usually a drip or very small stream of water) directly to a plant at low pressures. These systems are particularly advantageous on widely spaced tree and vine crops as well as high-value vegetable crops (Evans and Sadler, 2008). Micro irrigation is an extremely flexible irrigation method and has the potential for appreciable water savings because of precise, high-level management practices. Due to its high cost and intensive management requirement currently its use is restricted to relatively small fields. However, this method can be applied to almost all cropping situation, climatic zone and over a wide range of terrain. This type of irrigation has a greater potential where soils are of very low or very high infiltration rates and salt affected. But, presently micro irrigation is used on less than 1% of lands worldwide, primarily because of its recent development and high initial capital cost. Micro irrigation can be used on most agricultural crops, although it is most often used with high-value crops such as vegetables, ornamentals, vines, berries, olives, avocados, nuts, fruit crops, and greenhouse plants because of its relatively high cost and management requirements.

Scientific Irrigation Scheduling

Scientific irrigation scheduling refers to application of optimum quantity of water at most appropriate time and space so that crop stress and over-application is avoided. It improves the ratio of yield to consumptive use (water productivity), primarily because of improved timing of water applications. However, it is always essential to combine the effects of scheduling of irrigation with improved farm practices. The irrigation scheduling can be further improved by converting irrigation system from gravity surface irrigation to pressurized drip or sprinkler systems.

1.2.2 Improving Crop Water Productivity

Under this type of demand management, users are encouraged to increase agricultural productivity i.e increasing the amount of output per volume of water used through reduction of water losses and waste, cutting out low value water applications, and maximization of the value obtained from their remaining water. The term productive use differs from efficient use in the sense that efficiency emphasizes the 'process' and is a dimensionless ratio between outputs and inputs, while productivity puts the emphasis on the output (FAO 38, 2012).

Improving crop water productivity means optimally using water for crop production while maintaining or even increasing total crop productivity through improved management and advanced irrigation technologies. Various strategies/methods to maximize crop water productivity includes: a) improving soil water management mechanism, b) implementing managed deficit irrigations, c) improving irrigation system through modernization of infrastructure, d) use of supplemental irrigation practice, e) introducing site-specific irrigation, f) spatially optimizing production, g) suitable site specific crop selection, i) minimizing crop evapo-transpiration

1.2.2.1 Methods to Improve Crop Water Productivity

Improving soil water management mechanism

Maximization of the productivity of water by managing soil water can be achieved through proper design of water delivery and farm irrigation system for application of required amount of water at the right time with an eye on the optimal use of available rain water. Further, management of irrigation water under severe to moderate soil water deficit conditions during the growing period of crops can increase crop productivity while reducing the amount of water applied. This implies economically optimization of production for each unit of water used can maximize crop productivity while reducing the amount of water applied.

Implementing managed deficit irrigations

The deficit irrigation aims at increasing crop productivity while reducing the amount of applied water such that irrigation is managed under severe to moderate soil water deficit conditions during at least part of the growing season (Evans and Sadler, 2008). Deficit irrigation is gaining popularity in various parts of the world. Currently it is practiced in large areas in the Texas High Plains and in the Columbia Basin in Oregon and Washington on annual crops (Musick et al., 1988; English, 1990) and on perennial crops (Drake and Evans, 1997; Evans, 1999). In addition to water shortages, the need for deficit irrigation management strategies may be induced by increased costs of inputs such as electricity, labor or combinations of external factors, which may be economically substituted for water (Nieswiadomy, 1988; Edwards et al., 1996).

Managed deficit irrigation strategies can potentially reduce agricultural water use, but they require excellent control of the timing and amounts of the applied water. Deficit irrigation strategies can also result in high field application efficiencies as crop water use can be substantially less than potential ET.

However, improperly managed deficits irrigation may also affect the harvestable quality of some crops.

As different crops have different allowable deficit levels, they respond much differently to manage deficits. For example, some potato varieties can withstand very little drought without significant quality problems, whereas wine grapes (Vitis vinifera) can produce high-quality grapes with only about 50% of that of a fully irrigated vine as long as the water applications are properly managed in time and amount over the season (Evans, 1999). Hence care has to be taken to economically optimize production for each unit of water (Evans and Sadler, 2008).

Improving irrigation system through modernization of infrastructure

The most important reasons to go for system improvements are to reduce labor by automation, minimizing water costs by conservation (higher irrigation efficiencies) and expanding irrigated area with the diverted water volume (irrigation capacity). Further, there are several management options for reducing water losses. Making small pits or basins (mini reservoirs), commonly called furrow diking, in sprinkler irrigated fields to hold water becomes beneficial. Irrigation at night can reduce evaporation losses.Weeds are major non beneficial consumers of water and their control is important to maximize water productivity. However, use of chemical to control weeds appear costly and may have unwanted environmental consequences. Use of mulches for weed control may reduce non beneficial evapo-transpiration and soil evaporation.

Reduced tillage techniques can reduce soil evaporation losses. Drip irrigation technologies can conserve water by greatly reducing soil evaporation and maximizing crop water productivity. These strategies could also incorporate alternative cropping systems including winter crops and deep rooted crops that maximize use of stored soil water and some nutrients.

Use of supplemental irrigation practice

Supplemental irrigation complements reasonably sufficient rainfall and stabilizes production despite short-term droughts. However, this practice is important primarily in arid and semiarid areas where it becomes possible to apply only one or two irrigations per season. This is a form of managed deficit irrigation where the impact of the timing and applications of limited water supplies relative to only rain-fed agriculture can be very positive (Sojka et al, 1981; Zhang and Oweis, 1999). These techniques imply applying water during critical growth stages so that there is optimal benefit per unit volume of water per unit quantity of crops of interest produced.

Introducing site-specific irrigation

Site specific irrigation technology to maximize crop yield per unit volume of water have a great potential in arid and semi arid regions. Experiments show that potential water savings under non stress conditions (maximum yield) using site-specific technologies are probably on the order of about 5% or less, but can be increased up to about 15% to 30% (Sadler et al., 2005). By aligning irrigation water

application with variable water requirements in the field, total water diversions may be reduced and, almost certainly, deep percolation and surface run off can be reduced.

Spatially optimizing production

Geographically relocating certain crops to their most productive areas and soils, thereby minimizing irrigation amounts and maximizing overall efficiencies (spatial optimization) creates an option for improving the productivity of water. Relocating specified crops to climatic regions and soil types that best suits to maximal output would be the most economically efficient use of resources

Site specific crop selection

In arid and semiarid areas where there is scarcity of water resulting in frequent partial season droughts, crops that mature more quickly, such as small grains, cool season oil seeds (e.g., mustards, camelina), or various pulse crops such as peas and lentils are advisable. Shifts to deep rooted, drought resistant crops such as sunflower and safflower may maximize use of precipitation water stored in the soil. However, longer season crops such as maize (corn) may have reduced yields.

Minimizing crop evapo-transpiration (ET)

Daily ET can be reduced up to 5% to 10% after the application of anti-transpirant materials (e.g., stomata closing type chemicals such as phenyl mercuric acetate or Atrazine, or reflecting materials such as finely powdered white clays like Kaolin), but efficacy was limited to about two weeks under rainless weather conditions (Gale and Hagan, 1966; Davenport, 1967; Agarwal and De, 1979; Yadov and Singh, 1981). The purpose of film-type anti-transpirants (i.e. various long-chain alcohols) was to block water loss, but they tend to block photosynthesis more than they block transpiration because CO_2 molecules are 1.6 times larger than water molecules (Evans and Sadler, 2008).

1.3 Reallocation of Water

The shift of water from less to more beneficial uses can be achieved through a combination of pricing, other market mechanisms and administrative devices. Once essential human and environmental water needs have been met, applying a 'shadow price' to the remainder of this scarce resource would encourage its application to the most productive (or beneficial) purposes (FAO 38, 2012). In some countries, inter sectoral allocation or re-allocation of water is achieved through administrative measures. Whether re-allocation is made through market or administrative devices, society has to set limits on transfers to protect third parties, the environment and the wider social interest. Subject to these conditions, competition for water can be conducive to improved allocation efficiencies.

1.4 WATER MANAGEMENT OUTSIDE IRRIGATION WATER DOMAIN

The agricultural response to water scarcity also lies partially outside of the water domain. Some important measures that can possibly help managing water demand outside of the water domain are: a) reduction of losses in the post-harvest value chain, b) reduction in demand for irrigated production through substitution by imports of rainfed staples, and c) reduction of per capita agricultural water demand, d) Use of genetic approach.

1.4.1 Reduction of losses in the post-harvest value chain

Beyond agricultural production, substantial savings of water can also be obtained by addressing the issues of waste in the food chain, diets, and the role of agricultural trade. Losses and wastages occur all along the food chain, and have been estimated at up to 50 percent of production in developed countries (FAO 38, 2012). The part of these losses may be irretrievable, hence it is wise to carefully identify the major sources of losses and assess the scope for their reduction.

1.4.2 Reduction of demand for irrigated production through substitution

These options include enhanced production in rainfed agriculture. There are several reasons to consider investing in rainfed agriculture as part of a water scarcity coping strategy. However, the opportunities vary greatly from one place to another. In places where climate is

conducive to rainfed agriculture, there is high potential to improve productivity where yields are still low. Here, a combination of good agricultural practices and weather insurance schemes can improve agricultural productivity with little impact on water resources.

It shall be pertinent to mention that the concept of 'virtual water' was developed in the 1990s to indicate that in a reasonably safe and interdependent world, gains in water productivity can be achieved by growing crops in places where climate enables high water productivity at lower cost and trading them to places with lower water productivity (FAO 38, 2012).

1.4.3 Use of genetic approaches

Genetic approaches to raise water productivity focuses on the selection of varieties with growth characteristics and tolerances (i.e. heat, cold, salinity, pests, drought, shorter growing seasons, earlier flowering, and more efficient nutrient use) matched to relatively location-specific conditions (Evans and Sadler, 2008). Crop breeding also have greatest impact on increasing water productivity by selecting for optimal growing season lengths and harvest dates that take maximum advantage of rainfall timing at critical growth stages for each region. Depending on genetic and environmental interactions, genetic improvements may play a major role, but are unlikely to create major shifts in water use efficiency (Sinclair et al., 2004; Passioura, 2006).

1.5 SYSTEM-LEVEL OPTIMIZATION

As an effort to reduce water scarcity by way of managing water demand, all the above components on a specific zone level can be integrated and the whole system can be optimized. Maximization of water productivity is possible if all terms that do not produce yield were eliminated, leaving all water for productive use only. However, in the systems perspective, some uses that do not contribute to yield may also lead to long-term yield. For example, leaching requirement in arid and semiarid areas never contribute to yield immediately but irrigation without some leaching can eventually lead to soil salination. Similar is the case of evaporation as it helps to meet the energy balance, and loss from one system may be the water supply to another system at watershed or catchment level.

In addition, there also exists scope for multi-objective analysis of all the above components on a specific zone level to maximize the terms that increase water productivity and to minimize the terms that do not produce yield within the specific time frame within the constraints of short term as well as long term sustainability of resources and environmental requirements.

1.6 CONCLUSION

As irrigated agriculture alone accounts for 70 percent of global freshwater withdrawals and more than 90 percent of consumptive use, it has to be made economically and environmentally sustainable due to the fact that society cannot afford to lose dependence for food, fiber, feed and fuel production from irrigated lands. Further, due to global warming and consequent climate change hydrological regimes is expected to alter thus decreasing the availability of freshwater with impacts on both rainfed and irrigated agriculture, making the situation more critical. Hence it is very much needed to maximize production per unit volume of water supplied per unit area of cropped field per unit time with environmental sustainability through various demand management approaches.

The demand management programmes may be designed considering consumed (evaporation directly from the soil or through plant transpiration) and non-consumed (deep percolation or flow to downstream land and watercourses) fractions of water withdrawal. Hence measures to reduce losses must be assessed per catchment, and not only at individual farm level. In view of above various measures that can be considered as conservation measures to reduce losses in irrigated agriculture.

Optimal use of water for crop production while maintaining or even increasing total crop productivity through improved management and advanced irrigation technologies can be achieved through various strategies/methods. The productivity of water in irrigated agriculture can be raised through management of soil water and selection of most appropriate irrigation

volume and timing to minimize the negative effects of water deficits on yields.

Modernization of irrigation, use of advanced irrigation technologies, precision agriculture tools and state-of-the-art delivery systems, if fully implemented for successful deficit irrigation management, can increase water productivity to an appreciable extent. Further, water savings under non stress conditions (maximum yield) using site-specific technologies have a potential to bring down the water need to the order of 15% to 30%. Managed deficit irrigation strategies can potentially reduce agricultural water use, but they require excellent control of the timing and amounts of the applied water. Application of anti-transpirant materials or reflecting materials can reduce daily ET up to 5% to 10% successfully for about two weeks under rainless weather conditions. The shift of water from less to more beneficial uses can significantly enhance the productivity of water which can be achieved through a combination of pricing other market mechanisms and administrative devices.

Beyond agricultural production, substantial savings of water can also be obtained by addressing the issues of wastes in the food chain, diets, and the role of agricultural trade. It is also always important to consider investing in rainfed agriculture as part of a water scarcity coping strategy. In places where climate is conducive to rainfed agriculture, there is high potential to improve productivity where yields are still low. Possibilities also exist to grow crops in places where climate enables high water productivity at lower cost and trading them to places with lower water productivity. Increasing consumption of meat and also dairy products increases water consumption, as their production requires large volumes of water.

To conclude, it shall be pertinent to mention that in the era of increasing water needs, there is an urgent need to explore the specific knowledge and technologies required to minimize water use with system level optimization while maintaining reasonable production levels to satisfy the growing needs of food, fiber, feed, and fuels in addition to environmental, recreation and municipal requirements with required degree of sustainability.

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MICA INDUSTRY OF JHARKHAND: PROBLEMS AND CHALLENGES

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Abstract

There is huge demand of good quality of mica in the global cosmetics market. Since Jharkhand is among the largest producers of Ruby Mica, it has huge market opportunity. But mica industry in Jharkhand is totally unorganized. Illegal mining as well as use of child labours in the State's mica mines are turning out to be the biggest obstacles in the way ahead. World's reputed cosmetic companies are reluctant to import mica from Jharkhand due to alleged involvement of child labors in the state's mica mines. Now time has come when state government as well as central government must take some serious steps to stop the use of child labours in this industry and also take some concrete actions to stop black marketing and illegal mining of Mica in the state. Apart from these problems, state's mica industry is also facing serious infrastructural problems, that need serious interventions.

Introduction

The word "mica" is thought to be derived from the Latin word micare, mining to shine, in reference to the brilliant appearance of this mineral (specially when in small scale). Mica is a class of silicates, having a prismatic angle of 120 degrees, eleminently perfect basal cleavage affording thin, though laminate of scales, color less to jet black, transparent to translucent, of widly varying chemical composition, and crystallzing in the monoclinic system. Jharkhand- an India's poor, remote east, is the biggest producer of Mica.

The mica that gives sparkle to the world's most beautiful faces brings only few rupees to the poor producers of it. Mica is a mineral coveted for centuries for its unique lustre. But its numerous uses in modern products now make it a valuable commodity. It is mica that gives make-up products such as eyeshadow, nail polish, lipstick and concealer their sparkle. Mica gives automotive paints their shine, is used in building materials, and as an insulator in electronic chips. It is found in lasers and radar.

Jhumri Telaiya of Jharkhand became famous in India in 1957 owing to its connection with Vividh Bharati, a nationally broadcast radio service of the All India Radio. But, very few people know that the little-known town, Jhumri Telaiya was once a major mica mining centre in the country. While laying a railroad through Koderma in 1890s, the British first discovered vast mica deposits in the region. Mining activities started soon after and many mining houses were established. Prosperous businessmen built huge mansions in Jhumri Telaiya. Till late 1960s, Mercedes and Porsche cars, and thoroughbreds from Arabia used to be common in Jhumri Telaiya

The city once boasted of most number of phone connections and phone calls made in India. Most of the mica business, was moved to the government-owned corporations sometime in 1973-74 through a government venture called as Bihar Mica Syndicate which was having Mica mines in Sapahi, 40 km from Jhumri Telaiya. This government venture was renamed to Bihar State Mineral Development Corporation (BSMDC), which is now known as Jharkhand

State Mineral Development Corporation.Most of the mica used to be exported to USSR, for space and military equipment. With the dissolution of the USSR and the discovery of a synthetic substitute for mica, the mining activity declined in 1990s. Koderma district was famous for its mica production worldwide and the district is known as "Abarakh Nagari". But gradually excavation of low quality of mica ore and high cost of production results in closure of mica related industry. Today Out of 8 (eight) mica factories are closed and only 2 (Two) are functional namely: M/s Daruka & Company and M/s Vinod Bajaj Mica plates and powder are being exported.

The Koderma district and the Lokai-Indarwa area covers the southern part of Great Mica-Belt of Jharkhand, Bihar and India. Previously the Mica belt was known as Bihar mica belt which extends for a distance of 160 km having an average width of 25 kms. The mica belt strenches from Gurpa in Gaya district in the west through Nawada, Koderma, Hazaribag, Giridih in Jharkhand and Jamui as well as Bhagalpur district of the Bihar state in the east. Its maximum width is about 40 km at Koderma-Hazaribagh-Nawada area. The whole belt encompasses roughly 4,000 sq. km. around area and lies on the north fringe of Chotanagpur plateau and runs in an east-north east to west-southwest direction.

India is the largest producer of sheet mica. And, Jharkhand is the largest producer of Only high-quality muscovite film mica, which is variously called India ruby mica or ruby muscovite mica in India. It is s used as a dielectric in capacitors. Sheet mica is used in electrical components, electronics, isinglass, and atomic force microscopy. Other uses include diaphragms for oxygen-breathing equipment, marker dials for navigation compasses, optical filters, pyrometers, thermal regulators, stove and kerosene heater windows, radiation aperture covers for microwave ovens, and micathermic heater elements. Mica is birefringent and is therefore commonly used to make quarter and half wave plates. Specialized applications for sheet mica are found in aerospace components in air-, ground-, and sea-launched missile systems, laser devices, medical electronics and radar systems. Mica is mechanically stable in micrometer-thin sheets which are relatively transparent to radiation (such as alpha particles) while being impervious to most gases. It is therefore used as a window on radiation detectors such as Geiger-Müller tubes. Muscovite splittings from India accounted for essentially all domestic consumption. Mica mines in an around Koderma are Bandarchua, Suggi, Pesra-Uparchala, Khalaktambi, Dhab, Dhanapahari, Guthwa, Domchach, Kushana, Dashro, Dumerdiha, Katiya, Arwatanr and Jalahia etc.

Demand

Growing inclination of cosmetic industry towards natural mineral products like mica is a good opportunity for Indian mica industry to revive itself. Today the main source of this material is India, which accounts for 60% of global production and possesses an industry that is estimated to have grown by 8.5% during the last two years. Nonetheless, concerns about the safety of the country's mica supply chains are increasing. According to the Australian newspaper The Age, child labour is endemic in India's mica mining business and 86% of the country's mica exports in 2010-2011 were unregulated.

Production figures

India officially produces about 15,000 tonnes of crude and scrap mica a year, according to the government's Bureau of Mines. It has a few hundred tonnes stockpiled. Yet it exported more than 130,000 tonnes - more than eight times the official production figure - in 2011-12, more than half of it to China.

At present, the majority of mica mining and trade is illegal, in India The bulk of India's exports of high-quality mica flakes come from illegal mines and much of it from the work of child miners But where the truckloads of mica are going, and for what purpose, is deliberately kept hidden by the suppliers who are at the beginning of a complex and clandestine supply chain.

Export figures have always consistently exceeded production figures. The report of production level indicates a steady decline from 21,902 T in 1970 to 9608 T in 1984, the percentage of fall being more than 56% during this 15-year period. It is interesting to note however, that the decline in production does not seem to have affected the capabilities to meet the export demand. It is logical that the production was regulated in accordance to the export demand.

Table 1.1
Import and Export of Mica
Since 2003-2004 to 2008-09

Year	Export		Import	
	Quantity (kgs)	Value (Rs.)	Quantity(kgs)	Value (Rs.)
2008-09	417639	262435685	1057344	267287866
2007-08	373584	255700230	1450776	237743683
2006-07	327738	255420579	393354	124441236
2005-06	330972	247478780	260843	82217448
2004-05	305639	219399766	126692	42452292
2003-04	328654	242515310	96297	36954653

Source:- Directorate General of Commercial Intelligence & Statistics, Ministry of Commercial & Industry, Govt. of India,

Present Condition of mica industry in Jharkhand.

Mica industry in Jharkhand is little better than a black market, dependent on a huge unskilled workforce, forced into working for lower and lower prices. Profits are made off the backs of children.

According to some reports Jharkhand mica is extracted by organisations whose certification of ethical practice through an audit process cannot be guaranteed. Working condition is also not good at all. Some place in the region in which mica is mined is too dangerous for visitors to arrive unaccompanied. There's also the problem that evidence of child labour is frequently hidden during these visits.

A child labour excavate approximately 10 kg of the mineral and earns 50 fifty rupees daily Depending on its quality and type, mica on the international market can fetch anywhere from several dollars a kilogram to more than $1000. The work is hard and dangerous. Children working risk snake and scorpion bites, and the hollowed-out caves they mine in often collapse. They suffer cuts and skin infections, as well as respiratory illnesses, such as bronchitis, silicosis and asthma. It does not matter whether mica mines are closed in state government papers, illegal mining is always there. Two decades ago, in the face of environmental concerns and in an effort to better regulate the mica industry, Bihar government shut mines across the state. But the closures have driven child labour further, literally and metaphorically, underground. In Jharkhand, small village children sell their mica to small traders, who consolidate several villages' work to sell on to bigger suppliers, who sell it on to exporters and - usually through China - to the world's cosmetics houses, paint companies and electronics manufacturers. "It is like a mafia - there is a black market for this, there are subcontractors in each village who rely on these children's labour. But the miners don't know where the mica they mine ends up. They are the third, fourth, fifth

layer in the supply chain, and the subcontractors and the suppliers deliberately don't tell them where it goes."Jhumri Telaiya, whole streets are dedicated to the mica trade, most of it black market. Men in kurta pyjamas sit in front of enormous sacks full of mica flakes for export.

According to locals, government closures of legal mines have simply forced people into working illegally.'The illegal mining continues. Hundreds of thousands of villages are involved in this trade. They are dependent on it, and they are very poor. Without this they would have no income at all.

In all of India, only Jharkhand has the high-quality mica, the quality for the cosmetics industry, so the demand is strong. Ninety per cent of the mica mined in Jharkhand goes overseas; electronics, paints, automobiles and cosmetics industries are the major buyers. interestingly through illegal mining.

But it is not illegal mining and child labor only creating trouble for the Mica Industry in Jharkhand. In India, Mica mining is purely a state subject; the mines are owned by the respective State Governments and are leased out to the miners based on merit as decided by the State Governments. The process of mining is highly speculative in nature and so far no scientific methods have been established to explore the occurrence and exploit the deposits of the mineral on a cost-effective basis. In the absence of scientific methods, the method generally adopted is to excavate a few trial pots to ascertain whether a particular pegmatite vein is rich enough in mica or not. If the process meets the day to day expenditure, further mining is followed up; otherwise the area is abandoned and a new area is tried. This is wholly a hit-and-miss affair.The time has now come for India to systematically study the occurrence of mica and to follow cost-effective methods of mechanical mining operations. As no other country is so rich in deposits of block mica as India, it is essential for India to develop methods of its own rather than depend on other countries for import of such technology.

Unhealthy competition among the traders failed to stimulate growth in the unit value realization of processed mica due to the development of substitutes and also the introduction of scrap mica –based products. Hence mining operations became almost uneconomical and resulting several mines closure

The rationalization of price structure after canalization and incorporation of a Government organization for such a purpose subsequently infused life into the morbid industry and offered stability to continuing operation. However, this step has not adequately met the situation and calls for a thorough review of mining operations vis-à-vis changing export trends. Details of the working mines compared to the total number of closed mines as on 1.1.1982 are given in Table 1.* Since 1982, government of India has not released any data.

The decrease in number of mica mines in India from 1961 to 1970 has been at the rate of about 1.9% per year on average. The reduction from 1970 to 1975 was about 52.5%; from 1975 onwards, the reduction stabilized at a level of 0.18% per year on an average. The above figures are based on IBM sources. There seems to be some discrepancy in the information regarding the number of reporting mines between IBM and DGMS. The discrepancy seems to be due to the differences in definition of a mine for conservation and development purposes (IBM) and safety regulations (DGMS).

Other problems of mica mining in Jharkhand:

- Increasing costs of electrical energy, explosives, transportation charges etc.;
- Demand and value are not commensurate with the quantity and cost of production;
- Non-availability of credit facilities;
- Old techniques;

In 1970s when similar problems were faced by Brazilian mica mine owners and reportedly the following incentive were taken by them:

- Waiver of land rent or deed rent;
- Exemption of import duty and sales tax on mining machinery and equipments including those required for prospects;
- Accelerated rate of depreciation for mining machinery;
- Exemption from income-tax on prospective expenses.

Apart from the above, the following facilities ought to be provided specifically to meet the situation in Jharkhand.

- Regulating the mining and its supply chain management. Controlling illegal mining and child labour.
- Treating mica mining as an industry and providing credit facilities;
- Generous reimbursement of expenses for developing infrastructure and approach roads etc.;
- Providing uninterrupted power supply and supply of explosives.
- Rectification of industrial law relating to the mica industry.
- To provide the rules for the benefits of workers by payment of minimum wages with good working condition, compensation, bonus, medical benefits, safety and security.
- Proper financial facilities provided by the government to the owner of the mica industry in mining, processing and marketing, by which they can solve their financial problem.
- To provide security through the state government (Jharkhand) to the people involved in the mining works.
- Establishment of research institute to discover various new areas for the utilization of mica and help to increase the demand.
- Establishment of training center through which the persons who are engaged in the extraction of mica and processing of mica, can be trained and they can improve the quality of mica and its products.
- Transportation and communication facility can be improved by investing huge amount for infrastructural development by the government which would help in collection of mica from different interior places.

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FUTURE OF E-RETAILING IN YOUNG INDIA

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Abstract

The Indian e-commerce industry was $1.8 billion in 2013. India's e-commerce market was worth about $2.5 billion in 2009, it went up to $6.3 billion in 2011 and to $14 billion in 2012. India has close to 10 million online shoppers and is growing at an estimated 30% CAGR vis-à-vis a global growth rate of 8–10%. Electronics and Apparel are the biggest categories in terms of sales. The paper presented here outlines the ecosystem opportunities and challenges of e-tailing in young India.

Introduction

A set of ideas that made sense a century shaped the modern perspective of shopping. Some old fashioned ideas that shopping is a burden and people dislike shopping and they shop only out of compulsion of meeting their family needs is totally outdated now. Modern shoppers buy things for rewarding themselves and satisfying their psychological needs. They buy to show off their personality and to boost their esteem needs. They demand delightful shopping experience. Today's retailers understand their needs and try to make their shopping comfortable, convenient and economical. 21st century retailing is different from the traditional retailing that it does not meet the customers' needs but also give him feeling of 'delight' and 'happiness'

For the new age retailers, teenagers are more important because they are the true global citizens. What is popular in New York is also popular in Delhi. Teen have become the latest marketing phenomenon. Adults may have similar taste in some categories. But, teens are different. They follow very similar tastes worldwide. They are the new followers of tailing. Dusty & crowded roads of Indian cities are now making traditional shopping more and more difficult. In small cities and town, a new crowd of teenagers is growing. This segment has easy accesss to mobile and internet connectivity. India has an internet user base of about 137 million as of June 2012. The penetration of e-commerce is low compared to markets like the United States and the United Kingdom but is growing at a much faster rate with a large number of new entrants. The industry consensus is that growth is at an inflection point. Today, teenagers extensively use social networking sites to connect and share with their friends. The Internet has evolved as a great tool for millions across the globe. From seeking information, to buying online more and more students are coming online.

According to a new study, there are 51 million smartphone users in urban India today, an 89% increase from 2012, when there were just 27 million users. The study also reveals that the biggest spike is in the youngest age group between 16 to 18 years, where numbers have gone from 5% in 2012 to 22% this year, a four-fold increase. The growth is driven by the range of low-cost smartphones introduced by both local and international players. "So far affordability was a major issue but now buyers with a budget of Rs 5,000 to 6,000 who might not have been intending to purchase a smartphone, can get one, as defined by this

Smartphone Incidence Study 2013, compiled by Nielsen Information Mobile Insights, are those with operating systems (OS) that allow installation of applications. According to 2011 census there are 231million youths (age group between 15-14) live in India. They comprised of 20 percent of Indian population, similarly adolescents, age group between 10-19 also comprised of 20 percent of Indian population. To gather it is 40 percent of Indian population.

Adolescent and Young India: Census 2011(In Million)report

Adolescent (10-19 years)	**253.2 (20.9%)**
Young (15-24 years)	**231.9 (19.1%)**

Today, teenagers extensively use social networking sites to connect and share with their friends. The Internet has evolved as a great tool for millions across the globe. From seeking information to making life-long friends, more and more students are coming online. It is, therefore, important to educate them on how to use the Internet judiciously and stay safe online. Advent of Internet has affected the every aspect of teenager's life. In this respect retailing is not an exception. In Internet retailing is expected to emerge as the next major retailing channel in India in coming 10 years. Internet retailing is expected to comprise 1% of total retailing value sales in India by the end of 2018. Much of this is set to be due to the low prices on offer online, as well as the convenience of shopping from home and the availability of a high number of leading brands, all of which is set to combine to drive numerous consumers to shift away from store-based retailing towards internet retailing. A substantial proportion of the country's urban consumers are now switched from store-based retailing to internet retailing. The main contributor to this shift was the rise of apparel and footwear internet retailing over the course of 2013. Companies such as Flipkart, Snapdeal, Homeshop18, Myntra and Jabong, among others, have begun to advertise their online apparel lines aggressively through media such as television advertising campaigns and social media platforms, specifically Facebook. These companies offer a wide range of apparel brands, many of were carry lower unit prices than similar products offered under economy brands or private label in store-based retailing outlets. This drove a high number of Indian consumers, especially youngsters, to begin making more use of internet retailing to shop for apparel and footwear, electronic gadgets like and pendrive, mobile phones etc. India has an internet user base of about 137 million as of June 2012. The penetration of e-commerce is low compared to markets like the United States and the United Kingdom but is growingat a much faster rate with a large number of new entrants. The industry consensus is that growth is at an inflection point.

Consumers in India are now adopted innovative approaches to payment, such as net banking, prepaid wallets, and cash- or card-on-delivery. About 20–50% of online transactions are supported by the cash-on-delivery payment method. Leading logistics companies have recognised the growth in the ecommerce sector and are investing in their network to better address the opportunity. Some e-tailer companies are also building their own logistics. The average turnaround time for e-tailing deliveries has declined from 4–5 days to 1–2 days.

Key drivers in Indian e-commerce are:

- Increasing broadband Internet (growing at 20%MoM) and 3G penetration.
- Rising standards of living and a burgeoning, upwardly mobile middle class with high disposable incomes
- Availability of much wider product range (including long tail and Direct Imports) compared to what is available at brick and mortar retailers
- Busy lifestyles, urban traffic congestion and lack of time for offline shopping
- Lower prices compared to brick and mortar retail driven by disintermediation and reduced inventory and real estate costs
- Increased usage of online classified sites, with more consumer buying and selling second-hand goods[
- Evolution of the online marketplace model with sites like eBay,Flipkart, Snapdeal, Infibeam,qnetindia.in,Dealkyahai.com and Tradus. The evolution of ecommerce has come a full circle with marketplace models taking center stage again.
- Government's reluctance to promote organized retail business.

The ecosystem elements required to support the growth of the ecommerce industry are also falling into place.

- **Internet access infrastructure:** India's Internet user base is expected to grow to between 300 million and 450 million in the next 3–5 years, driven by growing adoption of fixed broadband and the launch of 3G/4G services.
- **Payment infrastructure:** Consumers in India have adopted innovative approaches to payment, such as net banking, prepaid wallets, and cash- or card-on-delivery. About 20–50% of online transactions are supported by the cash-on-delivery payment method.
- **Logistics and delivery infrastructure:** Leading logistics companies have recognised the growth in the ecommerce sector and are investing in their network to better address the opportunity. Some e-tailer companies are also building their own logistics. The average turnaround time for e-tailing deliveries has declined from 4–5 days to 1–2 days in the last year or two.

As per "India Goes Digital", a report by Avendus Capital, a leading Indian Investment Bank specializing in digital media and technology sector, the Indian e-commerce market is estimated at Rs 28,500 Crore ($6.3 billion) for the year 2011. Online travel constitutes a sizable portion (87%) of this market today. Online travel market in India is expected to grow at a rate of 22% over the next 4 years and reach Rs 54,800 Crore ($12.2 billion) in size by 2015. Indian e-tailing industry is estimated at Rs 3,600 crore (US$800 mn) in 2011 and estimated to grow to Rs 53,000 Crore ($11.8 billion) in 2015. Last year, Snapdeal had garnered revenues of about Rs.600 crore . in 2014 it is expecting to cross Rs.2000 crore revenue. The company presently has 5,000 brands and over a million products listed on its website, which it expects to increase to 25,000 brands and 20 million products in the next 2 years. Similarly the movie and events ticketing portal run by Big Tree Entertainment Pvt Ltd saw revenues rise almost 80 per cent to Rs 52.6 crore ($8.7 million). The digital commerce firm, which draws a chunk of its business from the home-shopping network and runs an e-commerce portal, also saw acceleration in revenue growth with the turnover of TV18 Home Shopping Network (which runs HomeShop18) rising to Rs 225.4 crore ($37.4 million). HomeShop18 has over 500 brands spread across more than 12 million SKUs which are made available to customers in over 3,000 towns and cities in India. HomeShop18 witnessed 3.7 million transactions in 2012 (January-December 2012), representing a 97 per cent increase compared with the same period in 2011.

In the country , there are many platforms for internet marketing such as blog, forums, search engines and some online advertising sites like Google adwords and Adroll.social media sites Facebook and twitter.India got its own version of the so-called Cyber Monday known

as Great Online Shopping Festival in December 2012, when Google India partnered with e-commerce companies including Flipkart, HomeShop18, Snapdeal, Indiatimes shopping and Makemytrip. "Cyber Monday" is a term coined in the USA for the Monday coming after Black Friday, which is the Friday after Thanksgiving Day.[16]

Funding

In India, as of 2012, most of the e-commerce companies are yet to start making money. However, due to their growth prospects, Flipcart, Snapdeal, Myntra , BookMyshow and many other e-commerce companies have attracted huge investments and venture capital companies.

Name of the company	Amount raised (2012-14)
Flipkart.com	US$140 million
Snapdeal	USD 50 million
Myntra	$50 million
BookMyShow.com	US$17 million

Challenges

eCommerce demand highly secure, stable and protected hosting but most of the hosting companies working in India are not suitable for eCommerce hosting purpose. They are providing much less secure and threat protected shared hosting.

Within the Indian e-commerce industry, product categories with a larger ticket size tend to offer a lower gross margin than less-expensive items. For example, the margin for electronics tends to be 8–10%, compared with 25–40% for apparel. As a result, ecommerce companies that have significant depth within a given vertical are having to expanding horizontally in order to increase their margins..

There are two key cost components that ecommerce companies will need to manage in order to increase net margins and achieve profitable growth.

- **Customer acquisition costs:** The average gross merchandise value is not much higher than the cost of acquiring a new customer, which is about USD15–20 at present. As a result, repeat usage is critical to profitability. Customer acquisition costs will decline as the industry consolidates and financially weaker players lose out to larger players.
- **Delivery costs:** India's ecommerce market is unique in that e-tailers must cover the cost of delivering goods (about USD1–4 per item) to consumers. This will continue to put a strain on margins as well as capital requirements in the short-to-medium term as e-tailers look to build their own delivery arms. However, in the medium-to-long term, investment in logistics will bear fruit as it helps ecommerce companies to acquire new customers as well as retain established ones.

Conclusion

Young India is ready to welcome e-tailing. High internet penetration, spread of online payment and better delivery system are the key growth drivers. high customer acquisition cost and high delivery cost are the two major problem areas. The ecommerce market in India is not for the faint-hearted or those looking for an ROI in a short timeframe. It is also not without its share of challenges.

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AN UNTAPPED POTENTIAL OF JHARKHAND TOURISM

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Abstract
Welcome to the gateway of nature" is the official slogan coined by the state government to promote tourism. However, 13 years down the line after Jharkhand was created, tourism is yet to take off in a big way despite the state having some of the country's best scenic spots, rich wildlife and magnificent waterfalls, not to speak of serene towns like Deogarh and Netarhat. The paper presented here, gives a compressive look of the current status of tourism sector in Jharkhand covering the scope, problems & challenges associated with the industry

Jharkhand is one of the poorest states with per capita income much lower than the national average and nearly 56 per cent of the population below the poverty line. This posses a great stumbling block in the way of growth of tourism. The stark poverty of the masses is visible at the tourist places where helpless and destitute flock around the foreign tourists with the begging bowls in their hands. A few kind hearted and sensitive tourists get moved and leave the place in disgust. Some capture the object poverty of the places in their camera and show it to the whole world. This does not augur well for the growth of tourism in Jharkhand. No efforts are being made to keep beggars away from the tourist's spots.

Jharkhand has ample scope for cultural tourism, but the hinterland of the places of historical and religious impotence is not developed. Parks and entertainment centers where tourist can take fresh air land relax are yet to be developed. A few tourist lodges and rest houses constructed at tourist places are inadequate and ill equipped to cater to the modern tourists. Private sector entrepreneurs have not so much entered in this industry in any significant way. Non-availability of proper accommodation at tourist centers has become both cause and effect of the development of tourism in Jharkhand. A few hotels and lodges set up at Ranchi, Hazaribagh , Jamshedpur and Deoghar by the private entrepreneurs lack basic amenities and nicely in dealings and their tariff is prohibitive.

Jharkhand's tourist centers are gripped with transport bottlenecks. Most of tourist place are not directly linked with railways. The approaches roads from the rails-heads to the tourist spots have not been well developed and lack necessary repairs and maintenance. The foreign tourists have to encounter a great hardship to reach the destination, as they are tortured and exploited by the Tangawala, Rickshawala, and auto-drivers. They charge exorbitantly high fare creating a bad impression. The condition of roads is a pitiable one. The national highways due to lack of repairs and maintenance have developed potholes which cause road accidents. Road jams on the national highways are normal features. There is also lack of parking spaces.

Highways are the backbone of tourism industry in any state. In October 2013, when chief minister of Jarkhand Hemant Soren's visited Jamshedpur and candidly accepted the fact that national highways in the state need immediate facelift. The state chapter of the CII has also expressed doubts that the tourism industry in Jharkhand will make profits owing to its poor infrastructure and connectivity. Take the example of Amadubi tourist spot in Dhalbhumgarh (inaugurated by state tourism minister Suresh Paswan in sept 2013). Although the place is just 60km away from Jamshedpur, it takes over three hours to reach the spot. Proper connectivity through road, rail or air is prerequisite for reaching the tourist spots but in Jharkhand state there is a very poor no rail or road connectivity.

Law and order is a big problem in the state. We can not overlook the impact of moist extremism on the tourism industry of Jharkhand. As many as 19 of the 24 districts in Jharkhand

are Naxalite-affected and some of the best attractions like the Palamau Tiger Project at Betla, Hazaribagh National Park Magnolia Point at Netarhat famous for sun set view, Dalma Wildlife Sanctuary and Saranda forest in West Singhbhum district are in those districts. Social conditioned the environment have a great bearing on the growth of tourism. Simmering social discontents manifested through kidnapping, riots-blocks, road hold up, robbery, road are affecting the inflow of tourist in Jharkhand. Foreign tourist visiting here gets bitter taste of exploitation, intimidation and deceit. The local residents to achieve their foreign induced desire by legitimate means snatch their belongings in broad daylight and the police does not come to their rescue.

Another problem besetting Jharkhand tourism is the unstable governments which hampers continuity of tourism policies framed by earlier regimes.Prolonged delay in the formulation of a vibrant tourism policy is also gradually eating into the potentiality of the tourism industry. Several projects that are crucial for the growth of the tourism industry in any area. Law and order in many tourist destinations demand immediate attention. Lawlessness in the state cannot be judged merely from the prism of the Maoist incidents. The Union tourism ministry's report indicating 20 per cent increase in domestic tourists in Jharkhand in 2012 in comparison to year 2011. But downtrend in 2012-13 shows that the impression visitors have carried back home was not good.

There is also lack of effort to make the traditional handicrafts of Jharkhand which when displayed can color fully create indomitable interest in any stranger. No shopping complex is established specially for selling these products. If any howlers sold these items, no fix price is for product is mentioned and the tourist expects to get maximum value out of each dollar spent.

Other problems are:

- Direct effect on vegetation due to pedestrian and vehicular traffic,
- Imbalance between tourism wildlife and needs of local residents. There is threat to wildlife due to increase in tourist arrivals, increasing demands of souvenir and continuance of low income for resident population.
- Inadequate infrastructure facilities lead to overloading which causes supply failure, pollution an health hazard,
- Lack of tourist guides with variety of language known as tourist gets satisfaction to the extents level if he is described about the place in his language.
- Lack of information centers, communication centers, and counselor well trained. For proper guidance to tourist about facilities and places to visits, stay etc S.T. D. facilities,
- Lack of Tourist Police to control over the situation according to place.
- Lack of coordination among the interrelated departments like Cultural Dept., Transportation Dept., Hotel Dept., with the Govt. Dept. etc.
- Within rule department have to work in legal term.*
- Bonded with norms, -if any hotel is to construct than they are bonded to provide the tender in scheduled rate and in competition this is a major constraint.
- Lack of Professionalism- no positive attitude are seen among the employees.
- Department employees are having the nature of indiscipline and retained and bossed as seen in the Govt. office. This cannot promote the tourism, as the competition is very high.
- Lack of proper advertisement emphasizing the features of particulars places.
- Local problems are found during development of tourist area such as in Dasam fall development –local people are obstructing in construction because the land belongs to their "Ancestor's".
- Wrong marketing strategy.
- Poor connectivity by air roots - as tourist prefers to come by air.

Recommendation

- The architectural deigns of lodges, hotels and new structures should be confirms to the local landscape and soul match with local tradition.

- Growing more vegetables, fruit trees, floriculture and agriculture should be encouraged. People should be induced to study voluntarily, individually or in groups, geographical phenomenon of an area, air, water, birds and animals; undertake analysis of soils, fertilizers and insecticides used and to take up tree plantations.

- Introduction of administrative and planning controls will helps in maintaining the environment and ensure provision of tourist facilities.

- Regular Observation: Regular and detailed scientific monitoring of Flora and Fauna of the area should be carried out. In order to relieve excessive pressure, some alternative sites nearby will have to be found out where tourist activities can be decentralized

- Public Transport: There is an immediate need to improve public transport system. More number of uses must be operated and a strict control be imposed on Auto-rickshaws and private cabs. Adequate measures are taken up to punish the culprits.

- Tourist Information: The Department of Tourism must open good number of information booths at Bus terminus, shopping complexes, and busy commercial complexes. Right people with right attitude be employed in order to deal with tourists. The tourist office should be kept open all the 24 hours. Tourism should also undertake the responsibility of providing travels bulletins, and get included trade –related information in important week lines and in travel section, provide reduced cost during the off-season in travels as well as accommodation.Apart from this with a rapid change in technology, communication and transportation should be accessible affordable and developed that physical distances no longer constitute mental blocks to travels. Beside more entry points should be developed. 80 % tourist enters through Delhi and Bombay only. Moreover these entry points should be made more hospitable, visitor friendly and welcoming.

- Better Infrastructure and Communication Facilities: There is an urgent need for improving communication facilities. Besides, separate counters be opened in banks exclusively for tourists. More number of branches needs to be established at important tourist centers to cater to the needs of tourists.
- Display of Information: For the convenience of tourist's information about accommodation in hotels, lodges, clubs, resort hotels be displayed at railway station, airports, and bus station along with the tariff. This will help the tourists to choose accommodation of their choice.

- Trained Guides: Must be appointed by the tourism department. The guides must be in a position to explain the historical importance of the places in the respective foreign languages. We all agree that things are better understood and derive satisfaction when they are explained in our own language.

- Privatization of Maintenance of Tourist Spots: As the winds of privatization are already blowing through the different sectors of the economy, it may be tried out in tourism also. Foreign tourists are unhappy about the maintenance of tourist spots. Therefore, there is need to privatize it.

- Hygiene and Sanitation: Adequate steps be taken to provide hygiene and sanitation facilities at places of public interest like cinema halls, museums, parks, railway station, airport, bus terminus and so on. Unless the conditions are improved we are afraid that we may loose business on this count. Wrappers, empty cigarette boxes and other waste materials should not be thrown on the tracks route while on march. These articles should be retained in the pockets and disposed of in a proper place.

- A wide network of clean, hygienic and inexpensive hotels should be set up. It

should also provide a feature of accessibility. One attractive way has been to convert heritage priorities into hotels. Also paying guest accommodations could be promoted to provide an open book of life style and also economy.

- License for Travel Agents: In order to prevent tourists from unscrupulous people license system may be introduced. The license should be issued by a competent authority preferably by tourism department, while issuing such license the necessary qualification, experience, attitudes, concern for the tourists and so on should be looked into. Preference shall be given for those who hold a degree diploma in tourism management/ administration.

MARKETING STRATEGY

Marketing has a special significance for the promotion of tourism in the state, which has so many constraints to overcome. The nature and dimension of marketing the tourist product are distinct. In manufacturing enterprises, a marketing policy is devised for the product, which has already been produced. In tourism, the product is an amalgam of various elements, some of which are tangible and some intangible. The marketing strategy in this respect would be based on the consumers' needs, expectations, attitudes, likes and dislikes and the 'tourist product', which is to be developed, must suit the taste and pocket of the consumers. The tourism is a complex industry with multidimensional activities, which together turn out 'tourist-product'. Various sub-sectors, which are the constituents of the industry, are themselves independent industries e.g. hotel, transport and communication industries. Its marketing is also complicated, as it has to be directed at a Jorge number of people in various lands of socio-economic structure having different tastes, habits, attitudes, expectations and behaviour pattern. The raw materials for the tourist products are natural beauty, climate, history and culture and the people. The other things are facilities for the comfortable living such as water supply, electricity, road transport, communication and other essentials. The product may be entirely man-made or the nature's creation improved upon by man. All the components of the product are supplied by various individuals or group like Hotel Company, airlines or other suppliers directly to the tourists. A tourist combines these individual tourist products in a large number of ways. There would be many possible destinations, each with number of hotels, each reached by number of airlines and buses. The selection of product is a difficult exercise. The different segments which constitute, the tourist product work independently, each one striving to maximize its gain from tourism. If the desperate efforts of the different segments are unified and consolidated the marketing of Bihar as a tourist destination would be successful.

A survey needs to be conducted to identify the potential tourists visiting the state, as the needs of all the tourists are not uniform. American, European, Japanese, Chinese, South East-Asian and Australian visit the state, but each needs distinct approach. The facilities are to be created at tourist places as per the customers' needs. The planning for the development of hotels and tourist spots need be based on the realistic needs of the consumers so that the investment to be made to meet the projected demand fetches good return. A study of foreign markets would enable the government and other concerned institutions to distribute the promotional expenditure equitable on those areas which have the biggest tourist potential. A properly conducted market research would cover the entire gaunt of the marketing function viz. product pricing distribution and promotion.

The estimation of price at which the product is to be sold is quite important. A customer is price sensitive. The tourists expect to get maximum value out of each dollar spent. Foreign tourists are not always looking for convenient foods, perhaps they prefer Indian Cuisine like tandoori chicken, kabab, mixed vegetables and pakauras. An innovative approach is required so that prices are competitive. Product differentiation is a must for price differentials. In case of hotel chains, each chain should have distinct

product line and pricing. The Government should exercise some sorts of control over pricing and quality of the product. The coordinating agency may be department of Tourist, Government of Jharkhand.

The distribution of tourist produce in Jharkhand is equally important. The product is mainly to be sold to foreigners. It is not enough to distribute posters, leaflets and guide books through tourist offices and foreign mission. An attempt should be made to establish personal contact with the potential travelers by a strong market presence and intensive selling campaign by our offices abroad. The state government can supplement the efforts of the central government in collaboration with travel agents and tour operators. First, Jharkhand should exploit its traditional market of Budhist countries, particularly of South East Asia and then it should move to new and emerging market across the globe.

The travel agents create market for the tourist product. They determine the source of business from where the tourists originate, the requirement of hotels and transportation and know the preferences of the customers. After determining the market needs, the travel agents apply various methods to achieve the objectives. A travel agent has a great scope to make improvement on the itinerary of the client whereby he enjoys his visit to the country and returns as a friend and ambassador of goodwill. The nationally and internationally known travel agents need be patronized to promote tourism in the state.

An important thing for the promotion of tourism in the state is that the tourist product must have a distinct image. The receptionists, the public relation officers, tourist information officers and the staff at restaurant must leave indelible impact on the tourists by their grace and decent behaviour. They should cherish the memory of their stay in the State. For this purpose human resources engaged in the marketing of tourist products must be harnessed by proper motivation. To establish direct link with the customers by own staff is the least expensive exercise. Staff should have a caring concern for the customer and should have a motto that the customer is always right. Proper motivation is possible when employers grant incentives to employees and create congenial atmosphere.

Thus, Jharkhand need well-developed infrastructures coupled with proper marketing strategy for the promotion of tourism in the State.

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THE IDIOM IN 'NECTAR IN A SIEVE' AND 'THE COFFER DAMS'

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Kamala Markandaya made her mark as the first full-fledged woman novelist in Indian English literature. She has ten novels to her credit viz. *Nectar in a Sieve* (1954), Some Inner Fury (1955), A Silence of Desire (1960), Possession (1963) *A Handful of Rice* (1966), *The Coffer Dams* (1969), The Nowhere Man (1975), Two Virgins (1983), The Golden Honeycomb (1977) and *Pleasure City* (1982).

Indian writing in English has some characteristic features. One of which is the typical Indian flavour given to it with the use of Indian words and phrases in their writing. Keeping in mind the background of Kamala Markandaya, this article aims to study her style and diction in two of her novels **Nectar in a Sieve** and **The Coffer Dams**. Kamala Markandaya is equally well acquainted with the Indian ideals and mode of life as she is with Western ideals and mode of life. Markandaya was born in the famous Purnaiya family of Mysore. She abandoned her studies before completing her undergraduate level to join a small weekly paper as a journalist. In 1948, she went to England with the intention of working there as a journalist. In London, she married an Englishman Mr. Taylor and settled in London. She continues to write from there. Her very first novel **Nectar in a Sieve** was received acclaim.

The language of Indian fiction in English operates at two levels. First, it is the language of the non-English speaking Indians whose language is translated directly from the vernacular into English. It may consist of translated words, images and phrases, occasional transliterations and sometimes syntactical differences to emphasize tonal rhythm. The other level is the spoken English of the English speaking Indian, reported directly. This level is governed by the range of vocabulary and syntax particular to the occasion or the person who speaks it or is spoken to. The third level is the author's own mastery over the language. All these general trends can be seen in the novels of Kamala Markandaya. Her language is a fusion of occasional Indian words in a large heap of English words. Nevertheless her style, Meenakshi Mukherjee remarks "has the smooth, uniform ease of public school English." (1)

Markandaya has a perfect command over the English language and she uses it artistically and with grace. Her very first novel, **Nectar in a Sieve,** is unequalled in English language novels in its first person rendering of rural Indian life. Rukmani dominates the novel and narrates her tale from the present to the past. She is a poor, uneducated peasant woman but she speaks with the sophistication of a city-bred. Rukmani refers to the violinist and flute players who played on Ira's wedding day as a "fiddler" and a "flautist" respectively. (NIAS, p.53). In the beginning of the novel, Rukmani speaks in plain simple English which later becomes quite sophisticated. She uses small sentence fragments to describe the wedding of her sisters.

> My three sisters were married long before I was. Shanta first, a big wedding which lasted for many days, plenty of gifts and feasts, diamond earrings, a gold necklace, as befitted the daughter of a village headman. (NIAS , p.10)

The later part of the novel shows Rukmani having a refined vocabulary. She describes the poverty and hunger of the villagers quite artistically.

> Sometimes with sheer rebellion we ate grass, although it resulted in stomach cramps and violent retching. For hunger is quite a curious thing: at first it

is with you all the time, waking and sleeping and in your dreams and your belly cries out insistently, and there is a gnawing and a pain as if your very vitals were being devoured…(NIAS, p.120)

The use of words such as "rebellion", "retching" and "devoured" seems quite strange when used by a peasant woman. Later, she describes the advent of the tannery as an unstoppable and powerful monster which has the qualities of a "juggernaut". No Indian villager would compare the Lord with the monster.

I had always felt that the tannery would eventually be our undoing…And because it grew and flourished it got the power that money brings, so that to attempt to stop it was like trying to stop the onward rush of the great juggernaut." (NIAS, p.180)

If the English language must undergo some change from its conventional use to suit Indian speech, it must also be suitably amended to meet the ends of the theme. This can be done only if idioms and imagery are adapted to the Indian theme and context which Markandaya has successfully done in her novels. Rukmani provides a few literal translations like getting the 'mouth of her friends stitched', and 'putting lines' in the face. Some descriptions such as 'wheat cakes fried in butter', 'rice cakes', crisp golden pancakes seem inadequate. Although the description is about a village, we find Rukmani informing the reader that little Ira called Nathan 'Apa' which means father. Later, Rukmani quickly traces 'a colam, a pattern in white rice flour'. Rukmani explains the things which she uses as 'nose-screw', 'water-buffalo', 'dung cake' and 'bullock-cart'.

V.K.Gokak in **Critical Essays on Indian writing in English** reflects

What I mean by Indianness in Indian writing in English is the sum total of cultural patterns of India and the deep-seated ideas and ideals –political, economic, secular and spiritual- that constitute the mind of India and are reflected in her writing. In Indian writing in English, however, the language may seem to clash with a culture for which it is not a natural medium. (2)

Markandaya uses imagery and metaphor picked from Rukmani's peasant environs and experience. Nathan before his marriage is described 'as brittle as a bamboo before it bursts into flames'. When the peace of the village is disturbed by the tannery, Nathan knows that there can be no return and advises her to 'bend like grass so that you do not break.' Finally Rukmani and Nathan leave their homes to 'wander like jackals' in the city.

Markandaya's language is like pure running water. She has rich poetic overtones in her language. But the appropriateness of her language is questioned by Meenakshi Mukherjee who asks "whether it is the most desirable style in fiction where one has to deal with particular human beings rooted in their narrow regional identities" (3)

When old granny dies of starvation, having no relation, none to own her, Rukmani reflects

Once a human being is dead there are people enough to provide the last decencies perhaps it is so because only then can there be no question of further or recurring assistance being sought. Death after all is final. I could not avoid the thought, which came from my own uneasy conscience, harsh and bitter, as I watched them lift her up, light as dust on the bier; as mourners came up with flowers. (NIAS, p.125)

Rukmani's concern for death in the above passage seems to have traces of

Markandaya's use of "the technique of objective epitome". (4) in which "the subjective conditions of a character are conveyed not through the descriptive method but only by describing a few objective details which 'epitomize' the conditions and feelings of the character." (5)

Shyamala Venkateswaran's article on "**The Language of Kamala Markandaya's Novels**" discusses the lack of authenticity in her novels. She relates this to the long absence of Markandaya from India. According to Venkateswaran, "the question is whether the language expresses the sensibility of her characters" (6) Venkateswaran's article deals with the first few novels of Kamala Markandaya. She doesn't take into account the last five novels of Markandaya where she artistically uses the English language as her means of creative expression.

Markandaya's sixth novel **The Coffer Dams**, presents the post colonial era with an attempt to experiment with a new narrative technique. There are a number of sub-plots in it but no strands are left untied at the end.

K. Madhavi Menon and A.V.Krishna Rao say-

> Though Clinton is the main focus of the construction plot, the parallel plot centers on his wife Helen. Both the plots are finely interwoven and interconnected until the denouement towards the end of the novel. (7)

They further add that narrative technique is "a discovery of her carefully filtered and clarified view of life." (8) Although the narrator tries to streamline the plot at times there are narrative slips like Clinton starting off on foot at dawn for a funeral and reaching in the evening.

Markandaya's later novels beginning with **The Coffer Dams**, move towards experimentation with language and "a power rich in overtones and undercurrents, gone is the distance of third person narrative in favour of the stream-of consciousness technique which plumbs the emotional working of characters in a language that cuts clean and sure as a surgeon's knife." (9)

Markandaya shows her command over English and the style moves gracefully yet effortlessly. But due to subject matter of the novel, the style becomes quite heavy on the readers. The maturity of an experienced author is brought out in the language of Kamala Markandaya. The language is quite developed and has a poetic tinge.

The characters in **The Coffer Dams** speak English without any inhibition. This is because Markandaya has first hand knowledge of the way English people speak. Shyamala Venkateswaran points out "it is not that the novelist has changed the language to suit the characters, as that the character has been chosen to suit the language – Helen's idiom does not labor under the disadvantage of having to be an Indian." (10) Helen speaks as any British would speak. She reasons out with Bashiam saying "You're not some kind of freak to me. We're alike, we're freaks only to the caste we come from, not to each other." (TCD, p 136)

Markandaya uses steel-like language which is quite concrete but it has a soft colour of poetic abstraction with effective images. There is a succession of images to show an emotional impact. e.g. Helen does not smell the rain that Bashiam can. She says that it is 'as dry as a bone.' She also speaks of 'pavements battened down upon'. There are images of 'pop-up cardboard figure' and 'open weeping sores'.

Metallic or engineering images and animal imagery occupy a major place in the novel. The jungle, the land the rain and the river running at different elevations- all these are images that become symbols by the end of the novel. Steel and iron form prominent and recurring images. In **The Coffer Dams**, Lefevre's movements were agile and efficient "gecko-like". There is a reference of people lined up "like passive cows at a backstreet Christian butchery" (TCD, p.69) and the river moved violently "like an animal placed in a cage." (TCD, p.31)

Markandaya's language slowly moves towards poetry. She balances beautifully with her choice of words. She articulates the theme beautifully without any experimentation or oddities of construction. Ramesh Mohan says that the Tamil resembling structure of sentences in **The Coffer Dams** like 'water rose and rose' are very few. This may be obviously because she

had been living abroad for many years. Commenting on the use of language, Ramesh Mohan says-

> Her latest novel The Coffer Dams very authentically reproduces the colloquial rhythms and nuances of native English speech. (11)

The British come from different section of society and this is evident from the cockney of Jackson. "All I'm saying 'uman is 'uman". (TCD, p. 159) Markandaya's skill in handling the English language to reveal character and status is unquestioned here. Meenakshi Mukherjee feels that Markandaya, Santha Ram Rao and Manohar Malgonkar "have generally by-passed the linguistic and stylistic problems inherent in the Indo-Anglian situation" (12)

The Coffer Dams shows a new development in the work of Kamala Markandaya. Throughout, the novel deals with the English in India rather than the Indians. Markandaya's novels are a work of art. Her language brings forth a series of interacting physical, physiological, sociological, psychological and psychic components. She is a serious novelist and has a deep sense of commitment to her art. In most of her novels, her message clearly goes across to the readers and for her own writing, she says

> I do write and re-write and polish endlessly…. I could not tell you how I know, when to stop, having achieved the effect I wanted. I simply know that that is just right; and then I stop being haunted. (13)

The imagery, metaphors and symbols used and the poetic control over the language in **Nectar in a Sieve** and **The Coffer Dams** show that Kamala Markandaya has a formidable command over the English language. She uses the language to open up deeper layers of encounter and experience. She explores imaginatively the broad spectrum of human experience. Most of her published works have an artistic taste. She makes narrative experiments and expresses her ideas well. Her language makes her novels very readable and most of her novels have absorbing themes. Western as well as Indian critics have praised Markandaya's control over the English language and her clear vision towards life.

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