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PREFACE

This is the combined issue for October 2016- September 2017 (Volume 2, No.2 & Volume 3, No.1) and contains collection of scholarly articles -13 in all. A special thanks goes to the authors and reviewers who all played a large part in the continued success of this journal. As we are aware that the field of research is developing very fast in every department of human activity and with the advancement of knowledge a new global community has emerged enriched with new theory of knowledge and practice.

The present volume has been devoted to Women Empowerment particularly on the issues like "Does Gender Really Affect Awareness level about Mutual Fund Investment Decision?", "Role of Information and Communication Technology on Women Entrepreneurship in a Developing Country", Contract Farming and Women Empowerment: An Emerging Economy Perspective", "The Role of Women in inheritance of knowledge on Traditional Medicine", "Effect of Picture based Instruction on Teaching Microwave Oven Usage Skills among Women with Intellectual Disabilities", "The Education and the Political Emancipation among Women in Eritrea: A Study in Asmara", "ICTs and Empowerment of Indian Rural Women," and "Socio-Economic Impact of Tourism upon the empowerment of Local Women: A Case Study of the Pobitora Wildlife Sanctuary".

Expecting that the readers and students particularly will be benefitted through the articles of this issue.

Finally, Information contains in this Journals has been published by the IUT obtains by its authors from various sources believed to be reliable and correct to the best of their knowledge, and Publisher is not responsible for any kind of plagiarism and opinion related issues.

Dr. A. K. Bose (Chief Editor)

1

Does Gender Really Affect Awareness level about Mutual Fund Investment Decision? A Study of Bank employee of Tripura

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Abstract

Awareness level assesses the familiarity of the individuals regarding accompany, product or service. The awareness level of investors is a vital factor that affects the investment behaviour. Bank employees are highly financial literate. Their investment behaviour may impact to other groups of society. As income is concerned, women bank employees are equal to their counterpart. But question is whether gender has a role to play the investment behaviour towards mutual fund. Present study will focus on the fact that working women are significantly different as compared to their counterpart regarding awareness level of mutual fund.

Keywords: Bank employees, Working women, Awareness level, Investment behaviour, Mutual fund

Introduction:

A Mutual Fund is professionally managed type of collective investment scheme that collects money from many investors and invest typically in investment securities. The incomes generated through this investment are shared by unit holders in proportion to the number of units owned by them. The mutual fund sectors are one of the fastest growing sectors in Indian economy and have implausible potential for sustained future growth. Mutual fund becomes

simple for investing, easily reached and affordable (Kumar and Bansal, 2014). Bank employees are so busy in their works So, It becomes difficult to monitor the market on daily basis for making investment in various avenues of financial products with the objective of generating income (Sindhu and Kumar, 2014). Mutual fund becomes good investment avenues for the bank employees as it is monitored by expert fund manager on behalf of investors

Indians by investing their money in low earning instruments and traditional financial products are not taking advantage of new age financial products which have the potential to generate higher returns due to lack of awareness level (Bhushan and Medury, 2013). Sundar (1998) found that the awareness level about mutual fund concept was poor in small cities. Women bank employees are considered to possess same status as their counterpart in terms of financially literacy and income. It is expected that their investment behaviour would be same. Banks are offering mutual funds under their own brand name. So, awareness levels of women bank employees towards mutual fund as compared to their male counterpart is an emerging area of behavioural science.

The decision making behaviour of an investor to invest in a particular investment avenue is influenced by their awareness level towards the product. Salaried employees who are aware about the current financial system make significant impact while deciding the investment (Palanivelu and Chandrakumar, 2013). At different levels of awareness, the individual investors view differently about their investment and make decisions differently. In this situation, in the present study an attempt is made to examine the influence of gender of bank employees on their investments in mutual funds.

Literature Review

An increasing number of financial studies conclude that women invest their asset portfolios more conservatively than their male counterparts (Bajtelsmit and Bernasek, 1996). James Felton et al. (2002) examined the role of gender and optimism on the riskiness of investment choices of the students. The data suggests that males make more risky choices than females. Also, males demonstrated greater variability in the final portfolio value than did females. Abdisalam Ali Ibrahim et al. (2008) investigated that men and women have different investment strategies. Men tend to choose riskier investments whereas women lean towards less risky investments. Jani and Jain (2013) examined the investor buying behaviour of urban and rural for financial assets specifically focused on mutual fund, the impact of gender, on

the buying behavioural pattern of both Investors.. The study shows that gender, factor had significant bearing on both urban and rural investors buying behavioural process. Powell & Ansic (1997) investigate whether females have a lower risk tolerance in comparison to males when the decisions to be made are concerned with losses rather than gains.

Few literatures regarding impact of awareness level over investment behaviour have also been accesed. Numbers of studies have been conducted regarding impact of awareness level on investment behaviour. Awareness about the financial system of investors was found to be the significant factors when investor want take investment decisions (Rajeswari, 2014). Geetha and Ramesh (2011) found that people were not aware about all the investment options available to them and all this influence them not to invest modern investment avenues. Relatively higher level of knowledge and awareness level about the financial product among the individual investors direct them to higher volume of investment (Kumar and Rajkumar, 2014). Majority of the investors had stated that lack of knowledge as the primary reason for not investing in mutual funds (Saibaba and Vipparthi, 2012). Prathap and Rajamohan (2013) found that most of the investors have high level awareness and positive approach towards investing in mutual funds.

From the above literature, it is evident that awareness levels of investors have influenced investment behaviour.

Objectives of the Study

The objectives of the present study are as follows:

- > To ascertain the awareness level of bank employees of Tripura according to gender wise in respect of their investment in mutual fund.
- > To find out impact of gender on awareness level of investment in mutual funds.
- > To find out the impact of awareness level of bank employees of Tripura on their investment in mutual funds.

Hypothesis of the Study

The null hypothesis formulated for the study is given below:

- H₀: There is no significant association between gender and 'awareness level of individual investors' towards mutual fund
- H₀: There is no significant association between 'awareness level of individual investors' and their investment in mutual fund.

Research Methodology

The universe of the study consists of all those bank employees in Tripura who are employee of a bank which is having own sponsored mutual fund. The total numbers of such employees as on 1st April, 2015 are 815. Using simple random sampling design from the population of 815 employees at 95% confidence level and 5% confidence interval, a sample of 262 employees is obtained. The sampling unit is the individual bank employee who is from the bank which is having own sponsored mutual fund. 81.3% bank employees are male and 18.7% female. In order to achieve the objective of the study, a well-structured questionnaire was prepared and used for collecting primary data. For assessing the influence of awareness level on investor behaviour, binary logistic regression analysis, chi square test have been used.

Analysis and Findings

Analysis and findings of the study is given under the following paragraphs:

1. Women Bank Employee's Awareness Level towards Mutual Fund

Table 1: Investment in Mutual Fund and awareness level

	Awareness level of Mutual Fund						
Gender	Highly Aware	Aware	Neutral	Not aware	Highly not aware	Total	
Female Bank Employees	20.4%	20.4%	34.7%	22.4%	2.0%	100.0%	
Male Bank Employees	23.5%	39.0%	22.5%	12.2%	2.8%	100.0%	
Total	22.9%	35.5%	24.8%	14.1%	2.7%	100.0%	

Source: Compiled from questionnaire

Table1 exhibits that male bank employees are having higher awareness level as compared to their female counterpart.

2. Impact of Gender on Awareness Level towards Mutual Fund

Table 2: Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	9.452 ^a	4	.041	
Likelihood Ratio	9.471	4	.050	
Linear-by-Linear Association	3.890	1	.049	
N of Valid Cases	262			
a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.31.				

Source: Compiled from questionnaire

From the table 2, it is revealed that gender has significant association with awareness level towards mutual fund as p value is less than .05

3. Impact of Awareness Level on Investment in Mutual Fund

To ascertain the impact of awareness level on mutual fund investment, binary logistic regression is used. Investment in mutual fund is considered as dependent variable and awareness level as calculated above is the predictor variable. Dependent variable is Mutual fund invested by the bank employees at present Y=0 (Not invested in mutual fund),

Y= 1(Invested in mutual fund),

Predictor variable is awareness level of bank employees. It is given as:

X=1 (Very high level of awareness level),

X=2 (high level of awareness level),

X=0 (Neutral level of awareness level) and

X=-1 (low level of awareness level) and

X=-2 (very low level of awareness level).

P(Y=1) is the probability of not investing in mutual fund. And P(Y=0) is the probability of investing in mutual fund.

$$P(Y=1) = 1 - P(Y=0)$$

Here, p (Y=1) must lie between 0 and 1.

Regression model: $\ln (ODD) = \ln \{P (Y=1) / (1-P(Y=1))\} = a + b (Awareness level)$

Table3: Omnibus Tests of Model Coefficients for past

	Chi-square	Df	Sig.
Step	74.812	1	.000
Block	74.812	1	.000
Model	74.812	1	.000

Source: Compiled from questionnaire

From the table 3, Omnibus Tests of Model Coefficients gives us significant as p value is less than .05. This indicates that adding awareness level variables to the model have significantly increased ability to predict the decisions made by investors.

Table 4:- Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square	
1	284.954	.248	.333	

Source: Compiled from questionnaire

From the table4, the Cox and Snell R^2 value for the fitted binomial logistic regression is 0.248 which does indicate a good fit.

Table 5:-Variables in the Equation

	В	S.E.	Wald	df	Sig.	Exp(B)
Awareness level	1.243	.173	51.621	1	.000	3.468
Constant	-2.599	.404	41.491	1	.000	.074

Variable (s) entered on step 1: Awareness level

Source: Compiled from questionnaire.

The Variables in the Equation output shows us that the regression equation is –

Ln (ODD) =
$$\ln \{P(Y=1) / (1 - P(Y=1))\} = -2.599 + 1.243$$
 (Awareness level)

Table 5 investigates the estimated parameter. These are the ordered log-odds (logit) regression coefficients. It indicates that one unit increase in (Awareness level), the dependent variable is expected to change from 'yes' to 'no' by its respective regression coefficient in the ordered log-odds scale. It is seen that awareness level of bank employees have significant impact on investment decision on in mutual fund at 5 % level of significance.. Beta coefficient of awareness level is positive which indicates that if awareness level is changed from higher level to lower level, has higher chance not to invest in mutual fund.

Conclusion

It is concluded from the above finding that awareness level and investment in mutual fund is directly related. Investors, who have high awareness level, are found to have high chance investing in mutual fund. Women bank employees being equal status with their counterparts in terms of income and financial literacy, have lesser awareness level towards mutual fund. So, for them it would be less chance to invest in mutual fund. So, in order to increase the chance to invest in mutual fund for the bank employees, awareness programs of mutual fund should be arranged.

It is a message for the policy maker that large number of bank employees should be made aware towards mutual fund in order to enhance the volume of investment in mutual fund. Moreover, if bank employees are highly convinced and aware; they can guide bank customers who are looking for investment avenues in order to get higher return with minimum risk. As bank employees are highly financially literate, they easily can be made aware towards mutual fund which in turn empower others female investors in terms of better investment decision. Ramanthan and Meenakshisundaram (2015) suggested that awareness programs should have to be conducted to educate the bank employees towards capital market investment. By conducting these awareness programs, the climate of investment would definitely become very friendly and attractive.

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2

Role of Information and Communication Technology in Women Entrepreneurship in a Developing Country

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Abstract

With time women are now more educated and they have shifted themselves from household works to higher level professional activities. Women are now working in various professions like trade, industry, engineering etc. Thus women are becoming actively involving in economic growth and simultaneously taking part for the overall growth of developing country like India. Even case studies indicate that many women entrepreneurs are working in much difficult situations when compared to their male counterparts. In today's era of 4th Generation networking with advanced ICT social communication using new technologies enhance skill that many entrepreneurs in the nation are yet to posses. Thus with the help of ICT women's are now independently participating in economic growth and overall development of any country. Our country is not lagging behind in that aspect. At last this can be quoted that like other developing country, today in India also women becomes a significant stake holder of country's growth which is mostly through application of ICT tools.

Keywords: Information and Communication Technology (ICT), Economic growth, Entrepreneurs, 4th Generation networking

Introduction

Information and Communication Technology plays an important role in economic and social development of a nation. ICT is increasing the interaction in the society. It is used for the

development of India over recent years. It has a number of applications and services used to produce, process and transform information. ICT can result in changing social interaction in education, business and also in economic improvement. So with the use of modern diversified ICT, women can easily be an entrepreneur. Being an entrepreneur, she will be able to help her child and family to be aware of ICT and new technologies and practices which will help for overall growth of the country.

We can breakdown ICT into four subareas like ICT strategy, Management and support, Information systems and ICT infrastructure. ICT Strategy is a set of key decisions or a set of documents which define the principles and the rules, which are to be followed within any ICT activity of the company. Management and support is a set of activities which controls and supports the provision of a long term, efficient and high quality of the information systems and ICT infrastructure. Information systems present ICT functionality in a company and act via individual use cases as an interface for its users. ICT infrastructure is a logical and physical structured system of activities and components which can be used by any information system. The specialists who take care of the ICT infrastructure can fully focus on the required knowledge of technologies.

Women are an important human resource of any country and entrepreneurship is the most important tool which can accelerate the economic growth of a country. So, in any developing country entrepreneurship is a key to empower women which improves the economic health of the country and their family. In any up growing country advance technology needs more initiations from educated women entrepreneurs. For overall development of the country all women entrepreneurs can initiate, organise and lead a successful business enterprise. Women has realised that it is necessary to work hard equally with men for the development and progress in the business world. Entrepreneurs need to be more efficient and their thoughts and values lead employees.

When it is about Information Technology related business enterprise, employees need more software knowledge and skills to develop the enterprise through ICT. Women having good skill of software development, maintenance and managerial skill, can take initiative to be an entrepreneur. In our developing India Information and communication Technology is one of the main ways to empower women equally with men. As it requires only knowledge and skill, by sitting at any organisation only women can manage everything in any

organisation only through ICT. Field work is not mandatory. This skill can develop her confidence and economic status of her family and the nation.

Research Methodology

Methods which can help entrepreneurs through ICT are as follows. Entrepreneurs may have the website development, maintenance and updating skill or they can recruit the persons having these skills. They can have tele-calling facilities through these. Regular updating of their own business product features or availability of different products is helpful to get huge numbers of customers. Their own Magazine may be one of the main key features for online business which is through ICT. Magazine should reflect all information about the products. Magazine can be released regularly in their website.

ICT can help the organizations in responsible to the challenges of an increasing environment. ICT can also help to achieve the flexible organisation structure. The challenges behind the development of an organization and improvement of an entrepreneurship are the matter of concern in any developing country.

Women as a good Entrepreneur

Women entrepreneur is a person who accepts challenging role to meet her all personal needs and become economically independent. A strong desire to do something positive is an inbuilt quality of entrepreneurial women who is capable of contributing values in both family and social life. Skill, knowledge and adaptability in business are the main reasons for women to emerge into business ventures. The hidden entrepreneurial potentials of women have gradually been changing with the growing sensitivity to the role and economic status in the society. They are flourishing as designers, interior decorators, exporters, publishers, garment manufacturers. In developing nation like India although women constitute the majority of the total population, the entrepreneurial world is still a male dominated one. But in developed or advanced nations women are more recognised and are more prominent in the business world. Some constraints for Indian women entrepreneurs like women lack confidence in their strength and competence.

The family members and the society are reluctant to stand beside their entrepreneurial growth. To a certain extent this situation is changing among Indian women and yet to face a tremendous change to increase the rate of growth in entrepreneurship. Women's family and personal obligations are sometimes a great barrier for succeeding in business career. Only

few women are able to manage both businesses efficiently devoting enough time to perform all their responsibilities in priority. Women must be educated and trained constantly to acquire the skills and knowledge in all financial areas of business management. This can facilitate women to excel in decision making process and develop a good business network.

Various institutions in the financial sector extend their maximum support in the form of incentives, loans schemes etc. Training programs and workshops for every type of entrepreneur is available through the social and welfare association. Other than this, sudden fall in family income of family may be one of the push factors for women to take up employment. Some pull factors may be women's desire to evaluate their talent or they may want to utilise their free time or education. Some women may want to gain recognition, importance, social status and economic independence.

Environment for Women Entrepreneurship

The study of women entrepreneurs finds that some social and cultures factors represent important barriers to the success and entrepreneurship activities. Maintaining professional and family life is also a challenge for women entrepreneurs. To promote ICT ambient environment for women's entrepreneurship in a developing country like India, Government also takes initiatives now a days to encourage all women entrepreneurs.

ICT can enhance Micro-Trading capabilities through Mobile Phones as there is a tremendous growth in mobile phone ownership. ICT indirectly can help women for their entrepreneurship through micro-trading. In any business organisation for micro trading activities when trading is about gathering primary information, improving information management through mobile phones will directly enhance decision making, control and income generation. In a nut shell it helps to improve economic empowerment through entrepreneurship.

Result

Here are some examples of successful women entrepreneurs.

- Kiran Majumder Shaw is the chairman and managing director of Biocon Ltd. She became
 India's richest women in 2004. She has founded Biocon in Bangalore India.
 Biotechnology was new at that time and the company launched assets day by day and now in its present position.
- Neelam Dhawan is the Managing Director who ads Microsoft India.

- Priya Paul started her family business and is currently the chairperson of Park Hotels.
- Simone Tata has been instrumental in changing a small subsidiary of Tata Oil Mills into a
 largest Cosmetic brand in India- Lakme, which is synonymous with Indian fashion. She
 become a part of Lakme India during 1961 and has been responsible for tuning the
 company into one of the biggest brands of fashion in India. Now she is the chairperson of
 Trent Limited, a subsidiary of Tata group.

Discussion

Information and communication technology is part and parcel of modern era. Nowadays everywhere around us people uses ICT for their well being. This includes their household purposes, official ventures, entertainment, sports etc. To become an entrepreneur in today's world application of ICT becomes very significant as without this, communication among peoples in today's global village is not possible. In this regard this is noteworthy to mention that the concept global village has been initially brought on the basis of successful implementation of ICT only. Thus without ICT surviving in today's era, when economic recession is going on everywhere and as a result financial constraints becomes a significant hurdle on the way for the development. On this background I have chosen this topic to summarize the role of ICT behind a successful entrepreneur, which will enlighten the economic growth of a developing country like us.

Conclusion

From above all documented results this is evident that ICT inevitably modulate outcomes of an entrepreneur to become a successful entrepreneur. In addition this is also obvious that along with ICT proper implementation of modern technologies are key regulatory points behind a successful entrepreneur. Thus at last this can be inferred that ICT along with modern technology play a significant role on financial growth of an entrepreneur, which may influence overall GDP growth and financial stabilization of any developing country.

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3

Contract Farming and Women Empowerment: An Emerging Economy Perspective

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Abstract

There is an increasing trend of agriculture to be feminized. There are multiple reasons behind this which include greater voluntary movement of male workforce from agriculture to Industrial economy, growing income opportunity for women, lower and sticker wage rate as well as lack of bargaining power of women in agribusiness. Under contract farming, landowners or tenants have contracts with agribusiness marketing and/or processing firms that specify prices, timing, quality and quantity/acreage of the produce to be delivered. Contract farming is in practice in most of the emerging economy and has been credited for promoting participation of domestic firms and MNCs in Farming. The proposed paper would study the emerging economy experience of women agribusiness worker, both as producer and labor, under contract farming, in the context of self-esteem, involvement in decision making in respective household and other empowerment related variables.

Keywords: Contract farming, Women empowerment, MNC, Emerging economy, Sticker wage rate

Introduction

While the earliest examples of contract farming could be traced back in ancient Greece and China, contracts between firms and farmers over quantity, quality and time is a phenomenon innovated during last 100 years. In traditional marketing system, farmers produce under their own decisions on variety, quantity, quality, and timing, and then sell to the open market at the

market price. In contrast, contract farming (CF) refers to "agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products" (FAO 2013). Typically, the farmer concurs to supply certain quantities of a specific commodity at the specified quality standards and time, and the buyer commits a specified pricing for the same (Eaton and Shepherd 2001).

Watts (1994) explained how CF was initiated by Japanese firms in Taiwan during end of nineteenth century and later on by US firms in Central America during early Twentieth century. During Second World War, this practice was introduced in Europe (Hamilton, 2008) Since then, CF has gradually been diffused in other parts of the world. Rehber (2007) showed that contract farming contributed 15% of all agricultural output produced in the developed world where US topped the list with 39% of total value in US Agricultural production. In other European countries, CF played a vital role, for instance in Germany contract farming contributes 38% of the production of dairy, poultry and sugarcane, In Sweden, Czech Republic, Slovakia and Hungary, percentage of firms using CF has gone substantially over the decades (Swinnen and Maertens, 2007). In Armenia, Moldova, Ukraine and Russia, the percentage of food companies using CF has increased from 25% in 1997 to 75% in 2003 (Swinnen and Maertens, 2007).

Latin America faced similar kind of experience with CF. Since 1950, counties like Peru, Mexico, Brazil, Honduras, embraced CF for food grains and vegetables (UNCTAD, 2009). In Southeast and South Asia, CF has gradually become preferred practice. Since 1956, Indonesian Government through its Federal Land Development Agency prompted farmers to adopt this practice. In Malaysia, state funded out grower arrangement helped CF to diffuse (Morrison 2006), In Vietnam, Cotton, fresh milk, rice and Tea have been the preferred area for contract farming (UNCTAD 2009). In India, CF was initially used for seed production and then gradually made its inroads in Poultry, dairy products, potato, rice, spinach and other fruits and vegetable production (Rehber, 2007).

Literature Review

Traditionally the very definition of emerging economy indicates the institutional voids and higher transaction cost. Transaction costs, which offer one measure of how well a market works, includes all the costs associated with conducting a purchase, sale or other enterprise related transaction (Paleppu and Krishnan). Well-functioning markets tend to have low

transaction costs and high liquidity as well as greater degree of transparency and shorter time periods to complete transactions (Aekerlof, 71). All markets, irrespective of development phase, are less than perfectly efficient. Compared with emerging markets, however, developed markets are more likely to approach consistent standards for efficient transactions. Conducting even simple transactions in developing economies can be times and resource intensive process, posing challenges for those expecting the efficiency of the developed market. Developed markets for products, talent and capital are full of institutions that are purported to reduce the transaction costs that arise from differential information between buyers and sellers of goods, services and capital, which are completely or partially absent in developing countries.

The agriculture supply chain in emerging economies has gone through transformational changes since the time most of the developing economies started integrating with the global market. Both the demand side and supply side factors are responsible for this. Historically, majority of the agricultural system in developing economies were controlled by state owned enterprises whose hegemony ended with the call of globalization. As globalization and liberalization ushered the economic policy of most of the developing economies, value of the international trade in agriculture commodities particularly high value non-traditional commodities such as horticulture has increased (Da Silva, 2005). The opportunity of higher international trade prompted higher investment and greater control over Agricultural supply chain. Large firms with highest level of technical efficiency swung into action with ever increasing activities (Da Silva,2005). Thus, agricultural supply chain became dominated by few large firms with a great degree of vertical and horizontal coordination (Giovanucci et al., 2008).

Global logistics industry over the years has become extremely efficient with the advent of global positioning system and mobile networks. Goods with better transportation system could travel longer distance which could not be possible during 80s. (Da Silva, 2005). Agreed criteria or the standard has become another driver for CF adaptation. In most of the cases, vertical integration through contract farming is geared to ensure adherence to public or private standards and traceability (Giovanucci et al., 2008). In addition to this, certain demand side factors like increased population, high disposable income, changing taste and preferences have spurred the rapid diffusion of CF.

Moreover, during last two decades developing economies have experienced of rise of super markets in food retailing (Reardon and Berdegué, 2002). Supermarkets value chain configuration favoured centralized purchasing, specialized and dedicated wholesalers, preferred supplier system and private quality standard (Shepherd, 2005). So, these characteristics demand more vertical coordination among different value chain activities like production, wholesale, retail, etc. Another important driver for CF diffusion in developing countries is the lesser involvement of state in the area of providing marketing inputs and technical services.

So in nutshell, CF provides a stable and consistent supply to the downstream food processors and consumers, gives the processors more control, makes food traceable, and reduces transaction costs. But, in developed countries, farmers are more concerned about losing their independence and important business decision skills (Schulze, Spiller, and Theuvsen 2006); however, in developing countries, farmers may acquire better production technology, achieve scale economies, and receive a higher return to improve their welfare (Miyata, Minot, and Hu 2009; Tripathi, Singh, and Singh 2005).

CF might have helped the entire agriculture sector in developing countries to have better technology, stable price, high value addition, however, there are concerns associated with CF which are salient for developing countries. Some of them are increased instability for nonparticipants in the community, disruption of power relations in the traditional household culture, over reliance on cash crops that may leave households more vulnerable to food shortages and exploitation from large firms. Moreover, it is important to understand whether CF has increased gender disparity as the majority of the agriculture worker in developing countries is female.

Objective and Methodology

Objective of the study is to understand whether contract farming has improved women empowerment particularly in those countries where there exist institutional voids. While defining women empowerment, parameters like decision making power in household, leisure time, education, wage rate, access to technology, etc have been taken.

The paper was conducted based on the secondary data from several studies. The majority of the studies reviewed was conducted in developing countries and involved myriad agricultural products. In each study we analyze the major information related to findings. We conducted key word search in Econlit, Science Direct, Scopus, EBSCO and Emerald search

engines. The word searched were contract farming, women empowerment, productivity under contract farming, self-esteem, Agriculture, developing and developed. We have selected those studies where women participation under contract farming was prominent.

Results and Discussion

Since the inception of agriculture, women have been involved in it. During last few decades women participation in agriculture has increased. An FAO report (99) indicates that while the proportion of labour forced engaged in agriculture has decreased; proportion in women in agriculture has increased with steady trend. Deere (2005) clarified the definition of feminization as "An increase of women's participation rates in the agricultural sector, either as self-employed or as agricultural wage worker; in other words an increase of percentage of women who are economically active in rural areas".

National statistics data indicates that 86 percent of economically active rural women in Bolivia work in agriculture, followed by Brazil with 70 percent and Paraguay with 43 percent. On the other hand, only 10 percent of economically active women in Central American countries work in agriculture. In Latin America, women contributed a miniscule percentage of the agriculture wage labour force during 70s and 80s. Their role was confined as the harvest workers in traditional export crops. Post 80s, liberalization had spurred the production of non-traditional export agriculture crops. Non- traditional export has increased from 10 percent of total exports in 1970 to 23 percent of total exports during 90s, creating a demand for wage labour force (Deere, 2005).

Studies from various countries in Latin America reveal that with the dramatic increase of production of non-traditional export crops could not be possible without increased participation of women. In Chile, between 1986 to 1994, female agriculture workers increased by more than 20 percent, whereas male agriculture workers decreased by 20 percent (Kay 2002). In fruit production of Chile women contributes over 50 percent of temporary workers. The trend is prevalent all across Latin American countries. Like Latin America, economic liberalization ushered new work opportunity for women work force in Sub-Saharan Africa. In majority of the African nation, women participation as a percentage of total work forces varied within a range of 53 to 85 in high value export oriented agriculture produce (Dolon and Sorby, 2003). In Kenya, women workforce contributed 70 percent of total work force in certain activities like packing, labeling, bar coding of the produce. In the non-traditional high value export in Africa, it is evident that employers prefer women as they

are considered to be docile, having better patience and flexibility with regard to wage, contract, work hour etc which leads to exploitation in many cases.

In India, participation percentage varies with respect to genre of produce, geographical location, etc. Gill (2001) indicated that during the mid- 90s, 58 percent of total labour hours employed in vegetable production in Punjab was contributed by the female workers, while the figure was much lower in paddy. In Tomato alone, women contributed 60 percent of total labour hour. Women are preferred in tomato cultivation because they are more suitable for transplanting and picking job (Singh, 2003). In case of Potato cultivation in India, especially under contract, women participation has increased substantially. During harvest time women accounted for 38 percent of total labour employed (Gill, 2001). Though it is evident that across emerging economies, there is an increasing trend of women participation in agriculture labour force, but it is important to understand whether that increased participation could lead to women empowerment especially under contract farming.

The questions that need to be answered to explore the scope of empowerment under contract farming are: Whether the increased women participation leads to enhanced decision making power in the household or the community? Do the women have better control over their income? Does the increased participation lead reduction of their domestic work load? Does the increased participation enhance women's access to productive resources like land, credit, technology, etc? Do the female face similar kind of working conditions that their male counterparts face? Is their wage rate tantamount to their male counterparts?

Studies in Ecuador, Columbia, South Africa and Kenya (Dolon and Sorby, 07) indicate that though women participation and time spent in wage work has increased in non-traditional cash crops under contract farming, their traditional responsibilities remain same and have not been shared with their partners. When women are away for the wage work, their daughters' take the responsibilities for the household chores which may infer higher dropout rate from school.

Deere (2005) has analyzed the Latin American female workers and concluded that women in non-traditional agricultural export industry earn more than the women in other rural occupation which could be considered as a positive impact of contract farming, but Deere also observed that unlike the unmarried women who enjoy some amount of control over their income, unmarried women in most of the cases hand over their income to their male partners. In some cases, it leads to domestic violence. Similar kind of conclusion was

derived by Dolon and Sutherland (2002), when they have studied Kenya's vegetable industry. Women supplied almost three quarters of the needed labor in French been but were given only 38 percent of the income.

In sub-Saharan Africa, where land title overwhelmingly belong to men, women's value addition in high value cash crop does not result into better control of their income (Dolon and Sorby, 2002). In Uganda for example though women contributed to the majority of work hour in Vanilla production but 90 percent of their income was controlled by men. In India, contract farming for hybrid cotton seed production has seen increased women participation. Most of the cross-pollination work is done by the young girls. The girls and their parents are given contracts well in advance and required inputs including advanced credit are supplied to them. This credit advance ranging between Rs100 to Rs 3000 during 97-98, was extended to 90 percent of girl's parents involved in hybrid cotton seed production in Karnataka (Venkateshwarlu and Corta, 2001)

Girls are given preference because of low wages, longer working hour, and docile nature. Reports indicate that productivity of girl is higher than the male adult. In hybrid cotton seed, the most common labour arrangements for females are casual work where long working hour should have ensured instant payment, but in practice payments are held back for weeks if not months. Women workers live in constant apprehension of losing jobs which make them vulnerable to comply with the employer's demand (Ramamurthy 2000).

In Punjab, while women participation has increased under contract farming, wage levels went down as a consequence of increased competition of migrated labour force. In tomato production, women's contribution to total labour hours go up to 60 percent but woman' wage rate remains at 75 percent of a male worker's wage. Women who are mostly used during transplanting and harvesting of tomatoes spend long hours in the field with their children, in certain cases infants with a bitter implications for their health and nutrition (Singh,2003) In potato cultivation, female labour contribution is 38 percent of all labour used in this crop. But women are preferred for the job because they work with lot of patience and care (Gill, 2001), but women's wage amounts to two third of that received by men (Singh, 2003).

Conclusion and Recommendations

Most of the studies found that in the emerging economies, women participation in agriculture has increased substantially, particularly during liberalization regime. But with the increasing participation, there is need to see the changing production structure through the gender perspectives. The issues like similar wage irrespective of gender, technology diffusion, proper training, access to productive input, proper working conditions need to be taken care of. Government, Non-government institutions like NGOs should provide education and skill building facilities. In certain developing economies, legal framework should be amended so as to allow women hold title of the land. There is an increasing need to build a better eco system in agriculture for the betterment of humanity.

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The Role of Women in Inheritance of Knowledge on Traditional Medicine

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Abstract

Northeast India is rich in flora and fauna. The rural people mostly depend on their knowledge of Traditional medicines for treating their health problems. Different parts of various plants can treat different diseases used in a specific way whereas many can act as poison. So it is very important to have proper knowledge about plants and the use of each part of it. The mothers are contributing immensely in passing the knowledge to their daughters. This knowledge can greatly contribute to the scientific world in the current clinical era.

Keywords- traditional medicine, medicinal plants, folklore medicine, clinical drugs, role of women

Introduction

It is observed that in all over Northeast, the people, mainly, from the rural areas hardly depend on the hospitals for curing their diseases and mostly prefer to depend on their homely/ traditional medicines to treat their daily health issues. In Tripura, there are total of 136 government run hospitals for 3673917 populations. On an average, per hospital covers approximately 27014 persons. But still it is observed that mostly the rural people depend on the belief on the folklore medicine.

Concepts and Meaning

Ancient history and observation since last 30 years have shown that the knowledge of folklore medicine is practised in daily life by the mothers of every family and this knowledge

is passed to the mother of the next generation knowingly/unknowingly. But the current scenario of clinical world, based on cost and side-effects, indicates that there is an urgent requirement to explore this knowledge and make proper documentation of all this and research their saying scientifically.

Objectives and Methodology

The objective of this article is partly to document some of the sayings about few folklore medicines and also to encourage the practise and research in this area.

Review of Literature (Optional)

Tripura is rich in flora and fauna. It has 628 plants in total, out of which 403 are wildly grown and 225 are planted. Medicinal plants play a very important role in the lives of native people of Tripura and Northeast since ancient times. All cultures and societies have knowledge best described as folk medicine. Various ethno- medicinal plants of Tripura are used in various ailments by Tripuri and Reang tribes of Tripura. Some of them are noted below (Choudhury, 2013):

- 1. Stem and rhizomes of *Alpinia allughas* Rosc. (**Vernacular names**: Tara, Taruku) are used in bronchitis and rheumatic pain.
- 2. Fruits or seed of *Amomum dealbatum* Roxb. (**Vernacular names**: Allach, Allachi) is used in muscular rheumatism.
- 3. Petiole and rhizome of *Amorphophallus bulbifer* Roxb. (**Vernacular names**: Dadunga) are used for the relief of muscular and joint pain.
- 4. Tuberous roots of *Asparagus racemosus* Willd. (**Vernacular names**: Satamuli) is used in epilepsy.
- 5. Leaf of *Barleria prionitis* L. (**Vernacular names**: Ziodi) is used for the treatment of pruritis, rubefacient and blotch.
- 6. Flower and bark of *Careya arborea* Roxb. (**Vernacular names**: Kumbhera, Kumbhi) are used to cure cough, mouth and throat infection.
- 7. Leaf and stem of *Chenopodium ambrosiodes* L. (**Vernacular names**: Bara bathu sag) are used in scabies.
- 8. Tender leaf of *Commelina oblique* Buch.-Ham. (**Vernacular names**: Kansira) is used for the relief of boils and infection caused by poisonous insects bite.

- 9. Bark of *Crataeva nurvala* Buch-Ham. (**Vernacular names**: Barun) is used in nephritic disorders.
- 10. Rhizome decoction of *Curculigo recurvata* Dryand (**Vernacular names**: Talmuli) is applied locally to cure urinogenital ulcer.
- 11. The whole plant of *Cynodon dactylon* (L.) Pers. (**Vernacular names**: Durba) is used in the treatment of miscarriage.
- 12. Leaf and rhizome of *Drynaria quercifolia* (L.) J. Smith. (**Vernacular names**: Gundi) are used in intestinal worms and abdominal pain.
- 13. The whole plant of *Enhydra fluctuans* Lour. (**Vernacular names**: Helencha) is used to treat hypertension and excess bile secretion.
- 14. The plant juice of *Euphorbia hirta* L. (**Vernacular names**: Dudhi) is used as a remedy for gonorrhaea and lactation.
- 15. The whole plant of *Glycosmis arborea* (Roxb.) DC. (**Vernacular names**: Phatikhira) is used for the treatment of jaundice, anaemia, worms and vomiting.
- 16. Tender leaf of *Meyna spinosa* Roxb. (**Vernacular names**: Monkata) is used in skin irritation.
- 17. Leaf of *Mussaenda roxburghii* Hook. F. (**Vernacular names**: Mussaenda) is used in fracture of bone.
- 18. Leaf of Passiflora foetida L. (**Vernacular names**: Ban kamala) is used in blood purifier, burns and scabies.
- 19. Crushed twigs of *Neptunia prostrate* Lank (**Vernacular names**: Panya lajuri) is used to prevent gastritis, acidity and constipation.
- 20. Fruits of *Phyllanthus acidus* L. (**Vernacular names**: Harboroi) are taken either raw or dry as liver tonic.
- 21. Half cup of root decoction of Plumbogo zeylanica L. (**Vernacular names**: Sweta Chita) is given to 2-3 months pregnant woman for abortion, if necessary.
- 22. Leaves and tubers of *Typhonium trilobatum* (L.) (**Vernacular names**: Kharkan) are given to the patient suffering from piles and rheumatism.
- 23. Leaves of Aegle marmelos Correa ex Koen. (Vernacular name: Bel) are used for religious purposes. These are used as fodder and given to goats for curing stomach disorder or loose motion. Fruits are eaten raw and boiled as well. Fruit pulp is used against stomach disorder. Stem wood is considered good for making "asan" for

- placing idols and branches are used as firewood and are required in religious occasions. This tree is also assumed as "Chaudhury" (Head) of village in absence of any suitable candidate and takes decision by gathering around the tree.
- 24. The fruit juice *Averrhoa carambola* L. (Vernacular name: Kamaranga) mixed with sugar is used to cure jaundice. Decoctions of leaves are used for taking bath to relieve from jaundice.
- 25. Fruits, leaves, bark and seed of *Azadirachta indica* A. Juss. (Vernacular name: Neem) are used as insecticide. Fruits and bark are grounded with water to make paste and sprayed in infected paddy fields. The dried powder of seeds are mixed with cow dung and used as fertilizer and insecticide as well. Fresh leaves are consumed during stomach problem, cough, cold, pimples, fever, small pox and chicken pox. Branches are used as tooth brush against toothache.
- 26. Cinnamomum verum Breyn. (Vernacular name: Dalchini) is effective in improving blood glucose control in diabetic patients and adds powerful antibacterial power to cold and flu remedies. Cinnamon essential oil is a reliable remedy for athletes' foot but should only be applied to the skin when diluted with carrier oil.
- 27. Roots *Moringa oleifera* Lam. (Vernacular name: Sejna) are used to relieve from pain. A mixture of its bark along with arhar root and base of banana plant is used to recover headache. Stripped bark is kept in the home or holes for chasing or keeping either snake or rats away from the house during full moon.
- 28. Leaves and young branches of *Nyctanthes arbotris-tris* L. (Vernacular name: Hengra) are used against stomach disorder. Bark is used to heal wounds.
- 29. Fruits of *Phyllanthus acidus* L (Vernacular name: Lehri) are boiled to extract juice and used to cure cough. Leaves are boiled with neem leaves and are used for taking bath to cure chicken pox infection.
- 30. The young leaves of *Psidium guajava* L. (Vernacular name: Goyam) are consumed with water in empty stomach to cure gastric problem. Paste of young leaves with raw egg in empty stomach is considered best against diarrhea. Fruits are edible and considered good for health.

Indigenous medicine is generally transmitted orally through a community, family and individuals. All cultures and societies have knowledge best described as folk medicine. In earlier times, mothers were entrusted with all but serious remedies.

Results and Discussions

In the present clinical world, there is a continuous need to discover new antimicrobial compounds since there are incidence of new infectious diseases. Another big concern is the development of resistance to the antibiotics in current clinical use. Finding new antibiotics involves a huge amount of time and investment. Also any new antibiotic comes with a huge number of side-effects. The path to search of new antimicrobial agents can be made easier by starting the journey from the search of traditional medicines or natural sources. Hence the plants can be used in modern medicine with scientific base.

In Tripura, traditional medicines acted as the primary health care system at times. With time and practice, the people, mainly the women, have developed the knowledge on the use of plants and plant products in curing various ailments/ diseases. With the use of these plants for the medicinal purpose their beliefs in their medicine for remedies have grown. The knowledge and belief was transmitted from the mother of one generation to the mother of another generation only verbally. They use these medicinal plants in everyday life as food, with specific recipe and these can treat various diseases. The mothers also have the knowledge of preparing different combinations and each combination has specific use for the treatment.

Conclusion and Recommendations

Due to modernization the traditional knowledge is vanishing with time. Accordingly, it is urgently required to study each of these formulations and analyzed scientifically. If the results after analysis reflect the medicinal properties as said in the folklore world, these formulations can be patented. These can act as one of the steps for empowering of the women and help to uplift the mankind as a whole.

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Effect of Picture Based Instruction on Teaching Microwave Oven Usage Skills among Women with Intellectual Disabilities

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Abstract

The present study was designed to identify the effect of Picture Based Instruction in learning Microwave Oven usage skills among Women's with mild intellectual disabilities. The present study used the single group case study pre-test and post-test design in order to obtain effectiveness of Microwave Oven skills among Women's with mild intellectual disabilities. The study consisted of 10 Women's with mild intellectual disabilities. A static picture manual was prepared for the intervention. Individual sessions were given to all the participants. The MASTER-CHEF package consists of activities (Heating of Popcorn, Making of Maggi and Making of Soup). Results indicated that there was remarkable improvement after using Static Picture Manual, was effective in training Microwave Oven skills to mild intellectual disabilities. All the ten participants acquired and maintained the skills.

Keywords: Microwave Oven skills, Static picture manual, & Intellectual disabilities.

Introduction

The true mark of a civilized society may be the manner in which it deals with the members who are unlike others. The matter is same in dealing with the Womens with Intellectual disabilities also. The limitations of cognitive functioning will cause a child with Intellectual disabilities to learn and develop more slowly than a typical child. Children may take longer to learn language, develop social skills, taking care of their personal needs such as dressing or

eating and domestic skills. Learning will take them longer, require more repetition, and skills may need to be adapted to their learning level. Nevertheless, virtually every child is able to learn, develop and become participating members of the community through the proper education and training on every day activities of life.

The importance of teaching pre-vocational skills to Women with intellectual disabilities has received an increased attention in the transition literature. Pre-vocational skills include, washing the clothes, ironing the clothes, maintain personal hygiene, read and write simple sentences, wipes floor with wet cloth, and cutting vegetables to prepare food, etc. Learning the pre-vocational skills will prepare the Women with Intellectual disabilities to live as independent as possible. As more and more people with disabilities have prepared to live in the community – in their natural home, foster homes – the special educators have become aware that a broader spectrum of skills are necessary to function successfully in the domestic environment. So teaching the prevocational skills to Women with intellectual disabilities are very vital.

Intellectual disabilities/ Mental retardation

Intellectual disabilities are a condition associated with cognition disabilities and impairments in adaptive behaviour. The Women who are classified as mentally retarded can be provided an appropriate education that will facilitate them leading as productive, independent lives as possible. Although they may have difficulty in learning, all can learn to some extent and profit from well-designed educational programs and systems of support.

Definitions

The term mental retardation has been defined on various times. The revised definition of American Association on mental retardation (AAMR) in 1992 states as: "Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly sub average intellectual functioning existing concurrently with related limitations in two or more of the following applicable adaptive skills areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work. Mental retardation manifests before age 18" (Luccasson, et. Al. 1992).

In 2002, AAMR again revised the term as "Mental Retardation is disabilities characterized by significant limitations both in intellectual functioning and in adaptive

behavior as expressed in conceptual, social and practical skills. These disabilities originate before age 18 (Luccasson, et, al. 2002).

Accompanying this definition and expanding on how it should be applied are five assumptions.

- 1. Limitation in present functioning must be considered within the context of community environments typical of the individual's age, peers, culture.
- 2. Valid assessment considers cultural and linguistic diversity as well as difference n communication, sensory, motor and behavioural factors.
- 3. Within an individual, limitations often coexist with strengths.
- 4. An important purpose of describing limitation is to develop profile of related supports.
- **5.** Within appropriate personalized support over a sustained period the functioning of person with Intellectual disabilities generally proven.

The Women with Mild Intellectual Disabilities

All disabilities are serious, even when they are considered mild. Those children with intellectual disabilities have impaired intellectual abilities. Children with intellectual disabilities may be sumptuously different from children of next door in some way, but also like them in others. These difference, create obstacles for these individuals and families, people with these disabilities must take special effort to learn, and need considerable special assistance and support from teacher and others. Today many professional intellectual disabilities are socially constructed condition to some extent.

Special Education

Special education includes all aspects of education which are applied to exceptional children. Special education means specially designed instruction which meets the special education and related needs of an exceptional child. Special education is not a total programme which is entirely different from the education of the ordinary children; rather it includes those aspects of education which are specific in addition to the regular programme. It aims at the personal adequacy, social competency and the economic independence of the Women with special needs. Special education has the same objectives as those of regular education, i.e. human resource development through providing appropriate education to children, national

development, civic development, social reconstruction, vocational efficiency etc. in addition to these objectives special education has certain special objectives such as the following:

- 1. Early identification and assessment of special needs of handicapped children.
- 2. Early intervention to prevent a handicapping condition from becoming a serious one for remediation of learning problems and compensation by teaching the child new ways of doing things.
- 3. Parent counselling about prevention and remediation of deficits, care, and training of handicapped children in daily living skills, self-help skills, pre-academic skills, and communication skills.
- 4. Community mobilization and awareness of problems of handicapped children and their education.
- 5. Rehabilitation of the handicapped.
- 6. By means of this, the realistic self-concept of that strategically determine for effective living.

Importance of Teaching Cooking Skills to Women with Intellectual Disabilities

One of the purposes of special education is to teach Women to live as independent as possible. This means Women with intellectual disabilities must learn to perform daily living skills, such as food preparation. Women who can satisfactorily prepare a meal are on the road to independent living (Cox, 1982). Learning to prepare food enhances independence in the home and also may lead to employment in the community. Numerous investigations have focused on teaching food preparation skills to Women with intellectual disabilities.

Food preparation skills represent a widely popular objective within programme for people with intellectual disabilities. There are various reasons to state this. One of the reasons for this is that the people with intellectual disabilities are expected to live independently in the community and they should meet their own needs, especially preparing meals. Another reason for considering food preparation skills as very useful objective is that such skills can serve multiple purposes such as leisure management, domestic, occupational and work involvement. There are also the financial benefits as independent cooking is more economical than its alternatives: a restaurant, hiring someone to cook, etc. as the meals time is one of the constructive social interaction time, the preparation of food too gives a fruitful social

interaction to those who live in the group homes. Thus the cooking skills are an important curriculum content to teach the Women with intellectual disabilities.

Learning: Learning is the process by which an individual acquires knowledge, habits, skills, mental constructs, values and attitudes through study, experience, or teaching, that are necessary to meet the demands of life. An individual starts learning immediately after his birth and continues the learning throughout his life.

Factors Influencing Learning

The factors influencing the nature of the learner are: Maturation, Readiness, Mental abilities, Age, Sex, Previous experiences, Socio-economic background and Physical handicap.

II Task Variables (Nature of Learning Material)

- 1. Length of the task
- 2. Difficulty of the task
- 3. Meaningfulness of the task.

III. Method Variables (Nature of Learning Situation)

The important method variables that influence learning are the following:

- 1. Method of learning
- 2. Amount of practice
- 3. Availability of incentives
- 4. Nature of sensory approach

Importance of Learning Food Preparation Skills

The purpose of special education is to teach Women to live as independently as possible, and then food preparation skills should be a high priority curricular are for persons with intellectual disabilities. Women who can "satisfactorily prepare a meal are on the road to independent living". (Cox, 1982). This means Women with mild to severe intellectual disabilities must learn to perform daily living skills including food preparation skills.

A second reason for considering food preparation skills as very useful objective is the view that such skills can serve multiple purposes such as leisure management, domestic, occupational and work involvement. Within this context, the teaching emphasis is not specially on peoples in depending living, but rather on their own constructive, pleasant or remunerative daily activity. (Lancioni, et al 1999). Cooking independently has other financial benefits. Independent cooking is more economical than its alternative; eating out in

restaurants and /or hiring someone to provide cooking services. (Snell & Browder, 1987). Few skills are found across so many curricular domains.

A third reason, popular particularly with in group homes living management, is the peoples possibility of interacting constructively and fruitfully with staff members and fellow home inhabitant during important session of the day, such as those concerning preparation in social contents (e.g., dinner parties) with families and friends. Few skills are found across so many curricular domains. (Felce & Toogood, 1998; Sullivanetal., Bakeret al.,) 1998; Sinson, 1994).

Challenges in Teaching Food Preparation Skills: Cooking skills is a multi-step task and replicated practice in real setting is required to master the skills.

- Replication of real lifelike scenario within the simulated class room environment is not always possible.
- Teaching food preparation is totally dependent skill.
- Community based instruction sometimes become difficult to implement with frequently student need because of inherent cost and logistically complex factor such as transportation and scheduling. (Wissick etal, 1999)

Statement of Problem

One of the purposes of special education is to teach students to live as independent as possible. This means students with intellectual disability must learn to perform daily living skills, such as food preparation. Students who can satisfactorily prepare a meal are on the road to independent living (Cox, 1982). Learning to prepare food enhances independence in the home and also may lead to employment in the community. Numerous investigations have focused on teaching food preparation skills to students with intellectual disability.

Food preparation skills represent a widely popular objective within programme for people with intellectual disabilities. There are various reasons to state this. One of the reasons for this is that the people with intellectual disabilities are expected to live independently in the community and they should meet their own needs, especially preparing meals. Another reason for considering food preparation skills as very useful objective is that such skills can serve multiple purposes such as leisure management, domestic, occupational and work involvement. There are also the financial benefits as independent cooking is more economical than its alternatives: a restaurant, hiring someone to cook, etc. as the meals time is one of the

constructive social interaction time, the preparation of food too gives a fruitful social interaction to those who live in the group homes.

This study intend to analyse the factor of cooking skills are an important curriculum content to teach the students with intellectual disability.

Objectives of the Study

The prime objective of the is to find out the effect of Picture Based Instruction in teaching usage of Microwave Oven skills for cooking among students with Mild intellectual disability.

- To find the effect of Picture Based Instruction on cooking skill among students with Mild Intellectual Disability.
- 2. To assess the knowledge of mild intellectual disabilities regarding usage of Microwave Oven skills by pre test.
- 3. To Prepare and administer static picture instruction manual of teaching programme to mild intellectual disabilities regarding usage of Microwave Oven skills.
- 4. To Analyze the effectiveness of Picture Based Instruction regarding usage of Microwave Oven skills by post test.
- 5. To find the level of usage of Microwave Oven.

Hypothesis

 H_0 = There is no any significant difference in the pre-test and post test scores after Picture Based Instruction on teaching usage of Microwave Oven Skills to mild intellectual disabilities.

Methodology

The present study an attempt to see the effect of Picture Based Instruction in learning Microwave Oven usage skills among Women's with intellectual disabilities.

Research Method: In the present study Experimental method was used.

Research Design: For conducting the present study experimental method was used. The experimental method is the only method of research that can truly test hypothesis concerning cause and effect relationships (Cohen, Manion & Morrison, 2007). For the present study the

pre-test & post-test one group experimental design was used. Case study method was used in the present study.

Case study research excels at bringing us to understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Case study research emphasizes detailed contextual analysis of a limited number of events or conditions and their relationships focus on one instance (or a few instances) of a particular phenomenon with a view to providing an in-depth accounts of events relationships, experience or processes occurring in that particular instances.

Sample: The sample of this study includes ten Women with mild intellectual disabilities.

Sampling Technique: Non probability, purposive sampling technique was used in the present study. Non probability sampling, also called non-random sampling, is the process of selecting of selecting a sample using a technique that does not permit the researchers to specify the probability or a chance that each member of a population has a being selected for the sample. Purposive sampling, also referred to as judgement sampling, is the process of selecting a sample that is believed to be representative of a given population. In other words, the researchers select the sample using his experience and knowledge of the group to be sampled.

Sample Profile: The participants were 10 children with mild intellectual disabilities studying in SEC, NIMH-Secunderabad. 6 were from NIOS and 4 from Vocational class with IQ below 55-69.

Inclusion Criteria

- 1. Subjects with mild intellectual disabilities, whose IQ scores ranges between 55 to 69 as per school records.
- 2. Subjects with mild intellectual disabilities age ranging between 20 35 years.
- 3. Those Women who secured a minimum of 50% score in pre-requisite checklist.
- 4. Subjects with mild intellectual disabilities who are not having any sensory disabilities.
- 5. Subjects with mild intellectual disabilities who are not having any fine motor difficulties.
- 6. Those subjects who do not exhibit any severe problem behaviour.

It is observed that the total number of subjects were 10 between the age group of 20 to 35 years. Among them 10 subjects were selected for experimental group. In this experimental group three male and one female were participated in the study.

Variables

Independent Variable: Picture Based Instruction.

Dependent Variable: Usage of Microwave Oven (Electronic Appliance).

Constant Variable: Women with mild intellectual disabilities.

Tool: For the present study researcher has developed the following tools. To find out the effect of Picture Based Instruction in learning usage of Microwave Oven skills among Women with mild intellectual disabilities the following tools were developed by the researcher. The researcher prepared Checklist for assessing pre-requisite check list for usage of Microwave Oven.

Task analysis checklist for assessing usage of Microwave Oven by cooking different recipes are like heating of Popcorn, making of commercial noodles and making of soup.

Content: Before developing this checklist the researcher observed all the basic tasks related to electronic appliances namely identifying the plug and plug point, holding the plug, inserting the plug into the plug point, removing the plug from the plug point, switch on and off, etc. Based on the observation and after discussion with teachers, the researcher listed down the pre-requisite skills required for learning using of Microwave Oven .the total number of items in the checklist was 14 and items in pre-requisite checklist for Heating of Popcorn making of commercial noodles and soup was 18 all the items have been arranged in increasing order of difficulty.

Scoring: Key is provided for recording the performance of the subjects. The following scale was used to record the performance of the Women.

The keys are as follows: The scoring was done using numerical codes ranging 1-5.

Physical Prompt-1, Modelling- 2, Gestural Prompt-3, Verbal Prompt-4, Independent-5.

Material Development: For teaching Usage of Microwave Oven skills, researcher prepared a Static picture Manual, a coloured photographs booklet with written instructions, so that the Women with mild intellectual disabilities would be able to be independent in their learning of Usage of Microwave Oven skills.

For preparing it, first self clicked pictures were taken using the own camera. Manual was prepared by using A4 size vertical sample which had single picture and written instructions in a full page.

Intervention Schedule: The intervention programme was conducted for 20 sessions for Women. During of each session was 2 hour 30 minutes on daily basis except weekends and

holidays. Everyday researcher observed the Women's performance and provided scoring using keys 1-5.

Activities planned for cooking in Microwave Oven: In the present study the researcher had planned certain activities (making of maggi, making of soup and heating of Popcorn in Microwave Oven). The materials were developed so it will gain the attention as well as enhance the ability of making from the persons with mild intellectual disabilities.

Procedure: The researcher has selected the sample of 4 persons with mild intellectual disabilities. The researcher did the pre-test of both the persons with mild intellectual disabilities before starting the intervention. The researcher has given 20 sessions of intervention for the cases. For the present study, the researcher has divided the day in two sessions, namely morning session and afternoon session. All the ten cases got equal chance to attend both the sessions equally. The researcher had follow a certain pattern for activities that is first activity was making of commercial noodles was given intervention and heating of Popcorn like rice /dal /curry etc. for making interest in children because researcher has chosen the timing of 11 a.m. to 12: 30 a.m. and it was the lunch time for the children and learn how to heat their food in lunch box and enjoy the food eating hot. And the third activity was making of soup at 3: 00 p.m. because it was the snack time.

The researcher provided one activity at a time with 20 minutes interval how the case responded to the activity was recorded in the record sheet side by side. While providing the material the researcher interacts with the cases and forms rapport with the child.

The researcher has prompted the persons with mild intellectual disabilities with various prompts. The session wise performance of the Women was recorded as regular evaluation of record sheet has been done after each session of intervention. After the 15th session post test was conducted and the data were tabulated for analyzing using statistical analysis.

Evaluation: Base line scores were recorded at the beginning of intervention and the researcher has done evaluation at the end of 5 session among the steps in task analysis of intervention Package pre and post test was conducted among the most observed states of 4 cases to record the improvement.

Statistical Analysis: Data was analyzed by using Statistical package for social sciences (SPSS). Mean, SD was calculated, non parametric tests were used due to the small group of sample. Paired t-test was computed to find out the level of significance between pre-test and

post-test. The data was interpreted according to the research findings and also represented the findings through graphs.

Review of Literature

The review of related literature involves the organized recognition, location and analysis of documents containing information related to the research problem. These documents include periodicals, abstract, reviews, books and other research reports. The major purpose of reviewing the literature is to determine what has already been in relation to the present study. The knowledge not only avoids involuntary replication, but it also provides the understandings and insights necessary for the development of a logical frame wok into which the problem fits.

The present study is conducted to investigate the effect of audio visual instruction on learning cooking skills among Women mild intellectual disabilities. An attempt is made to review the previous literature, conducted in imparting skill training to children with intellectual disabilities using audio visual instructions and training of cooking skills to these Women using different methods and techniques.

The review of literature includes the following

- ✓ The studies related to Picture Based Instruction
- ✓ The studies related to cooking in Microwave Oven.

Mechling and Gustafson (2009) conducted a study on compared the effects of static photographs and video prompts on the independent performance of cooking related tasks by six young adults with moderate intellectual disabilities. An adopted alternating treatment design with baseline and final treatment phase was used to measure the percentage of tasks correctly completed by each student across treatment. Results indicated that both procedures were effective in increasing correct performance of tasks for all participants from baseline level in which only verbal task directions were provided.

Bevil, Alicia R., Gast, David L., MAGUIRE, Amy M., Vail, Cynthia O. (2005) this evaluated a hierarchical intervention with ten young children with significant developmental delays. Picture cues and correspondence training were provided at three levels of intrusiveness. Two children required only less intrusive levels of instruction while the other two required the entire intervention package to reach criterion.

Lancioni & Reilly, (2002) documented 12 studies using pictorial instructions on cards; ten studies using pictorial instructions through computers; seven studies using systematic

prompting (time delay or prompted practice of incorrect task steps), and three studies combining time delay with cards. The overall training outcomes were quite encouraging. Maintenance and generalization data tended to be in line with the training outcomes. The findings for the different teaching approaches were analyzed in relation to the characteristics of the participants, number and complexity of the tasks available, data collection strategies as well as relevant literature on intellectual disabilities, the suitability of teaching approaches for different types of people and environments and some relevant issues for future research were also examined.

Jeff Sigafoos, MarkO'eilly, Helen canella(2005)., evaluated the use of a video prompting procedure for teaching three adults with developmental disabilities to make popcorn using a Microwave Oven. Training, using a 10-step task analysis, was conducted in the kitchen of the participant's vocational training program. During baseline, participants were instructed to make popcorn, but were given no further instructions or prompts. Video prompting consisted of first watching a video clip of a step being performed and then giving participants the opportunity to imitate that step. This prompting procedure was introduced in a delayed multiple-probe across subjects design.

Following acquisition, video prompting was removed and maintenance in the absence of video prompting was assessed at 2, 6, and 10 weeks. Two of the three participants acquired the task when video prompting was introduced and performed at 80–100% correct during follow-up sessions. This data suggest that video prompting may be an effective instructional strategy for teaching daily living skills to adults with developmental disabilities.

Result and Discussion

An essential part of research is the analysis of the data. Analysis must be carried out in relation to the research problem. The decision on the appropriateness of analytical methods must be made in relation to the nature of the research problem and the specific aims of the research study. There are several reasons why we analyse data to measure, to make comparisons, to forecast, to test hypothesis, to construct concepts and theories, to explore, and to explain the inferences.

Case study is not a methodological choice but a choice of what is to be studied (Stake); similarly (Miles and Huberman) described a case study method as an investigation of a phenomenon that occurs within a specific context.

The present study entitled "Effect of Picture Based Instruction on teaching Microwave Oven usage skills among Women with mild intellectual disabilities" is attempt to:

- ✓ To find the effect of Picture Based Instruction on cooking skill among Women with Mild Intellectual disabilities.
- ✓ To find the level of usage of electronic appliance (a Microwave Oven).

As per the research design the persons with mild intellectual disabilities were taken as subjects. All the ten subjects were exposed to "Static Picture Manual on Usage of Microwave Oven" package comprises of different activities with different materials.

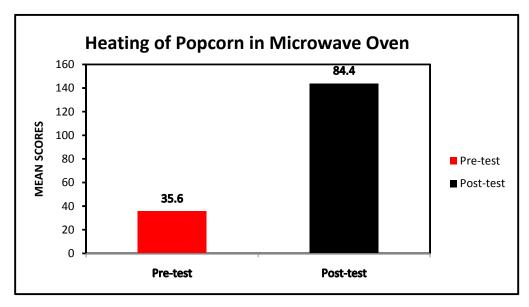
The subjects have been given an exposure for various activities in the popcorn making room for 20 days and everyday 2:30 hour intervention was given to all the ten cases. The pre-test scores have been collected before the intervention started. After 20 sessions post-test scores have been collected. The performance of each student has been duly entered in the data record sheet, after every session to measure the performance of the subjects, which is subjected to statistical analysis.

Table 1: Comparison of Pre-test &Post test mean scores of Experimental Group in Task
Heating of Popcorn

Sl. no		Mean Scores	SD	t-value	Sig. diff
1.	Pre-test	35.6	2.76	49.22**	67.75
2	Post-test	84.4	0		

Note: ** is highly significant.

Figure 1: Pre-test and post-test mean scores in learning Heating of Popcorn in Microwave Oven.



The table 1 and Figure 1 depict that mean improvement scores of 4 Women pre-test is 35.6 (SD=2.76) and post –test mean improvement scores is 84.4 (SD=0) and difference in mean score is 67.75. This shows that there is a difference between pre-test and post test mean scores giving the indication of improvement in heating of leftover in Microwave Oven after implementing the intervention using static picture manual.

To find out whether the difference between the mean scores is significant or not, paired t-test was conducted. The obtained t-value is 49.22, which is higher than the table value. This indicates the difference in the pre-test and post- test improvement scores is highly significant at p<0.05.

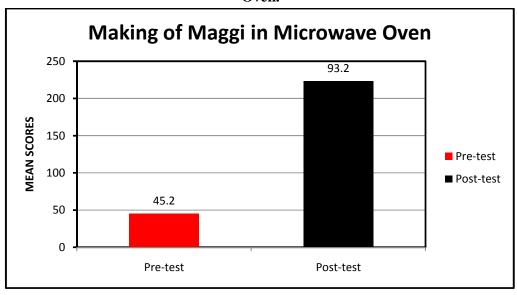
In the present study the subjects were given ample opportunity to improve involvement in the task related activities. So child can improve in his/her vocational skills with the support of family members. Static Picture Based Instruction based programme can be considered as effective technique for the Women to improve vocational skills.

Table 2: Comparison of Pre-Test &Post test mean scores of Experimental Group in task making of Maggie

Sl.no	Test	Mean Scores	SD	t-value	Sig.diff
1.	Pre-test	45.2	0.5	64.3**	78.5
2	Post-test	93.2	1		

Note: ** is highly significant.

Figure 2: Pre-test and Post-Test Mean Scores in Making of Maggie in Microwave Oven.



The table 2 and Figure 2 depict that mean improvement scores of 4 Women pre-test is 45.2 (SD=0.5) and post –test mean improvement scores is 93.2 (SD=1) and difference in mean score is 78.5. This shows that there is a difference between pre-test and post test mean scores giving the indication of improvement in making of maggi in Microwave Oven after implementing the intervention using static picture manual.

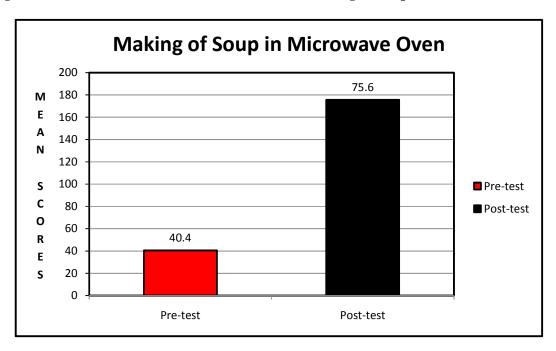
To find out whether the difference between the mean scores is significant or not, paired t-test was conducted. The obtained t-value is 64.3, which is higher than the table value. This indicates the difference in the pre-test and post- test improvement scores is highly significant at p<0.05.

Table 3: Comparison of Pre-Test &Post test mean scores of Experimental Group in task making of Soup

Sl.no	Test	Mean Scores	SD	t-value	Sig.diff
1.	Pre-test	40.4	0.5009	54.5**	95.2
2	Post-test	75.6	0.5009		

Note: ** is highly significant.

Figure -3: Pre-test and Post-Test Mean Scores in Making of Soup in Microwave Oven



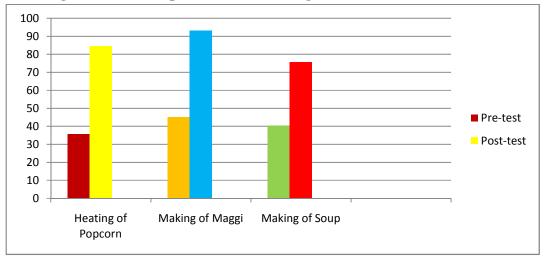
The table 3 and Figure 3 depict that mean improvement scores of 4 Women pre-test is 40.4 (SD=0.5009) and post –test mean improvement score is 75.6 (SD=0.5009) and difference in mean score is 95.2. This shows that there is a difference between pre-test and post test mean scores giving the indication of improvement in making of maggi in Microwave Oven after implementing the intervention using static picture manual.

To find out whether the difference between the mean scores is significant or not, paired t-test was conducted. The obtained t-value is 54.5, which is higher than the table value. This indicates the difference in the pre-test and post- test improvement scores is highly significant at p<0.05.

Table 4: Comparison of Pre and Post Test percentage scores among different activities

Sl.	Names of Activities	Pre-test	Post-test
1.	Heating of Popcorn	35.6	84.6
2.	Making of Maggie	45.2	93.2
3.	Making of Soup	40.4	75.6

Figure 4: Overall performance of usage of Microwave Oven skills



The above graph shows that there is a highly significant difference between pre-test and post-test scores as it shows in pre-test score is 35.6 and post-test score is 84.6 in heating leftovers, pre-test score is 45.2 and post-test score is 93.2 in making of maggi and pre-test score is 40.4 and post test score is 75.6 in making of soup.

Major Findings of the Study:

- Subject participation was enhanced and strengthened.
- Performing skills of the Women increased through active participation.
- ➤ Women have developed their curiosity, self-esteem and the skill to learn by themselves.
- > The subjects of experimental group who received Picture Based Instruction showed improvement in learning usage of Microwave Oven skills.
- > There was high significant improvement in the percentage score of effect of Picture Based Instruction in usage of Microwave Oven skills.

Conclusion:

The results of the present study indicate that the subjects of the experiment have shown significant achievement in hands on working with modern technology cooking appliance of usage of Microwave Oven skills through Picture Based Instruction. Learning was faster and it created interest as the excitement of preparing some eatable items like making of maggi, making of soup and heating Popcorn has given them an opportunity in operating electronic appliance.

Educational Implications: Results in this study support Effect of Picture Based Instruction in usage of Microwave Oven skills among Women with Mild Intellectual Disabilities. Teacher can teach the usage of electronic appliances such as Water Heater, Mixer Grinder, Hair Drier, Microwave Oven etc., as these items make the person become more independent as a part of ADL.

Limitations/Recommendation:

- The sample size in the present study was small; as such generalization of results is difficult. Hence there is a need to conduct the study on a large sample.
- ➤ The Women should be trained in such activities which provide job opportunities for their bread winning.
- > Researcher was directly involved in the intervention which can influence the results.

Scope for Further Research:

- ✓ The present study has been conducted the study for a small group with shorter duration. Hence, there is a need to conduct the study for larger group with longer duration.
- ✓ The Picture Based Instruction study can be used for different age group of children belonging to various levels of intelligence (Moderate to Severe level) to find the effectiveness of the instruction.

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6

The Education and the Political Emancipation among Women in Eritrea: A Study in Asmara

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Abstract

Educating a female emancipates her and brings about better economic changes. Women can help to initiate and ensure the implementation of programs, and activities that would promote the welfare of women and encourage greater participation in national development. Achieving gender equality and social transformations require a great educational effort in order to transform the domestic environment where men and women coexist. Education is both an issue of concern and strategy for achieving change both now and into the future. Access to and provision of education is clearly seen as the means through which gender equality will be achieved around the world.

Keywords: *Eritrea, Education, Women, Development, Government.*

Introduction

Eritrea encourages women in all the major professions: lawyers, judges, doctors, university lecturers, bankers, accountants, administrators and so on. These professional women have made and are still making a valuable contribution on various fronts of the national development. In spite of the increasing number of highly qualified and competent women in all the areas, the number of women in policy-making positions in government and statutory bodies is very small. The government decided to do something about this, which means to improve women's representation on the boards of stated and Para-stated bodies. A study on

the women advancement showed that 30percent seat is reserved for women while they have equal access to the rest 70percent seat.

The government agreed to increase the representation of women on the hierarchy bodies, and whenever boards of such ideas were to be reconstituted, it was asked to recommend names of qualified women to serve them. Thus, the NUEW (National Union of Eritrean Women) association was formed. This particular act of the NUEW considerably increased women's participation in policy and decision making at various levels and it also exposed a number of women to broader national issues than they had been dealing within their individual offices and departments. This had an observable result which created a keen awareness among professional women in various aspects of national life. Following from this, it made it possible for these women to ensure that women's concerns were taken into account in making rules and regulations that governed the lives of women employed in the formal sector. One specific area in which such women's contribution affected the lives of many women employees is that the maternity leaves. Women in Eritrea are entitled up to two months paid maternity leave. It becomes obvious that only woman can effectively and efficiently articulate women's concerns and issues based on an urgent need which can be brought into reality through the women policy-making bodies.

As such, women can help to initiate and ensure the implementation of programs, and activities that would promote the welfare of women and encourage greater participation in national development. They can also provide necessary insights into women's concerns that would ensure that government policies, projects, and programs which have the desired impact and achieve the desired goals precisely. Moreover, it is clear that such women become effective role models for the younger generation. As Dolphyne (1995) states, that "only education can give women knowledge that would expose the fallacies behind the central practices that keep them in subordination without such education being made available to women the emancipation of women will take several more centuries which consequently, highlighting the contrast between educated urban citizens and illiterate rural communities, a contrast which poses a real threat to social stability (Dolphyne, 1995). Keeping this in mind, women to stand for their right of decision as their counterpart they should be educated.

Review of Literature

Historically, we can see from theliterature that there was aless societal expectation of educating female. For instance, in earlier literature, Clarke has argued young women to study

only one third as much as young men and not to study at all during ministration (Henslin, 1993). Nevertheless, this view could be seen a yardstick to measure the mindset of earlier generation's gender discrimination in school, and could also remind us now that we have swum towards the gender equality in education. According to the time-honored view of a girl always known enough for her needs and domestic duties are traditionally make her overload. Girls have to leave schools as soon as the distance between the home and the school becomes too far. Even parents most of the time, prefer to female drop outs as opposed to her male siblings in such cases.

Understanding this situation, the NUEW is continuously exerting its effort to motivate females to continue their education in such circumstances. A short interview was held with Tsega (NUEW Official) and she informed the researcher that her organization is in collaboration with other NGOs who had granted a huge number of mountain-bike cycles to students who are far from the secondary school around Nefasit (a village located on the mountain), otherwise it would have resulted in significant drop out of female students. Furthermore, still, today's schools are sex-biased towards students into different fields and activities (Weitzman, 1984; Foley 1990, cited @ Henslin, 1993). School teachersstill nurture the natural difference they find as in the past and continue to perpetuate the gender inequalities of the existing social order. This is mostly done by fostering sex-linked aspirations by encouraging females to choose "feminine" occupation thought to be compatible with future husbands and children, while male choose work more benefiting the future roles for which they are being groomed. Hence girls are often engaged in clerical jobs, which hardly men join whereas males join to business and lucrative professions.

In most cases, men and women differ in their aspiration when they join the college as they are nurtured in patriarchal worldview. Two extremes in bachelor's degree highlight this reality. The 92% of bachelor's degree in home economics is awarded to thefemale while 95% of bachelor degrees in military science got the males. Similarly, men earn 86% of bachelor's degree in the masculine field of engineering, whereas, women are awarded about 90percent ofabachelor degree in the feminine field of nursing (Sociological Abstract, 1991: Table 284 Cited in Hensline, 1993). It is noted that the female's highest attrition rate occurs is engineering and mathematics, traditionally two strongly masculine fields (Hensline, 1993).

The above notion can be well proved in Eritrean context. The University of Asmara which is the only national university record shows that the above reality in the so-called

feminine and masculine departments. The engineering faculty (especially the Mechanical Engineering) is commonly said as monasteries where women are not allowed (such as Debre-Bizien Monastery). The mathematics department also shows similar gender biases enrolment. Whereas, on the other side, the nursing, psychology, English, biology have quite appreciated proportion of females. So, the gender bias aspiration in which females are being socialized accounts a lot in hindering females to join special departments, where they can make a radical change at least economically. Some scholars insist that the pay gap could behalf owing to the fact that women tend to choose lower paying jobs whereas men are more likely to go into more lucrative or changing and rewarding fields, such as business and engineering, but the balance is due to discrimination of work world (Kemp, 1990 cited on Henslin, 1993).

Another big challenge in the feminine world is the harsh realities of discrimination in searching jobs. In many nations, especially in the USA, the law states that family responsibilities cannot be a factor in hiring, transfer or promotion, and forbids employers from asking a prospective employee's family status, owing to the assumptions that child's need may interfere with a woman's ability to do her job. However, in the ground the discrimination of this assumption has never ceased. Employer's use different strategies to get around the law discover it to a woman is married or has a child (Berkeley, 1989 cited in Hensline, 1993).

In the related literature of the Eritrean context, the national constitution applies to both genders with no discrimination (Article 5). Article 7, prohibits, "any act that violates the human reign of women or limits or otherwise thwarts their role and participation". Women are entitled to participate in all political, economic and cultural aspects. However, though the constitution states this right, we can't say there is equal normative access to the job on the ground, especially on the private companies, as the negative patriarchal stereotype towards women, which has a deep root on the tradition of customary attitudes our society could not be eradicated in a short period of time. However, taking this into consideration, the government of Eritrea has taken thesame affirmative action to increase the recruitments of female teachers with the focus on minorities and to empower female for the establishment of an effective support system and the integration of gender-sensitive issues, methodologies and increasing awareness of the teacher's role in the educational process (NUEW, 1999).

Achieving gender equality and social transformations require a great educational effort in order to transform the domestic environment where men and women coexist.

Education is both an issue of concern and strategy for achieving change both now and into the future. Access to and provision of education is clearly seen as the means through which gender equality will be achieved around the world. The employment of women is not possible without improving access to education. Economic stability and financial control likewise, require education in order to be successful. Because of the impacts of education can have in other areas of women's lives, it is not surprising that, it is frequently mentioned. While getting gender equality into education programs needed, its access to education in the first places that continue to be a vital concern for many equality advocates (Symington et al, 2004).

Taking into consideration the government of Eritrea has made a lot of efforts to promote the economic and social status of women. The basic guide for a continuous process towards the emancipation of women and their full integration in economic, political, social and cultural development has been the formulation of Nairobi Forward-looking strategies that intended to provide a practical and effective guide for global action on a long-term basis. Thus, the government develops a constitution in 1997 which favours the right of women and their participation in every aspect of life, among these, health and education issues, school infrastructures, penal code to exclude all discriminatory clauses and add protective measures for women. Education as a strategy shifts the focus from a matter of access to schools into a matter of content that the students should be taught. Thus, education is used as a tool through which gender issues are addressed and through which advocacy can occur. The roles education as issue and education as a strategy reinforce each other, means they favour of equality both through promotion and generation of attitudes (Symington et al, 2004).

The government of Eritrea believes that the core of its development strategy lies in the equality of its human resources. The direct need for the reconstruction and rehabilitation of the economy will depend on the development of its human resources and the production of modern, literate and skilled manpower. To meet these objectives, the state declared free and compulsory basic education for all its citizens irrespective of sex and ethnic origin. If we see similar literature, the UNESCO (1960) also adopted the convention and recommendation against discrimination in education, based on sex, race and national or social origin (J. Chapeaud, 1974).

The impact of education is obvious, women and men who are not well trained are treated as marginal workers who can be hired or dismissed at the desire of employer, especially in labor-intensive industries like the garment of women, tradeswomen with educational credentials provide a pool of cheap labour that enables industries to survive and flourish. Women have traditionally been paid less than men reflecting both their subordinate position in society and the assumption that women are never the principal sources of family income, but are dependent on men as providers. Unless women are educated to compute efficiently with men, they will continue to be discriminated, to occupy marginal positions and to continue to lag behind men in earnings (Pervcci and Knudsen, 1983).

As such the ministry of education in Eritrea to ensure equal distribution, equal participation and provision of quality education have made a 5-year development plan (1995-2000). This is to make sure that the 50percent of all primary school aged children have easy access to education by the year 2000, with 51percent of enrolment rate achieved in 1999. Besides, regional seminars and workshops on girl's education have been conducted to raise awareness about the status, role, and contribution of women and girls in society. Greater participation of the parents through the Parent Teacher Association to tackle the major problems of girls' education has been introduced at school and village levels.

Furthermore, a review of education and an increase in the capacity of Asmara University to entertain more students has opened the opportunity for more high school graduates to join the university. Female enrolment had gradually increased with the introduction of positive discrimination by lowering the university entrance criteria. Female enrolment has reached 14percent of the total day and evening participants. Education either function as an instrument which is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it or it becomes "the practice of freedom", the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of the world by eradicating patriarchy, by ending sexist oppression, by challenging the politics of domination on all fronts (Watkins, 1989).

Women's education always has lagged behind that of in all African societies and there are several reasons for this. It has been explained that in traditional societies, a major role for a woman is to ensure the continuity of the lineage as she was expected to marry soon after puberty. She did not need formal education to perform this function. Moreover, a woman was expected to be provided for by her husband, and since education become a means for entering a highly paid job in the formal sector. It was considered more important for boys to have

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formal education since they were thought to be breadwinners in the family (F.A. Dolphyne,

1995).

Objectives

The main objective of this research is:

To investigate female education in relation to better political awareness, decision making

and access to leadership.

Hypothesis

Education has the power of political emancipation among the feminine and brings about

leadership changes in the society.

Methodology

Sources and Techniques of Data Collection: Primary data collection method is based on

questionnaires. The total 80 questionnaires are distributed which are self-guided. These

include close and open-ended questions.

Secondary Data: Relevant books and Research Journals are referred.

Probability Sampling: The random sampling techniques are used in the field of study i.e.,

Zoba Maekel (Central Asmara) and the differential percentage of the questionnaires are

distributed as the following: Asmara (50%), Himbirti (19%), Adi Segdo (12%), and Adi

Abeito (19%), to have a better representation of the population.

Non-Probability Sampling: We used judgmental/purposive sampling by choosing college

educated and elementary level to the gap of emancipation that better suit to our study.

Characteristics of the Respondents

Gender: All respondents are females

Age: Between 25-50

Marital Status: Married, Divorced or Widowed

Limitation of the Study

This research could have been concluded nationwide but unfortunately, it is done within Zoba

Maekel (Asmara) only due to lack of financial resources. Another limitation is the sample

population comprises only female respondents.

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Data Analysis

Significance of Education in the life of Women: Educating a female emancipates her and brings about better economic changes. As Ann Cotton and Richard Synge said it, female education is "an investment in better standards of living in the future with multiplier effect in terms of health, nutrition, hygiene, smaller families and women's improved social status. It is equally, the process of family and community's own social, economic and political barriers to progress (Ann Cotton and Richard Synge, 2000). The above quotation indicates that educating females results in a high rate of political emancipation and leadership quality.

Women's Education and Its Influence in Making Decisions

To discover the real data, first I prefer to forward this quotation. The perfection of our nature and capability of happiness must be estimated, by the degree of reasons, virtue and knowledge that distinguishes the individual and direct the laws, which bind society; and that from the exercise of reason, knowledge and virtue naturally flows, is equally undeniable if mankind be viewed collectively (Wollstonecraft, 1991). If a woman is to be excluded, without having a voice, from a participation of the natural rights of mankind, prove first on the way tothe charge of injustice and inconsistency, that they want a reason. If marriage and family are the "cement of society" excluding women from the civic sphere does not remove foundational threat they pose (Shanley, 1991).

To come to the genesis of the Eritrean women and their influence in decision-making in some spheres of life, traditionally women were deprived of their right to vote and to be elected as avillage or community administrators. It is not an exaggeration to judge them that they were in Iron cage. They did not have any chance or right to present/forward and negotiate their cases regardless of its severity, in the village assembly. A witness record could be the article 20 (1952) of the Eritrean constitution which states "the electoral shall consist of those persons possessing the Eritrean citizenship who are/is male mix"(NUEW,1991), which dominates the Eritrean societies' attitudes and behaviour towards feminine, the whole period of pre-colonial, colonial and until the eve of independence. Though, the women's participation in decision-making started during the struggle for independence but its speed multiplied after the independence.

Although their equal participation in the struggle for independence and the governmental policy gave them equal access to decision making, their level of education lagged them behind the men. To substantiate our arguments with most factual findings,

whether increasing level of education increase one's influences in decision be it at home, district or state level, we have forwarded the following open-ended questions to be filled privately by the respondents. And, finally, we have come with the following substantial findings (Table-1).

Table 1: Educational Status Leading to Political Rights

	Responses	Percentage
Yes, I think	48	60
No, I don't	22	27.5
No response	10	12.5
Total	80	100

It is clear from the Table-1 that with upgrading the level of education, women's consciousness on their own political right and their awareness about the public life increased. Although 12.5 percent of the total sample did not respond to the above question and 27.5 percent did not agree with, the majority that is 60 percent supported with increasing education, there is an increase in exercising one's political rights. This is due to the fact that, through critical thinking, she is able to understand what is going around the world. Further education enables here to break the old tradition, which means the negative attitude towards one's natural and legal rights, through participation in seminars, reading pamphlets, magazines newspapersand related articles. This is all our analysis of the respondent's view. From this, we can understand that there are more attitudes, on one's education and her access to political right but in practical life, there is not. As one Mozambican ex-fighter states, "it is easier to eliminate colonial, bourgeois influence that was imposed on us, and identified with the enemy than to eliminate generations of tradition from within our own society." Having this concept in mind, to break the oppressive patriarchal tradition and to form an equalitarian society, it is high time females fought for their equality and it could only be achieved through much effort on education.(Davis, 1990).

Educated Women and Access to the Leadership

In the olden days, women were traditionally denied not only their access to decision making be at home, district or state level, but also they did not have any access to leadership. As I have explained above, even for their cases, be it simple or complex was through their male counterpart. There are over-lapping notions, that hinders women from having access to

leadership one of the main factors for the oppression and denial of women, that was passing from generation to generation as a hereditary through a narrow looking, which do not have a broader perspective as in today's world stem out from a culture at a macro-level a wrong image perceived by the community about women as inferior beings. It may seem overemphasized to say partly the perception is resulted from misconceptions of the wording of the holy books. As Filmier justified the origin of Patriarchy "God created only Adam and a piece of him made the woman and if by generation from the two as parts of them all mankind are propagated. If also God gave to Adam not only the domination over the woman and the children that issue from them, but also over the whole earth to subdue it., and overall creatures on it. So, as long as Adam lived no women could claim or enjoy anything but by domination, assignation or permission from him" (Shanley, 1991:76). This notion dominates the history of mankind, which is falsified in today's contemporary world, that we have men of the professor as well as women, men of president as well as women etc.

If we look at the gender ratios, still there are fewer higher educated women. Their low level of education denied them their proportional representation in the political hierarchy. But if we look at the trends of women representation on the political hierarchy and their influence in decision making is increasing. However, it is not only the level of and access to education denied women in leadership or influences their right, but the type of the field of study they choose is another problem. Not only in our country but, also in many parts of the world, women groups worry about taking part in mainstream politics. Many deliberately keep their distance from the broader political process and are ambivalent about becoming embroiled in party politics. Many women are struggling for economic and social rights, these distances them from public authorities and even at local level. They also avoid formal political activity that they regard as sectarian, corrupt and divisive (Report Geneva, 2000).

For the question that we have distributed that is "what kind of educational profession do you think is appropriate for you?" Although some very negligible number of respondents rejected it and considers it as a sexist question that any profession is appropriate for female- it depends on their choice. More than 70percent have supported, health science, commerce, hygiene biology are more appropriate. These departments tend to be domestic and do not let most of the women to look around the world and have little information what is a human right. Ideally, most of the respondents have the attitude of being educated, is helpful in exercising one's political right. But on the ground, many of the respondents want themselves

to keep a distance from influencing their political right; they only want to develop their economic status. We are not identifying their effort to develop their economic status, but parallel to that, they should know what deserves for them and especially the educated women should pay as role models to the younger females.

Table 2: Gender Breakdown in the Higher Government Office

No.	Government Post	1992		1998			
		No. of women	Total	% of women	No. of women	Total	% of women
1	National Government	22	105	20.9	33	150	22
2	Ministers	2	13	13.3	2	17	11.8
3	Director General	1	4	20	2	41	4.8
4	Directors	1	0	0	9	115	7.8
5	Professional Governor	0	10	0	0	6	0
6	Sub-Provisional Governor	2	51	3	3	53	5.7
7	Dep. Provisional Governor	1	47	2	4	49	8.2
8	District Administrator	8	109	6.8	3	13	23
9	Dep. District Administrator				6	7	85.7
10	Ambassadors				2	18	11.1
11	Counselors				1	13	8
12	Councils				6	56	10.7
13	Secretarial 1 st				0	19	0
14	Secretarial 2 nd				1	31	3.1
15	Secretarial 3 rd				2	23	8

Source: National Report on Eritrean Women, 1999

Although we do not have current data, we feel it is advisable to use secondary data (Table-2) which show the representation of Eritrean women in the higher governmental offices. It becomes clear that after the Literacy campaign started in 1992, the representation of women in the governmental bureaucracy has increased and is increasing. Additionally, the reserving of seat 30percent, which is positive discrimination towards women enable them to

increase their representation from 20percent in 1992 to 22% in 1998. There were no women-Ambassadors, counsellors, and judges in 1992; however, these gaps are filled in 1998, though comparable to men it is in a small level. For more information, the following table is referred. However, the increase in women representation in the governmental posts does not mean that there was no problem. The cultural constriction of political office as masculine makes it extremely difficult for women to be elected though there is a quota system (reserved seat). The men have their own constriction of patriarchal view and the women also have to lower their self-concept. Thus, females should have the know-how, about their capacity and the ability as male counterparts in many aspects of life is it economic, social or political and should work hard to break the patriarchal view.

Problems and Prospects of Females Education

Educating women yields a higher rate of return than other investment available in the developing world. Even though, evidence shows that increased schools of boys and girls are similar in its wage impact and educating women is clearly much more effective in generating social benefits. It is because of women do with the extra leverage which they offer within the family, and in part because of the direct effect of being more knowledgeable and aware (Summers, 1994).

In Eritrean contexts also educating the female populations are found to be important, and efforts are being made to enable them to have an equal right to participate in education. One of these efforts is the formulation of policies that guarantee the equality. For instance, the macro-policy (1994:29) shows that "all efforts will be made to sensitize and enhance the awareness of the society on the decisive role of women for the socio-economic, political and cultural transformation of the country".

According to the ideal setting of the policy, everything seems to go smoothly. That is the laws recognize the equal rights of citizens, and policies are formulated to indicate how this equality should be maintained. But, is there equality of access to education based on gender? Are women participating equally in education with their male counterparts? What is the parents' attitude in sending their children to Warsay-Yikalo higher education? Do they give equal chances or opportunities for their sons and daughters? The following table illustrates the responses of the parents' attitude about their children's continuation of higher education.

Table 3: Parent's Attitude in sending their Children to Warsai-Yikalo Higher Education

	No of respondents	Percentage
Equal for their sons and daughters	15	18.75
More for their sons	57	71.25
More for their daughters	3	3.75
Do not give chance for both	5	6.25
Total	80	100

According to our 80 respondents' responses to the questionnaire that we have distributed about the "parents" attitude in sending their sending sons and daughters to Warsay-Yikalo higher education" are listed above (Table-3). Based on the above table, 15 respondents out of 80 or 15.75percent answered that parents give equal chance for their sons and daughters. From the total sample, 5 individuals or 6.25percent of the respondents replied that their parents do not allow for both their sons and daughters to continue their higher education. Similarly, only 3 respondents that are 3.75percent said that parents give more chance for their daughters.

However, though the above-mentioned number of respondents has different responses or answers, the majority of our respondents i.e., 57 individuals (71.25%) out of the total sample size agreed with the idea that parents are biased more in favour to their sons to continue higher education.

From the above statistical analysis, we can understand that almost all parents are willing to allow only their sons to continue higher education, but not for their daughters as equal as they do for their sons. So, why is this happening? Are they thinking that educated women contribute nothing to the family, community or the society at large? The following arguments will give us highlights or organizations for the above questions.

L.B Castle study shows that educating women is an investment in better standards in the future, with multiplier effects in terms of health, nutrition, hygiene, smaller families and women's improved social status. It was the great and wise African leader Dr. Aggey, who said, "when you educate a man, you educate an individual, but when you educate a woman, you educate a family". This is because the women play a very important role in the family and the society at large, as for matters and educators of their children who will be the future leaders in the society (L.B Castle, 1968).

Conclusive evidence now exits that the education of women has a beneficial impact on raising economic productivity, improving the health, nutrition, and longevity of a family; reducing family size and raising an individual's self-esteem and confidence. Furthermore, these studies have shown that the impact of educating women goes beyond themselves and their families to enrich an entire nation (Richard Deeth, 1978). Then if the reality is what we have discussed above what could be the main barriers for the continuation of women's higher education? Some major contrast from related literature is discussed below:

There are many reasons, which can be a bottleneck for the gender inequality in education, such as family size, socio-economic factor, religious and cultural beliefs, societal norms, early marriage and so many others. Kane's study indicates that in some regions of Eritrea, educating females is seen as irrelevant and a barrier to achieve the goals and aspirations which parents have for their daughters. That is a girl child approaching the age of puberty is the domain of domestic life and a candidate for marriage (Kane, 1994).

Similarly in a report by the National Union of Eritrean Women on their fourth conference (1995; 3) shows that the traditional societal attitudes of low status accorded to women, leads to preferring boys for schooling over girls, and that is why women are forced to quit at an early stage or are not encouraged to continue their higher education. The report also indicates that the already existed reluctant attitude to educate females is reinforced by poverty, heavy domestic workload, distance from home to schools and early marriage.

Studies show that children of educated parents were more likely to enrol in school and less likely to dropout and spent more time in school. According to Giele's study, father's education was more significant for female enrolment at primary level; whereas, mother's education was more significant at the secondary and tertiary levels. Mother's education was also positively associated with years of schooling and it also reduces the chances of dropout from school (Janet Z. Giele, 1978).

Another research made by the UNESCO (1996) shows the influence of parent's income on female's education. Although the influence is that most parents try to send their

children to children, a choice has to be made by lower-income families on who go to school, male or female, most of the time; it is the girl who drops out or remains at home. This shows that the difficulty in meeting educational expenses result to gender disparity in education. When resources are limited, boys are given priority.

However, according to our findings, the parents have a negative attitude towards sending their female kids to Sawa (12th Grade Education Centre of Eritrea and Mai-Nefhi (Bachelor Degree Education Centre) to continue their higher education. If such phenomenon continues to happen in the future it would be a waste for the country's educational system, and the desired benefits and goals of educating the female population are going to be a distant dream.

Conclusion

It is time to identify the prominent causes and find a remedy for the problem. Without identifying the problem it would not be easy to eliminate or ameliorate the ongoing problem of the educational system of the country. This issue needs an integrative and a holistic approach to the solution. Therefore, the government and non-governmental organizations, such as the National Union of Eritrean Women (NUEW), the National Union of Youth and Students (NUEYS), the religious institutions and the whole society should strive together and carry their duties for the change of societal negative perceptions and attitudes towards barriers of higher female education, especially to higher education. Since nowadays the measure of living standard and income level is the level of education in any society. So that if they are going to be productive as they are supposed to do, they should be given the opportunity to continue their higher education as far as they could and should be equally motivated as their male counterpart, otherwise, they will remain unproductive and hence a burden to the society in the future.

7

Shifting Cultivation in North-East India: Trend, Benefits and Challenges

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Abstract

Shifting cultivation is in transition across the world. Traditional land practices exacerbated by poverty and associated with a lack of technical knowledge is the main cause for the continuation of unsustainable shifting cultivation. Population pressure, inadequate land for cultivation, low education levels, policy planning and implementation without local participation are all factors that influence farmers' decision to continue shifting cultivation. Shifting cultivators from indigenous nationalities have the right to practise shifting cultivation and to government support to help make it productive and remunerative. The objectives of this paper are to study the trend, benefits and challenges of shifting cultivation in North-East India.

Keywords: *Shifting cultivation, North-East India, Tribal, Livelihood.*

Introduction

The word Jhum may be the most misunderstood term among the environmentalists, scientists and others concerned with natural resource management. The most commonly shifting cultivation is defined as any agricultural system in which the fields are cleared (usually by fire) and cultivated for shorter periods than they are fallowed. Jhum is not synonymous with 'slash-burn agriculture' or it is not just a land-use system where forest is slashed and burned

to make arable land for a particular period. In fact slush-burning is a land clearing method and is employed also for other agricultural and non-agricultural land clearing. However, Jhum is a component of traditional agro-ecosystem encompassing practices derived from ages of observations to interact with the environment in most harmonious manner that takes the form of traditions, customs and rituals that governs agriculture in a most cultural and sustainable way where land is cleared by means of controlled fire and employ natural fallow phase long enough to be dominated by woody vegetations.

The term shifting cultivation refers to a certain method of farming. In this particular method, land is widely used to cultivate crops for a few years, then allowed to lie fallow for several years after which it is reused again. The practice is characterised by a cultivation phase, which involves clearing of primary or secondary forest and crop cultivation for one to three years, followed by a fallow phase, during which cultivation is suspended to allow recovery of soil fertility. It is considered as a major driver of deforestation. Shifting cultivation throughout the tropics is largely a subsistence activity practised in areas with few alternative options and is a practice that is likely to continue. It fallows have been shown to recover vegetation faster in terms of basal area, regeneration, and accumulation of species than other human-modified and subsequently abandoned lands such as pastures, agro forestry sites, and plantations (Karthik et al., 2009).

Slashing and subsequent burning are preconditions for Jhum cultivation. Slashing of vegetation for cultivation is done during January-February. The dry vegetation is burnt and the hill is cleaned for sowing seeds in April-May. The important Jhum crops are brinjal, turmeric, rice, chili, sesame, marpha (cucumber), arum, sweet-gourd, and cotton. The other less important crops are maize, gourd, tassel-gourd, yard-long bean and tree potato. After the start of the first rains in April- May, they dibble different crop seeds in holes, while simultaneously using the hoe. Jhum farmers broadcast smaller seeds and dibble relatively bigger and mixed seeds. They cultivate turmeric and aroids as mixed crop.

The hill farmers harvest Jhum crops for a long period that starts from June and ends in December depending on the maturity period of crops. They harvest leafy vegetables and fruits during June to September. Cucumber, bitter gourd, maize, sweet gourd and sinel (spices) are harvested between July and September. Other important crops like potato, chili, arum and rice are harvested during September and October. In October, they harvest white

gourd, yard long bean, cotton, cassava and sesame. Only turmeric is harvested between the month of November and December.

The shifting cultivation system persists due to its compatibility with the sociophysical environment characterised by a sparse population, specific forms of community land tenure system, undulating topography, poverty, meagre resources, etc. All such cultures are intimately linked with the mode of subsistence. The environment, local conditions and value systems are invariably connected with the agricultural practices that have evolved in the area. Shifting cultivators may possess a highly developed knowledge and understanding of their local environments and of the crops and native plant species they exploit. Shifting cultivation is a land-use practice that reflects indigenous knowledge accumulated through centuries of trial and error, an intricate balance between product harvest and ecological resilience, and an impressive degree of agro-diversity.

Types of Shifting Cultivation

Conklin (1957) distinguished "integral" and "partial" shifting cultivation. "Integral" reflects the system as an integral part of a subsistence farmer's way of life. "Partial" indicates the use of shifting cultivation as a technological expedient for cash cropping or some other form of commercial agriculture. Conklin's classification can be summarized as follows:

- 1. Integral shifting cultivation: (a) Pioneer Swidden farming-Significant portions of climax vegetation are cleared annually; and (b) Established Swidden farming-Little or no climax vegetation is cleared annually.
- 2. Partial Swidden cultivation: (a) Supplementary Swidden farming-A farmer practicing continuous agriculture devotes part of his efforts to shifting cultivation; and (b) Incipient Swidden farming-A farmer moves into a forest area and cleans part of it for continuous agriculture but may be forced to shift by low yields after a few years.

Watters (1971) proposed a similar classification:

- (a) Traditional shifting cultivation-This has been practiced traditionally by tribal people whose lives and religions have been closely tied to the natural systems around them.
- (b) Shifting cultivation imposed by necessity-The cultivator is not linked to a tribal community and usually owns no land or not enough land to support permanent agriculture. Therefore, the cultivator often clears forests for cultivation and starts a cycle of shifting agriculture. This type of shifting cultivation can also be called land, hunger shifting cultivation.

Stages of Shifting Cultivation

The basic phases of shifting cultivation are the following: (1) conversion, (2) cultivation, and (3) fallow. Conversion includes the slash-and-burn of native vegetation. This practice physically exposes the soil for planting, eliminates competing plant cover, and improves soil fertility by leaving it less acidic and with a greater availability of nutrients. The length of the cultivation period varies depending on the region (one to three years), but is always shorter than the fallow period. The fallow period may be natural or managed and allows recovery from the soil degradation resulting from conversion and cultivation. The duration of the fallow period is variable, but it must be long enough for woody vegetation to become dominant.

Shifting cultivation typically has two basic stages: removing the old vegetation and managing the new vegetation.

- (a) *Clearing:* Forest clearing usually starts at the beginning of the dry season, since many plants dry slowly and have to be cut long before they can be burned. There are two stages in clearing: (i) slashing and related cutting activities, and (ii) felling and related cutting activities. Most small vines, weeds, bushes, easily cut saplings and underbrush are slashed close to the ground at the slashing stage. The size of the farm clearing varies considerably, depending upon population density, the number of people to be supported from one family garden, soil fertility, and the size and energy of the labour force.
- (b) *Burning:* The success of the burn depends on the thoroughness of cutting activities, the type of vegetation, and the weather. The best time for burning depends upon the dryness of the debris. In the dry season three or four weeks are usually adequate for drying. Sometimes a second or third burning, usually in piles or in small heaps, is necessary in humid areas to clear all debris.
- (c) Cropping: The cropping phase is the most demanding phase of the shifting cultivation cycle. It is complex, since many crops are cultivated simultaneously or in an overlapping fashion producing a constantly changing mosaic of inter-cropped cultigens in the system. Mixed cropping and intercropping are common practices in the shifting cultivation system, showing the importance of space and time relations for securing a flow of crop production throughout the year. Mixed cropping provides more complete cover and controls weed growth, thus reducing the labour. for weeding.

(d) *Fallowing:* Fallowing is a period in which the land is prepared for the next shifting cultivation cycle by controlled natural reforestation and forest enrichment. This period is important for re-establishing the soil fertility. Nutrients are taken up by the fallow vegetation from a variety of soil depths depending on their rooting zones. Part of the nutrients is stored in the vegetation and parts are returned to the soil surface in the form of litter and rain-wash. The long term success of a shifting cultivation system depends upon how well the fallow period restores or maintains soil fertility. If the fallow period is shortened, the annual addition of organic material will be reduced, leading to soil fertility deterioration (Christanty, 1986).

Global Perspectives of Shifting Cultivation

Shifting Cultivation is also known as slash-and-burn agriculture. It is when farmers clear land by slashing vegetation and burning forests and woodlands to create clear land for agricultural purposes. It is practiced in much of the world's Humid Low-Latitude, or "A" climate regions, which have relatively high temperatures and abundant rainfall. It is practiced by nearly 250 million people, especially in the tropical rain forests of South America, Central and West Africa, and Southeast Asia. Shifting cultivation is called by different names in different parts of the world. It is generally known as 'slash and burn' and 'bush fallow' agriculture. It is variously termed as Ladcmg in Indonesia, Caingin in Philippines, Milpa in Central America and Mexico, Ray in Vietnam, Conuco in Venezuela, Roca in Brazil, Masole in the Congo and Central Africa.

Most families grow for subsistence purposes, just to eat and live. In other cases, the crops grown by each village vary by local customs and taste. The predominant crops include upland rice in Southeast Asia, maize (corn) and manioc (cassava) in South America, and sorghum in Africa. Yams, sugarcane, plantain, and vegetables are grown in some regions (Agriculture, 2014). Shifting agriculture is an adaptation to tropical soil conditions in regions where long-term, continued cultivation of the same field, without advanced techniques of soil conservation and the use of fertilizers, would be extremely detrimental to the fertility of the land. In such environments it may be preferable to cultivate a field for a short period and then abandon it before the soil is completely exhausted of nutrients.

Across South and Southeast Asia, a large number of people depend fully or partly on shifting cultivation for their livelihood and food security. The majority of the people practicing shifting cultivation in South and Southeast Asia belong to ethnic groups that are

generally subsumed under categories like ethnic minorities, tribal people, hill tribes, aboriginal people or Indigenous Peoples.4 In South Asia, shifting cultivation is practiced particularly by Adivasis in Central and South India and by indigenous peoples in the Eastern Himalayas³, i.e. Eastern Nepal, Northeast India, the Chittagong Hill Tracts of Bangladesh and the adjacent areas across the border in Myanmar. The extent of land under shifting cultivation in mountainous areas of mainland Southeast Asia region are discuss in table 3.1.

Table 1: Extent of Land under Shifting Cultivation in Mountainous Areas of Mainland Southeast Asia Region

 (10^3 ha)

Country	Total Land Area	Total Forest Area	Shifting Cultivation Area	% Forest under Shifting Cultivation
Cambodia	17,652	12,163	NA	NA
Laos	23,080	13,173	400	3.04
Myanmar	65,774	28,856	181	0.63
Thailand	511,770	12,735	400	3.04
-Northern	16,966	7,523	400	5.32
Vietnam	32,536	8,312	3,500	42.11
Chaina	39,410	9,533	130	1.36
(Yunnan Province)				
Total	229,629	84,772	4,611	5.44

Sources: Banerjee (1995), Sam (1994), FAO (1995), Fujisaka (1991), Lovelace (1991) and TDRI (1997) http://ercscd.env.nagoya-u.ac.jp/envgcoe/kanok.pdf

Even though shifting cultivation, locally called 'jum', has considerably declined in recent years, it is still an important source of livelihood for the majority of the indigenous peoples and a dominant land-use system in the hilly areas of the Chittagong Hill Tracts. In 1901, out of a total population of 124,762 persons of the CHT, 109,360 were estimated to live on jum. In the district gazetteer published in 1971, it was reported that about 41,485 hectares (102 468 acres, or 4.3 percent of the total area of the CHT⁴) of land are cleared every year for jum cultivation (Ishaq 1971: 80). According to another estimate in 2000, the proportion of people depending on jum has decreased, and the area under jum was estimated to be around 40,000 hectares (ha). Mohabbatullah et al. (2012: 2) estimated that about 40,000 households are currently involved in jum cultivation.

Shifting cultivation in a variety of forms has been practiced successfully and safely for centuries, fully adapted to the specific climatic conditions prevailing in a given forest region. Social change in Africa over the last few decades has been characterised by increasing population densities; the expansion of areas under cultivation, largely through the introduction and expansion of cash cropping; increasingly difficult access to land; and the increasing participation of small communities in regional, national and international markets. Changes in agricultural techniques can be understood in this framework, for what has been happening in Africa is that these techniques have been adapting fast to the changing circumstances, in particular the decreasing availability of land.

In Liberia, an alternative way of controlling the amount of land available to each taungya farmer was introduced by the Forestry Development Authority (FDA) in 1974. Land preparation, up to and including the phase of burning, is carried out by the FDA, and then the farmers come in to plant one rice crop at a nominal fee. A fee is charged to control the acreage given to each household and to help retain part of the cost for land preparation. The main benefits are reported as reduction in the cost of reforestation, as farmers perform the initial task of tending the plantations, and an increase in the production of upland rice through an increase in cultivated acreage and improved seeds (Forest Department, 2014).

Regardless of past human influence on Africa's tropical forests, the important question of whether or not the practice is actually unsustainable today still remains (Ickowitz, 2004). It is practiced in the thickly forested areas of Amazon basin, topical Africa, parts of south East Asia and north east India. Farmers clear a plot of land by felling trees and burning them. The ashes are mixed with the soil, and crops like maize, yam, potatoes and cassava are grown. When the soil fertility decreases, the farmers shift and clear a fresh patch of land for cultivation. Production in this type of farming is low, as the farmers do not use fertilizers and other inputs. It is known by different names in different parts of the world.

In 1950, the central African forest region subjected to shifting cultivation was composed of 92 percent forest and that in 1990 the forest covers had been reduced to 80 percent of the total simulated land area. The results of the simulation showed that with the current level of technology and consumptive habitats, shifting cultivation under projected rates of rural population growth would increase the annual rate of deforestation to 1.3 percent, converting 94 percent of the land area into cropland, fallow and secondary forests by 2050. At that time, only 40 percent of the potential above-ground biomass carbon (i.e.,

assuming all the simulated area is occupied by dense forests) will remain, compared to 85 and 74 percent in 1950 and 1990, respectively (Zhang et al., 2002).

Nobody really knows how many people depend on the form of land use called shifting cultivation for their livelihoods. It has been estimated that globally it could be up to one billion. They live in tropical and subtropical countries and belong to at least 3,000 different ethnic groups. In Asia, around 400 million people live in and with the forest, and most of them practice some form of shifting cultivation. The concrete manifestations of what is commonly called shifting cultivation are as diverse as the people who practice it, and it is therefore a difficult concept to define. During the 1960s, about 12 million households in South and Southeast *Asia* were involved in shifting cultivation. In Asia, the majority of the people practicing shifting cultivation belongs to ethnic groups that are generally subsumed under categories like ethnic minorities, tribal people, hill tribes, aboriginal people or indigenous peoples.

The popular prejudices against shifting cultivation common in these countries are conflated with other negative attributes ascribed to indigenous peoples throughout the region: that they are backward, primitive, a hindrance to national progress, disloyal to and a security problem for the state etc. In the age of global climate change resource use and management practices that rely on the use of fire are coming under increased pressure. This is particularly the case with shifting cultivation. In the name of forest conservation and development, colonial and post-colonial governments in Asia have since more than a century devised policies and laws seeking to eradicate shifting cultivation (Erni, 2009).

In Bangladesh, extensive and shifting agriculture, due to an increasing demand for food and fodder is the main driver of drastic deforestation and land degradation. In the case of eastern Bangladesh⁵, a drastic reduction of the shifting cultivation cycle due to high population growth is contributing to significant deforestation. This is also resulting in negative downstream effects on the environment creating a cycle of poverty that particularly affects rural farmers. The people in the uplands of eastern Bangladesh have been practicing shifting cultivation from time immemorial and it is closely related with their socio-cultural identity. Forest loss and degradation in the upper streams of watersheds, in particular, do not only inversely affect the socio-economic activities of local people, but also negatively influence downstream life and production, e.g., frequent and serious flooding, rapid siltation

and deposits of gravel in delta areas which also have negative effects on agricultural productivity (Rahman et al., 2011).

Currently, fewer shifting cultivators can allow for long fallow periods and regeneration of forests because they do not control large enough areas due to population densities, political pressures, and economic demands in tropical regions. The historical system of shifting cultivation, which can be sustainable in areas with low population densities and large land areas, is rare and has mostly been supplanted by agricultural intensification (Lininger, 2010).

Shifting Cultivation in India

The current practice of shifting cultivation in eastern and north eastern regions of India is an extravagant and unscientific form of land use. The evil effects of shifting cultivation are devastating and far-reaching in degrading the environment and ecology of these regions. The earlier 15–20 year cycle of shifting cultivation on a particular land has reduced to 2–3 years now. This has resulted in large-scale deforestation, soil and nutrient loss, and invasion by weeds and other species. The indigenous biodiversity has been affected to a large extent.

In India, shifting cultivation is still practiced in the hill areas of North-Eastern Region, Sikkim, Bihar, Orissa, Andhra Pradesh, Madhya Pradesh, Tamil Nadu, Kerala, Karnataka and Maharashtra. But among all these states, such practices are still prevalent in the hill areas of North-Eastern states, Orissa and Andhra Pradesh. The people of eastern and north-eastern region practice shifting cultivation on hill slopes. Shifting cultivation is an age-old practice, particularly being practiced in the Eastern Ghats. Orissa accounts for the largest area under shifting cultivation in India. Shifting cultivation is locally known as the podu cultivation.

About 5298 sq km area annually is under this primitive agriculture practice. Many festivals and other such rituals revolve around the podu fields, because the tribal's view podu cultivation not just as a means of their livelihood, but as a way of life. Crocklin (1961) described shifting cultivation as use of human labour, use of stick or hoe, short periods of soil occupancy alternating with long fallow periods. It served as the economic mainstay. The tribal's were totally dependent on it for survival. It is widely practised in the north-eastern states of India. In India about 10 million hectares of tribal land stretched across 16 states is under shifting cultivation. Based on satellite image, Forest Survey of India estimate 1.73 million hectares of land is affected by shifting cultivation. The shifting cultivation in different states of India is shows in table no. 3.2.

Table 2: Shifting Cultivation in Different States of India

Sl. No.	State	Tribal Families (Million)	Total Area (Million hectare)
1.	Andhra Pradesh	0.11	0.15
2.	Arunachal Pradesh	0.43	0.21
3.	Assam	0.31	0.31
4.	Bihar	0.23	0.19
5.	Madhya Pradesh	0.19	0.38
6.	Manipur	0.36	0.26
7.	Meghalaya	0.61	0.47
8.	Mizoram	0.40	0.19
9.	Nagaland	0.19	0.12
10.	Orissa	2.00	1.60
11.	Tripura	0.19	0.49
	Total	5.02	4.37

Source: Shifting cultivation in India, ICAR

In the Himalayan region of the north east, the agricultural practice of shifting cultivation also known as jhum cultivation or rotational agro-forestry, prevalent since prehistoric times, is being carried out by traditional tribal societies even today (India Today, 2006). It is being practised on the Revenue, Reserve Forests and protected forests. Although shifting cultivation is a non-viable resource-utilization practice, tribals are still clinging to this primitive practice to sustain themselves and their families mainly due to non-availability of timely employment avenues. The mountain eco-systems of these regions with shifting cultivation practice have to be made ecologically sustainable.

Formulating an eco-development plan for the region for environmental sustainability, could consider completely replacing agricultural practice with farm forestry. Agricultural practices are at the cost of loss of biodiversity resources; estimates indicate that one unit of energy in agronomic production costs loss of greater energy from the forests (Ranjan & Upadhyay, 1999). Shifting cultivation is practiced in some form or other in almost all the tribal areas of Orissa. A number of tribes inhabiting different areas of the state are practicing shifting cultivation. These tribes are Bondo, Didayi, Koya, Gadaba, Paroja, Soura, Kutia Kondha, dongaria Kondha, Kandha, Parenga, Jatapur, Juang, Paudi Bhuyan, Erenga Kolha etc. The problem of shifting cultivation is perhaps most acute in Orissa than any other State

in the country. Although at present an accurate data on the areas under shifting cultivation is not available, yet some rough estimates have been made (Dash, 2006).

Shifting Cultivation in North-East India

Jhum cultivation is a local name for slash and burn agriculture practiced by the tribal groups in the north-eastern states of India like Arunachal Pradesh, Meghalaya, Mizoram and Nagaland and also in the districts of Bangladesh like Khagrachari⁶ and Sylhet⁷. This system involves clearing a piece of land by setting fire or clear felling and using the area for growing crops of agricultural importance such as upland rice, vegetables or fruits. After a few cycles, the land loses fertility and a new area is chosen. Most farmers make huts near their land for shelter. Jhum cultivation is most practiced on the slopes of hills in thickly forested landscapes. The cultivators cut the treetops to allow sunlight to reach the land. They burn all the trees and grasses for clean and fresh soil.

Shifting cultivation is the oldest system of cultivation of crops and the first step in transition from food gatherer to food producer. In India the total area under jhum cultivation is 0.94 m ha whereas North East India itself accounts for 80 percent of the jhum area (0.76 m ha). It affects the forest cover adversely by clearing of the hill slope through slash and burning of vegetation. In the north eastern region the Jhum cycle is reduced to 2-5 years from 20-30 years, a jhum cycle of 15-20 years is sustainable. The cultivated lands in north-eastern states of India are shows in table no. 3.3.

Table 3: Cultivated Land in North-Eastern States of India

(in lakh hectares)

State	Reporting Area	Net Area Sown	Area Available for Jhuming
Arunachal Pradesh	57.93	0.70	2.48
Assam	78.81	21.98	4.98
Manipur	22.11	0.79	1.00
Meghalaya	27.79	1.58	4.16
Mizoram	16.54	0.61	6.04
Nagaland	13.51	0.47	6.08
Tripura	10.66	2.36	2.21
Total	227.35	29.49	26.95

Source: Economic Survey

The cycle of agricultural operation in all these areas of North-East Region is marked by the following stages: (1) Selecting the forested hilly track; (2) Cleansing the forest tract by cutting down the jungle during December – January; (3) Drying and burning of fallen shrubs/trees into ashes during February – March; (4) Fencing the cleared plots; (5) Worship and sacrifice; (6) Dibbling and sowing of seeds for mixed cropping⁸; (7) Weeding operation; (8) Watching and protecting the crops against depredation by wild animals, pests, etc.; (9) Harvesting; and (10) Threshing and storing. The shifting cultivation in the North-Eastern Region of India are illustrates in table no. 3.4.

Table 4: Shifting Cultivation in the North-Eastern Region of India

State	Annual Area under shifting cultivation (Sq.Kms.)	Fallow period (in years	Minimum Area under shifting cultivation one time or other (Sq. Kms.)	No. of families practicing shifting cultivation
Arunachal Pradesh	700	3-10	2100	54000
Assam	696	2-10	1392	58000
Manipur	900	4-7	3600	70000
Meghalaya	530	5-7	2650	52290
Mizoram	630	3-4	1890	50000
Nagaland	190	5-8	1913	116046
Tripura	223	5-9	1115	43000
Total	3869 (1.5 Per cent)		14660 (5.7 per cent)	443336

Source: RTFSC (1983), Basic Statistics of NER, 2002, Government of India, North Eastern Secretariat, Shillong. p. 42.

Information about the rotation of crops adopted by the Jhumias of the north-eastern region of India was collected during fieldwork in 1978- 84. Shifting cultivation requires a large amount of land but it can support only a small number of populations. About the extent of shifting cultivation in terms of area or in terms of number of persons engaged in it there is no definite reliable information. As per an old ICAR⁹ review the total estimated area under shifting cultivation was 5.42 lakh hectares and about 26.441 lakh tribal populations were engaged in it. Report of the Dhebar Commission revealed that nearly 5.41 lakh hectares of area are covered per year by the shifting cultivation and about 25.89 lakh tribal populations are depending on it. Again as per the estimates of Vidyarthi, about 2.6 million tribal people are engaged in shifting cultivation covering nearly 1.35 million acres of land scattered in different parts of India.

In north-eastern region, the estimates framed by the state departments of the region in 1974 reveals that shifting cultivation is prevalent in nearly 2.4 per cent of the total area of the entire NE Region at a point of time. About 2.7 million hectares of area i.e., about 14.19 per cent of the area of the entire NE Region is at present available for shifting cultivation and out of which only 16.8 per cent (i.e., about 4.3 lakh hectares) of the area is cultivated at one point of time leaving the rest area for natural regeneration of fertility. Further, about 4.25 lakh tribal families of the entire NE Region are found engaged in shifting cultivation and total area cultivated per tribal family in the region is 1.07 hectares. As per an recent estimate it is found that total area under shifting cultivation in a year in all north-eastern states is nearly 4.16 lakh hectares in comparison to that of 9.89 lakh hectares of area in whole India. Jhum cycle, period of occupancy and duration of fallowing in North-east India is depicts in table no. 3.5.

Table 5: North-East India: Jhum Cycle, Period of Occupancy and Duration of Fallowing

Tribe	Average Annual Rainfall (in cms)	Duration of Cropping	Fallowing Period
Ao (Mokokchung	150 cm	One year	5-8 years
District)			
Garo (Garo Hills)	125 cm	One year	5-10 years
Hmars (W. Manipur)	130 cm	One year	5-10 years
Idu-Mismi (Lohit)	250 cm	Two years	5-10 years
Jaintia (Meghalaya)	250 cm	One year	4-8 years
Khashi (Meghalaya)	300 cm	One year	4-6 years
Konyak (Nagaland)	140 cm	One year	5-10 years
Lakhar (S. Mizoram)	125 cm	One year	6-12 years
Lotha (Nagaland)	145 cm	Two years	10-15 years
Lushai (Mizoram)	185 cm	Two years	8-15 years
Mikir (Mikir Hills)	150 cm	One year	5-7 years
Pawi (S.C. Mizoram)	210 cm	One year	8-10 years
Rengma (Nagaland)	150 cm	Two years	7-15 years
Sema (Nagaland)	155 cm	Two years	6-10 years
Sherdukpen (Kamang)	125 cm	Two years	6-10 years

Source: Economic Survey 2011

According to T.R. Shankar Raman, the superiority of jhum cultivation over some forms of sedentary cultivation partly explains the persistence of this form of agriculture in North East India. Other reasons include the economic security provided by jhum and its cultural importance to indigenous tribes. Poor access to markets, capital, and technical knowhow of more commercially rewarding alternatives such as horticulture and cash crop cultivation also hinders the transition to other occupation. In the north-eastern region of India, comprising the states of Assam, Manipur, Meghalaya, Nagaland, Tripura, Arunachal Pradesh and Mizoram, shifting cultivation is largely practiced in the hilly areas:

(a). Manipur: The characteristics of jhum cultivation in Manipur are as follows: (i) Cutting and clearing of forest areas and burning of the dried biomass by fire, (ii) rotation of jhum land every four to seven years, (iii) use of human labour as the chief input, (iv) non-employment of animals implements or machinery, (v) collective ownership of land, (vi) reciprocal labour sharing and (vii) mixed cropping system. Women predominate in seed selection and planting, weeding, and other operations, while operations such as cutting of the jungle, clearing, burning of the cut undergrowth, etc., are done by men. Both men and women participate in harvesting. The produce is transported from the jhum land to the village by head-loading.

Underlying the view that shifting cultivation has alone been responsible for deforestation and environmental degradation is a deep-seated resentment felt by some sections of Manipuri society and the state administration at the lack of control over land and forests in the hills, the acknowledged power of traditional village councils and headmen, and the assertion by the hill tribes of their rights over local natural resources. The solutions offered in terms of regulating jhum cultivation include: a) resettlement of jhum farmers by relocation of their villages and provision of alternate means of livelihood; b) introducing terrace cultivation or forestry cooperatives on jhum lands; c) diversification into horticulture, floriculture and plantation crops and d) a complete change in the land tenure system in the hills whereby communally owned and operated holdings are replaced by individual holdings.

The planning department of Manipur has laid considerable emphasis on the control of shifting cultivation. The government has introduced certain measures aimed at i) restricting jhuming like allowing natural forest to grow in jhum lands, ii) initiating resource surveys, iii) increasing the area under terrace cultivation, iv) promoting programmes for intensive valley development and development of horticulture, v) plantation farming in jhum land and vi) the development of sericulture and a few forest-based industries.

In 1984, the Central Forestry Commission estimated that 6.7 million ha of cultivable area was affected by jhum in India. According to the Task Force on Shifting Cultivation, as many as 70,000 families in Manipur practiced jhum cultivation bringing 90,000 ha under this method of cultivation annually. The continuance of jhum in the state is closely linked to ecological, socio-economic, cultural and land tenure systems of tribal communities. Since the community owns the lands the village council or elders divide the jhum land among families for their subsistence on a rotational basis. In the hilly areas of Manipur, shifting cultivation is widely practiced, with settled terrace farming in foothill or low slope areas, above the adjacent rivers and streams.

Depending on the slope, wet broadcast on bunded fields or dry broadcast on unbunded fields is practised. In the plains wet paddy rice cultivation is prevalent. Traditional methods of production are still widely used by the farmers, especially on the hill slopes. Estimates for the area under jhum vary widely. The Registrar General of India and the Principal Chief Conservator of Forests, Manipur, reported an average 40,000 hectares in the 1990s, while the Agricultural Census, Department of Agriculture, Government of Manipur, reported an average of 90,000 hectares and the Directorate of Economics & Statistics reported around 44,000 hectares in the same period. The most widely quoted estimate is that of the study by the 'Task Force on Shifting Cultivation, Ministry of Agriculture, according to which, 90,000 ha are cultivated by 70,000 families in the state. Much of the area under rice in the hills, and about 40 per cent of it in the state as a whole is under jhum cultivation.

In Manipur the practice of jhum cultivation is as old as its civilisation and still continues unabated because the people as well as the government are yet to realise the environmental impacts of jhum cultivation. It is a hilly region with large portion of its geographical areas being covered by forests. The topography of the region apart from fertility of the soil can be attributed as one of the factors for widespread practice of jhum cultivation. The sloppy hills, fertile soil and accessibility to the forests are an ideal site for jhuming not to speak of its productivity (Khongsai, 2014).

(a) Mizoram: Shifting cultivation in Mizoram is an integral part of the socio-cultural life of Mizos. With increase in population the jhuming cycle has shortened considerably and the productivity of land has fallen with devastating impact on the environment. The Govt. of Mizoram in 1984 launched a programme called New Land Use Policy with an objective to put an end to the practice of jhuming by providing alternative land based permanent

occupation and stable income to the families practicing jhuming (jhumias) in rural areas thereby raising their standard of living. Assistance is provided for various trades or occupation for a period of three years. The programme is operated on yearly basis (Garbyal, 2009).

Jhum burning is always a busy period in a typical Mizo village. Traditionally, the entire community is involved, and every able-bodied member is expected to be available. All members of the village will prepare for the different responsibilities assigned to them. This may include speedy preparation of fire lines in strategic locations. Now-a-days, the community seeks the help of the local government, Fire Fighting Authority to control forest fires. Subsequently, the Village Fire Fighting Authority and the government may conduct an enquiry to determine the causes of fires and try to identify the culprits, if any. Increasing incidence of jhum-related forest fires has prompted the Mizoram government to introduce the Mizoram (Prevention & Control of Fire in the Village Ram) Rules 1983 for effective prevention and control of forest fires. It has set up fire prevention committees at the village (headed by the Village Council President), district (headed by the Deputy Commissioner) and state (headed by the Chief Minister) levels, each with distinct duties and functions (Darlong, 2000).

It is believed that this helps to fertilize the land, but can leave it vulnerable to erosion. Later seeds and crops are planted. Plants on the slopes survive the rainy season floods. Looking at all the effects, the government of Mizoram has launched a policy to end Jhum cultivation in the state. Shifting cultivation is a pernicious activity. It results in soil erosion and degradation of forests. It is a common land use in many states and particularly so in the North-Eastern region of the country. There are varying estimates of areas affected by shifting cultivation by different agencies. The area affected by shifting cultivation in the region was reported to be 3.81 million ha by a Task Force on shifting cultivation (1983). Other such estimates are 2.80 million ha by North-eastern Council (1975) and 7.40 million ha by FAO¹⁰ (1975).

Under its New Land Use Policy, Mizoram is laying emphasis on ending the age-old jhum shifting cultivation and has allocated Rs.410 crore in budget to enable about 30,000 more tribal families to shift to stable farming. Already 90,139 farmers families have benefited under the State Government's flagship scheme and 29,861 more families would be benefited during this financial year. The Planning Commission has appreciated the Mizoram

government for launching such a unique scheme. The NLUP's success could be a model for other North-eastern States. The Mizoram government initiated its New Land Use Policy in January 2010 to put an end to the age-old shifting or slash-and-burn method of cultivation, and help the tribal farmers to shift to stable cultivation of various cash crops.

In jhum, bamboo forests are cut, burnt, cultivated, and then rested and regenerated for several years until the next round of cultivation, making bamboos vanish and return on the slopes in a cyclic ecological dance of field and fallow. While Cheraw is cherished by all, jhum is actively discouraged by the State and the agri-horticulture bureaucracy. Although jhum is a regenerative system of organic farming, Mizoram, the first Indian State to enact legislation to promote organic farming, is now pushing hard to eradicate jhum under its New Land Use Policy. Labeling jhum as unproductive and destructive of forest cover, policy makers and industry now promote settled cultivation and plantations, such as pineapple and oil palm, claiming they are better land use than jhum. Oil palm, rubber and horticultural plantations are monocultures that cause permanent deforestation, a fact that the India State of Forest Report 2011 notes to explain declines in Mizoram's forest cover (The Hindu, 2014).

While the area of jhum cultivation in Mizoram decreased by 36 per cent that of wet rice cultivation increased by 28.4 per cent during 2010. While the area of shifting cultivation in 2010-2011 has decreased from 44,947 hectares to 28,562, the area of wet rice cultivation has increased from 9,446 hectares to 12,130 hectares. At present, Mizoram produces only 25 per cent of the total rice consumption. Mizoram produces only 44,950 metric tonnes of rice, against the total consumption of 1,80,000 metric tones (The Shillong Times, 2011).

(b) Nagaland: The north-eastern state of Nagaland is located at the confluence of the Indo- China and Indo-Myanmar region, and is endowed with rich diversity of species, flora and fauna. Shifting cultivation is the main form of agriculture, most suitable for the state's climate conditions and steep terrain. In recent years, however, the duration of jhum cycles have shortened. This has meant that there is little time for restoring soil fertility and yields are declining over time. Families that were once self-sufficient in food grains are now not able to produce enough even for a few months of the year.

Nagaland faces a major challenge in adapting land use and production systems to meet rising populations and changing lifestyles, while also maintaining its ecological sustainability. In partnership with the Government of Nagaland, the UNDP project¹¹ focuses on reducing land degradation resulting from shifting cultivation practices. About 61 percent

of the total households of the state are practice shifting cultivation in about 1.00 lakh hectare of land annually thereby exposing about 5.65 percent of the total geographical area of the state to soil erosion hazards. The report stated that jhuming is one of the key drivers of degradation of forest ecosystem in Nagaland, and also often the most suitable form of agriculture for the agro-climatic condition and steep terrain cultivation like Nagaland.

In Nagaland, *jhum* constitutes as much as 76 percent of the cropped area, as per United Nations Development Programme. At least 100 different indigenous tribes of north east India depend on *jhum* for their subsistence. Diverse views abound on the ecological and economic impacts of large-scale deforestation of acres of forests for farming. In Nagaland, *jhum* farmers normally grew multiple crops as decided by the community. The pattern of *jhum* practiced in the state consists of the burning of trees, felling, drying and burning of the *jhum* field followed by sowing, inter-cultural operation, harvest, and fallowin. The UNDP programme in partnership with the government of Nagaland, aims to address land degradation in shifting cultivation locations.

Slash and burn to sustainability project, in partnership with the government of Nagaland, aims to address land degradation in shifting cultivation locations in three districts of Nagaland through participatory planning, generating awareness, building institutions and supporting integrated farm development that enable sustainable land and ecological management. Horticulture, agro-forestry plantations and soil and water conservation measures have improved vegetation cover by over 2,000 hectares of land in project areas. Incomes of 4,400 women have increased by 10 percent as a result of sale of organic farm produce from jhum fields. Average incomes of 5,008 households have increased by 15-20 percent annually through access to existing credit facilities, agriculture revolving fund and sales from increased yield of jhum fields.

The jhum cropping phase has increased from two to three years in pilot jhum farms as a result of timely introduction of soil and water conservation measures. Informed decision is making by traditional institutions on land management systems through participatory land use plans (PLUP)¹³. Formal codification of land use has led to more effective participatory planning and management. PLUP has helped to address conservation challenges including rampant burning of jhum fields, protection of forest and water bodies, land degradation, etc (Slash and burn to sustainability, 2014).

(c) Meghalaya: Shifting cultivation has traditionally been practised in Meghalaya for generations. This has created a mosaic of forested and *jhummed* areas, resulting in disrupted connectivity of forests, fragmenting populations of wild animals and increasing incidents of human-animal conflicts. The problem is most acute in the Garo Hills; three quarters of the state's total number of households involved in shifting cultivation, belong to the Garo hills. As a result of *jhum* cultivation which involves slashing and burning of forests, rich wild habitats have been fragmented, affecting all kinds of wildlife. Jhum is a type of mixed cropping system practiced by Khasis, Garos and alike.

Meghalaya is an agricultural state with 70 percent of the population depending on agriculture for their livelihood. Owing to the region's undulating and hilly terrain other cultivation method doesn't seem feasible. Unlike the plain farming areas in other parts of India, the rugged terrain of the region makes it challenging for mechanized operations to take place hence the farmers here opt for shifting cultivation instead. Several farmers have adopted alternative farming methods in the form of integrated farming, poultry, piggery and terrace cultivation. The local farmers have also adopted other agricultural practices in the form of fishery, bee keeping, tea, rubber and floriculture. Some reports indicated a marked decrease in the number of families practising jhum cultivation in Meghalaya, but it was difficult to assess its success due to lack of reliable data. The implementation of the schemes to control jhum cultivation should not be a water-tight compartment, but has an integrated approach. Barring the decrease in the jhuming cycle from 20-30 years to 3-6 years, this method of cultivation is arguably the one that is most suited in the hills of Meghalaya and perhaps in the whole of north eastern region. The present allocation of funds of Rs. 10,000 per hectare for treatable areas was not sufficient for the required treatment because of the terrain and rainfall conditions in Meghalaya (The Times of India, Feb 1, 2008).

Tripura: The Tripura government has targeted to achieve paddy cultivation in more than 17,000 hectares of hill land under improvised Jhuming method in 2011-12. The traditional method of Jhum had been banned in the state few years ago and the government had introduced various rehabilitation packages for the hardcore Jhumias. Despite sincere effort and initiative for alternative sustainable livelihood opportunities, still about 25,000 primitive tribal people are practicing Jhum but we are able to motivate them to give up the traditional method, which reduced the environmental degradation as well as increased the productivity (The Shillong Times, 2011)

Table 6: Main Jhum Crops in Tripura

Local Name	English Name	Scientific Name
Dhan	Rice	Oryza sativa
Mokkya	Corn, Maize	Zea mays
Job Dhan	Barley	Hordium vulgaris
Ghochya/Til	Sesame	Sesamum indicum
Kon Soal	Fox tail millet	Setaria italica
Joar	Sorgum/Broom corn	Sorghum vulgare
Sora Kozu	Aroides, Arum	Colocasia esculenta
Ool Kozu	Corm/Taro	Amorphophallus campanulatus
Matya-Alu	Yam	Capsicum annum
JummoBegoon	Brinzal, Aubergine	Solanum melongena
Jum/Kem Sumi	Bean	Vigna sinensis
Sal Kumuro	Wax gourd, a variety of bottle gourd	Benincasa hispida
Karanga Sumi	Winged bean	Psophocarpus tetragonolobus
Shimei Alu	Cassava	Manihot esculenta
Sabereng	A basil like herb, a leafy spice crop	Ocimum americanum
Baghor Pada	Cilantro: A corinader like Eryngium foetidum leafy spice crop	Eryngium foetidum
Amila	Roselle, a leafy vegetable Hibiscus sabdariffa with sour taste	Hibiscus sabdariffa
Arhar/Dumoor Sumi	Cowpea	Cajanus cajan
Holot	Turmeric	Curcuma longa
Ada	Ginder	Zingiber officinale

Shifting cultivation has been identified as one of the main human impacts influencing biodiversity in Tripura. Over the last few years a new class of shifting cultivators has emerged that has adopted non-traditional forms of jhooming, which have been responsible for the loss of biological diversity in the state (Gupta, 2000). Various jhum crops cultivated in Tripura are discussed in table no. 6.

The people of Tripura were mainly dependent on agriculture for their livelihood and the aborigines of the princely state were primarily depended on the shifting cultivation, commonly known as Jhum cultivation. It is a very primitive, uneconomic and exhaustive form of cultivation. Plough cultivation was unknown to the tribal's living in the interior of the state. Only the Bengali and Manipuri cultivators along with some tribal communities living in the plain lands and in the border land of Hill Tipperah were acquainted with the plough cultivations before partition. As J. B. Ganguly had mentioned that, in the year 1955, there are 25,000 Jhumia families in Tripura and the total area of land under shifting cultivation was 16,00,000 acres, i.e. about 60 percent of the total area of the territory.

On the basis of the report of Census of India 1961, S. Dev Varman opined that, while the total number of tribal population in Tripura in the year 1961 was 3, 60,070, the number of tribal people depending on Jhum cultivation were 1,75,000, i.e. half of the tribal population were engaged in Jhum cultivation. Following the partition of India large number of Bengali displaced persons immigrated into Tripura for settlement. Most of the immigrants were rehabilitated in rural areas where tribal's practicing shifting cultivation was also being settled in permanent colonies. This created its own problems of adjustment, as there was pressure on land (De, 2012).

The Reang tribe in Tripura, which practised shifting cultivation and still does to an extent, faces serious problems with the state government implementing measures to turn them into settled cultivators. Government programmes have widened social disparities among the Reangs and brought in alternatives that cannot sustain them round the year. It argues that shifting cultivation, which aims at self-sufficiency, is still remunerative compared to other forms of cultivation if traditional forest and land rights are restored to the tribal people (Sengupta, 2013).

Mostly the Reang tribe of Tripura practiced jhum cropping at large. In Tripura over 10,039 hectares of land are under Jhum cultivation. In 1955, it was estimated that there were 25,000 jhumias families in Tripura and the total land under jhoom cultivation was 16,00,000 acres. After 1949, when Bengalis from Bangladesh migrated to plain lands of Tripura, the jhumias used to sell their jhum cultivation vegetables and rice to them at a very low price and this led to the exploitation of the poor tribes.

(d) Arunachal Pradesh: Arunachal Pradesh has made a significant progress in gradually doing away with the age-old practice of jhum cultivation or shifting cultivation, which degrades the environment. In line with the Centre's stress on conventional methods of cultivation, the state with a 72 per cent forest cover had been able to reduce the total area under jhum cultivation from 1,10,000 hectares to 84,000 hectares in the last 10 years. About

8.4 lakh metric tonnes of biomass gets lost due to burning of trees resulting in a huge emission of carbon monoxide, carbon dioxide, nitrous oxides and other gases. The emission has been reduced by taking up rice and maize cultivation in terraces.

The harmful effects of jhum cultivation included rapid soil erosion due to deforestation of hill tops and slopes and high runoff velocity and siltation of reservoirs, rivulets and valleys. The harmful effects resulted in the rapid decrease of jhum productivity due to removal of top soil by runoff water and very little time to recuperate soil fertility due to reduced jhum cycle. Sixteen districts encompassing the eight North-eastern states, including West Kameng and East Siang districts in Arunachal Pradesh, are among the recently-identified 100 most climate-sensitive districts of the country.

Slashing or felling down of trees, herbs and shrubs for jhum cultivation reduces oxygen generation and burning of them pumps harmful carbon-monoxide, nitrous oxides and many other gases into the air. The state government's attachment of top priority to agriculture, horticulture and allied sectors, would add to the national food productivity and help achieve 6.5 per cent annual growth by the end of 12th Five Year Plan set by the Agriculture Ministry (The Times of India, Aug 9, 2013).

The practice of the shifting cultivation is a major occupation for the people of Arunachal Pradesh. Some people have shifted from village to urban areas due to varied reason but majority of people do reside in the remote rural villages of the state. The only means of livelihood is to practice this kind of agriculture. Jhumming is very closely associated with the culture and tradition. The Jhumias have been depending on their Jhum and as they have cultivated many economical plants which may include vegetables, medicinal plants, spices, taroos and yams, grain etc. They practice rearing of pigs, cows, goats etc. The fodder and feeds of these animals also comes from the field thereby decreasing pressure on pastoral land. Hence it is linked to their economy (Murtem et. al, 2008).

Watershed Development Project in Shifting Cultivation Areas was taken up in seven States of North Eastern Region with 100 percent SCA as per directions of National Development Council in 1994-95. Recently, under National Afforestation Programme, problem of jhum cultivation was given special focus. Mid-term appraisal of Eleventh Five Year Plan mentions that as per report of Ministry of Rural Development, only 6.5 per cent of households have been reportedly engaged in shifting cultivation in the country. The

percentage of area under jhum cultivation is 9.5 in North-Eastern region, while it is 0.5 per cent for central tribal belt (Jhum cultivation, 2011).

Effects of Shifting Cultivation on Tropical Forest

Since a large proportion of the mineral nutrients in the ecosystem are stored in the vegetation rather than the soil during a fallow, clearing and burning appear to be the only way to prepare the land for cultivation and incorporate into the soil the nutrients that have accumulated in vegetation. The effects of clearing and burning on soils can be divided into changes in soil physical and chemical properties and changes in soil nutrient status.

Soil pH increases after burning due to a liming effect of the ash and then decreases gradually through time due to leaching. The magnitude of the change varies with soil properties. The basic cations in the ash cause dramatic increases in exchangeable calcium, magnesium, and potassium after burning. These are followed by a gradual decrease during the cropping period due to leaching and crop uptake. Although burning volatilises most of the carbon, sulphur, and nitrogen present in the vegetation, it has little effect on soil organic matter. The available phosphorus level of a soil increases upon clearing and burning as a result of the phosphorus content of the ash. Clearing and burning also cause significant changes in the soil micro flora (Christanty, 1986).

Merits of Shifting Cultivation

According to the jumias, there are many advantages of jum farming. Jum is an indigenous knowledge-based production system that helps to maintain the traditional culture and heritage of the indigenous peoples. Jumias get diverse seasonal crops from jum fields and it secures their rice, vegetable and other food needs for at least a few months of the year. Jum is a zero tillage cultivation system with minimum soil disturbance and nutrient loss. Jum is rain-fed, so there is no need of watering or irrigation in a jum field. There is a higher agro-biodiversity in jum than in lowland agricultural systems. Jumias have their own seed preservation system for future cultivation. There is a great demand of seasonal and annual cash crops from jum, like ginger, turmeric, chili, cucumber (jum marfa), kozu/kochu (arum/aroides) etc. in the local market.

Shifting cultivation is the source of income for rural people in hilly areas. When crops are cultivated, after a certain amount of time, the nutrients become depleted from the soil. Shifting cultivation means setting aside a different, more nutrient-rich plot of land in

which to grow vegetables. In the past, farmers have switched between different plots of land, which has allowed for the soil in certain plots to regain nutrients.

Some proponents claim that an advantage of shifting cultivation lies in the fact that it does not use fertilizers or chemicals to force crops to grow in nutrient-depleted soil. It helps to keep a good amount of diverse nutrients in the soil. One crop might take all of the nitrates out of the soil so after a year or two have no nitrates in that area and the plant will not grow well. This is when would either leave that area alone for a few years or plant a crop that puts nitrates back into the soil. Crop rotation is keys in large-scale, long term operations.

Jum crops are acclimatized to local conditions and are usually resistant to pests and diseases. Therefore, the use of chemicals for pest and disease control is not required. Jum crops can be harvested sequentially without hiring outside labour. Traditionally, jum fields are cropped for only one year, and many food crops, spices, and medicinal and aromatic plants are harvested from the fallow jum fields locally known as ranya ('vegetable market').

Jum is a diversified culturally linked multi-cropping production system, and therefore, has a big contribution to food security of the jumias who do not have to think for rice and vegetables for at least 6-9 months of the year. Jum vegetables can be easily preserved by the jumias without using any preservatives. Diverse crops can be cultivated in the same piece of land without any extra inputs. Diversity of crop species within a small place is quite impossible in other lowland agriculture practices. Jum is known as a 'bazar' from where all the vegetable needs can be harvested. Therefore, the jumias do not have to worry about vegetables for their daily food.

Harvesting such crops from fallow jum without any cost helps farmers to earn extra income. A number of features of jum farming act to ensure ecological stability. Resilience to variable weather conditions is obtained by staggered planting, the use of rice varieties with different maturing periods and by multiple cropping with crops having varying susceptibility to unfavourable climatic conditions.

The jum system can support at best 6-9 months food security depending on the size, location and quality of jum land plots. At the same time, the expenditure of the jumias for food, health care, housing, recreation, social ceremonies, and children's education has increased. Therefore, many jumias are depending on other alternative options of livelihood like horticulture, animal husbandry, collection and sale of fuelwood, timber, bamboo, and other NTFPs, running small trades (tea stall and grocery shop), working as day labourers on

others horticulture and farm forestry plots, fishing, small scale agriculture-based middleman or broker, including some other professions and trades.

Market demand for fruits and availability of saplings in the market have motivated the jumias to opt for fruit orchards (particularly pineapple, mango, papaya and litchi) in the homesteads. Income and expenditure of some of the jumia households have increased because they are including market-driven cash crop cultivation like turmeric, chilli, ginger, aroides, and fruit trees like banana in their jum plots. In spite of the many benefits from jum, the jumias in the study areas also see some disadvantages.

Shifting cultivation is a form of land use which enhances biodiversity. Severe declines in plant diversity have been observed in most areas when shifting cultivation is replaced by permanent land use systems. Particularly worrying is the decline in agro-biodiversity. Shifting cultivators have preserved agro-biodiversity through local rules, practices and the informal networks for exchange of seeds and knowledge, thus ensuring food security of their communities. Along with the replacement of shifting cultivation comes the collapse of these networks, which results in a substantial loss of crop genetic resources. The availability of high genetic diversity in agricultural plants has however been identified as a key element in adaptation strategies to climate change.

Demerits of Shifting Cultivation

Shifting cultivation is an agricultural system in which plots of land are cultivated temporarily, and then abandoned. This system often involves clearing of a piece of land followed by several years of wood harvesting or farming, until the soil loses fertility. Once the land becomes inadequate for crop production, it is left to be reclaimed by natural vegetation, or sometimes converted to a different long-term cyclical farming practice. Every year thousands of hectares of forest are destructed as a result of the practice. Shifting cultivation are causing changes in forest ecosystems (Henriques, 2007).

One of the most important negative environmental impacts of shifting cultivation is the damage that it causes to the soil system. It accelerates the soil erosion manifold. Besides causing air pollution due to burning, shifting cultivation is responsible for loss of soil nutrients and useful soil fauna and microbes. Burning of slash lowers soil acidity, organic matter and total nitrogen. Most shifting cultivation practices are subsistence level farming system having very low output/ input ratio compared to other farming systems/ methods. Excessive agricultural activity of shifting cultivation not only decreases the forest area, but

also changes the primary forest into secondary woodland of shrub. On the phase of soil property, it accelerated the soil and gully erosion, and acidification (Das et al., 2012).

Blessed with high rainfall, humidity and nutrient rich soil, the Forests of the State are rich in productivity and the potential productivity index is estimated to be 9-12 cubic metre per hactre per year. The forests of Tripura are divided into two major forest types. These are i) evergreen forest and ii) moist deciduous forest. Moist deciduous forests are further divided in two distinct categories, namely a) moist deciduous sal forests and b) moist deciduous mixed forest. Moist Deciduous Sal Forest covers parts of Belonia, Udaipur, Sonamura and Sadar Sub-Divisions.

The cultivation of Jhum leads to loss of natural forest ecosystems creating huge impact on environment. The extraction and the felling of large tracts of forest cover on the onset of Jhum distribute the environment in many ways. Loss in forest cover results on climatic variation like-uneven rainfall, precipitation, wind, humidity etc. The loss in biodiversity affects the environmental climatic conditions of a region affecting the abode of various faunas. Deforestation that results from the cause of shifting cultivation interference with the rain as vegetation plays a vital role in the rain cycle. The mass destruction of forest cover with forest canopy gaps lead to deforestation and this limit in rain formation due to low limited evapo-transpiration.

Inventory survey carried out by Forest Survey of India gives the account of composition of growing stock of Tripura as follows:

Table 7: Composition of Growing Stock of Tripura

Stratum	Area in in Sq.	Forest area (%of geographical area)	Volume (m3)/hec weighted average	Total volume (million m3)
Hard wood (misc) Forest	1829	17.43	26.18	4.79
Hard wood (misc) Forest mixed with bamboo	484	4.61	29.84	1.44
Bamboo Forest	938	8.94	9.07	0.85
Plantations	2201	21.19	20.69	4.28
Shifting cultivation	840	7.81	5.34	0.52
Grand Total	6292	59.98	91.12	11.88

Source: Forest Department, Tripura.

There is a large gap between potential and actual productivity of forest resources of the State. Moreover, due to 856 Km long international borders with Bangladesh, the trans-border smuggling of forest produces is one of the serious problems leading to degradation of these forests. Non-Wood Forest Products¹³ represent a vast untapped major source of Tripura, whose full ecological and economic potentials remain underutilised, which needs to be developed and promoted.

The defect of jhuming lies in the fact that the land can produce crops only once in several years (5 to 19 years) depending on the jhum cycle. But under settled fanning, the same field can be brought under multiple cropping with scientific management under irrigation, which can produce two or more crops. Thus, productivity per *bigha* under jhum cultivation is significantly lower than the settled cultivation. The level of income from jhuming appears to be very poor compared to prevailing wage rates. The growing population has brought about a vicious circle of more area being jhum leading to shortening of fallow period and consequent deterioration of soil fertility, which requires bringing more plots under jhuming.

Indigenous peoples all over Asia have experienced various forms of human rights violations from the state policies and programs seeking to eradicate shifting cultivation. Laws and policies that criminalize and/or seek to eliminate this traditional livelihood practice still exist in Asian countries, like Bangladesh, Bhutan, Burma, Indonesia, Laos Malaysia, Nepal, Thailand and Vietnam, thus affecting the wellbeing of millions of people living in the uplands and forests of the region.

Shifting cultivation is widely believed as a practice promoting deforestation and carbon emission. Cumulative losses from shifting cultivation in the tropics can affect the local to regional to global balance of carbon and nutrient cycles. Eaton and Lawrence (2009) found the repeated shifting cultivation further depressed carbon stocks in live aboveground biomass and coarse woody debris and carbon fluxes in litter. Additional cycles of shifting cultivation may limit future recovery of ecosystem carbon through a decrease in organic matter inputs to the soil.

Jhumias Rehabilization Programme

The move from subsistence farming to market-oriented farming has opened up numerous opportunities for smaller farmers and others to earn from working as labourers or daily wage earners in the various farms and plantations. This has facilitated the diversification of

livelihood options for many people who do not have the resources to farm. On the other hand, it has also brought about a situation where the already limited labour has become even scarcer. At the same time, increased market opportunities have facilitated the emergence of many entrepreneurs who not only invest in cash crop cultivation but also in marketing and value added activities. National policies and programmes have been generally designed to wean away traditional farmers from shifting cultivation and to introduce them to permanent land-use systems.

According to Tripura Human development Report, 2007, we know that, traditionally, most of the tribal population practised shifting or jhum cultivation and were termed jhumias. The term jhumia is a generic term used for tribal people dependent on shifting cultivation as the primary source of livelihood. J.B. Ganguly's book on the Problems of Jhumias in Tripura (1968) showed that in 1961 there were about 25,000 families who were dependent on jhum for their livelihood.

By 1978, this number had increased to 46,854 families, of which about 23,292 families were primarily dependent on jhum for their livelihood. In 1999, according to the Department of Tribal Welfare, 51,265 families were dependent on jhum, and the large majority of them were fully dependent on jhum. The big concentration of jhumia families was in Dhalai and South District. The total count shows a cleard decline in the number of jhumia families. Number of Households and Persons Dependent on Jhum, Tripura are discussed in table no. 3.8.

Table 8: Number of Households and Persons Dependent on Jhum, Tripura, 1968 to 2007

Year	Source of the Estimate	No. of Households	No. of Persons
1968	J. B. Ganguly	25,000	
1978	Benchmark Survey 1978	46,854	2.59 lakh
1987	Benchmark Survey 1987	55,049	2.88 lakh
1999	Department of Tribal Welfare	51,265	-
2007	Forest Department	27,278	1.36 lakh

Source: Government of Tripura

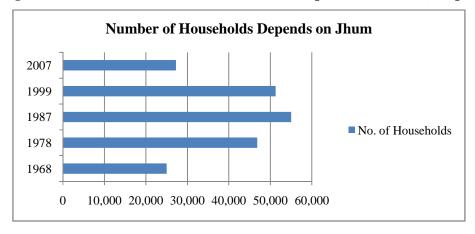


Figure 1: Number of Households and Persons Dependent on Jhum, Tripura

The major public policy intervention in favour of forest dwellers has been to rehabilitate and resettle jhumia families. The first attempts to settle jhumias were made by the Raja of Tripura, who set up the Kalyanpur Reserve in 1931. The reserve was situated in a fertile area outside forests and was intended to induce jhumias to take to the plough. The Congress Government set up colonies where jhumias were given land to carry out plough cultivation. Through the 'Shifting Cultivation Control Scheme', a centrally sponsored scheme, each family was to be granted a piece of cultivable land and Rs 500 as initial capital. Each settlement or 'colony' was designed to provide basic amenities to the tribal people. Numbers of Families Resettled under Various Schemes are discussed in table no. 3.9.

Table 9: Number of Families Resettled under Various Schemes, 1986.87 to 2004.05

Plantation	Total Number of Families	
Horticulture	8,962	
Rubber	9,445	
Tea	795	
Coffee	557	
All	18,959	

Source: Human Development Report of Tripura, 2007; p. 39.

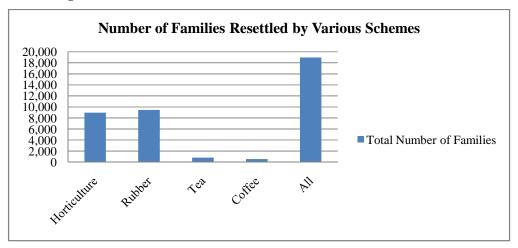


Figure 2: Number of Families Resettled under Various Schemes

The Tripura experiment is modelled on the experiences of the Kerala rubber economy, where the 'Rubber for the Poor' project attempted to provide tribal and other marginal farmers with a steady income. Rubber has the potential of providing jhumias with a substantial income. Apart from income benefits, the jhumia rehabilitation schemes are also significant because they contribute to skill development in several ways. The Government of Tripura is also eager to use tila land and waste land to grow cash crops and tap industrial and export markets. West Bengal and Tripura were the first two States in the country to implement the Joint Forest Management programme.

National flagship programmes like The Mahatma Gandhi Rural Employment Guarantee Act (MNREGA) facilitate minimum employment guarantee in rural areas to provide additional income to rural people. The income from such programmes helps poor farmers get much-needed cash to invest in farms and other alternative livelihood options. Older people opine that once farmers start earning from other sources, they generally look for jobs and other opportunities and abandon farming activities. Often many people choose to work on other people's farms and plantations to supplement their monetary income, neglecting their own farming activities. The usual monetary income for such small or marginal farmers is from selling wild and uncultivated herbs and leaves, which they gather from the forests.

The government of Nagaland has passed a law on shifting cultivation: the Nagaland Jhumland Act of 1970. The law recognizes the practice and the ownership of people over land and resources. However, the state does not have any clear written policy with regard to this traditional practice and has maintained a rather ambiguous attitude toward it. Except for

two externally aided projects, one supported by the Canadian government and the other by the United Nations Development Programme which directly work with shifting cultivators to improve their practice, there are no state supported programmes initiated for shifting cultivators. However, the state is implementing various national programmes that support permanent land-use development programmes.

Rubber Manufacturing Industry in Tripura

As Rubber is a vital raw material for more than 50,000 products, there is ample scope for rubber based industries in the state, which can generate much needed employment opportunities. The major Rubber industry units in Tripura are: (a) DS Group of Industries: Rubber Thread Factory at Bodhjungnagar; and (b) Maa Rubber Industry: Rubber Compound. India's second Rubber Park has been set up in Tripura at Bodhjungnager, which is jointly promoted by Tripura Industrial Development Corporation and Rubber Board with an estimated cost of Rs.23 crore. Kerala is the largest and Tripura is the second largest producer of natural rubber in the country

According to Economic Review of Tripura, 2013-14, The TFDPC Ltd. is the major producer of rubber in the State and it functions under the administrative control of State Forest Department. A rubber mission has been set up by Government of Tripura for better coordination of all the agencies involved in taking up rubber plantation and marketing of rubber. Till date, the Corporation owns 8,472.38 ha rubber plantations and besides created 3,200.89 Ha plantations for SC/ST families. Apex Bodies of Industries and Commerce like Confederation of Indian Industries etc. have also realized the importance and the potential of rubber cultivation in the State.

Conclusion

Shifting cultivation is in transition across the world. The characteristics of the shifting cultivation are changing over time. Reducing fallow period, or in some cases with no fallow, and changing vegetation management practices are major alterations in shifting cultivation. The statistically valid information on biodiversity value of the shifting cultivation lands and impacts of changing practices on biodiversity is inadequate to establish clear relationships. Further research is recommended on effects of changing shifting cultivation practices on biodiversity.

Traditional land practices exacerbated by poverty and associated with a lack of technical knowledge is the main cause for the continuation of unsustainable shifting cultivation. Population pressure, inadequate land for cultivation, low education levels, policy planning and implementation without local participation are all factors that influence farmers' decision to continue shifting cultivation. Intensive land management through agro-forestry is a promising alternative that can sustainably manage the remaining forest resources. If adopted, such systems potentially provide good economic returns, and may significantly reduce rural poverty.

Shifting cultivators from indigenous nationalities have the right to practise shifting cultivation and to government support to help make it productive and remunerative. This right is enshrined in the ILO Conventions Nos. 111 and 169 for those indigenous farmers who wish to practice this traditional occupation. Many farmers do wish to maintain shifting cultivation, despite adverse government policies, because it is the only viable way of farming on the steep slopes they inhabit, and may also form an integral part of their cultural identity.

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8

Langston Hughes' Poems: A Study of the Voice of Emancipation of the Black Americans

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Abstract

James Mercer Langston Hughes was an American poet, social activist, novelist, playwright and columnist. He is a forceful voice of the quest for identity of the African-Americans. Throughout his poems as in his other works, he exposes the identity crisis of the black Americans—the plight of being denied the fundamental rights for racist politics. He took up his pen against the general ideology of the era of de-glorifying the black Americans for their biological difference-against the racial discrimination they suffered from .In very simple and straightforward language his poems bespeak of the voice of emancipation of the black Americans-a cry for availing equal status of human beings.

Keywords: Emancipation, Identity Crisis, Discrimination

Introduction

"All animals are equal, but some animals are more equal than others." (1). The context though different, the quote proverbially well relates the politics of racism in America-the racial inequality the black Americans suffered from. Because of their dark complexion the black Americans were denied the equal dignity of status of human being. A feeling of isolation-a profound sense of identity crisis made them feel as if they were the outcast of the society. An age old history of racial segregation; discrimination is there all over the world.

Racism in America, as in everywhere, operated through various modes of operation-institutionalised racism, internalised racism, cultural hegemony. Hegemony, however, is a Gramscian idea. It is a kingdom of thought through which suppression works. Through these modes of operation the African Americans were made to feel inferior to whites, less attractive less worthwhile, less capable. Peecola Breed love in Tony Morrison's "The Bluest Eye" [1970] as a result of these racist ideologies cannot see her beauty. Instead she thinks that she would be pretty, happy and love if only she had bluest eyes. Racism is a timeless mindset ,and it becomes clear when a person like Abraham Lincoln who advocated for a form of government "of the people, for the people and by the people", says —"i am not ,nor ever have been in favour of bringing about in any way the social and political equality of the white and black races, that I am not , nor ever have been in favour of making voters or jurors of negroes, nor of qualifying then to hold office, nor to intermarry with white people .I as much as any man in favour of the superior position assigned to the white race." (2)

As against this I would show here how artists took up their social responsibility against this go of the day. They wrote from the cross section of the society. From Phillis Wheately to George Moses Horton, Langston Hughes, Claud Mckay, Countee Cullen, there is a timeless voice of protest against the politics of racism with a view to bring redress to the supposed second class citizen of America. It is ironical that a country where Christianity, ideal democracy are professed, there is and there was racism. Black American writers raised their voice against slavery, the Black Codes, the Convict Lease System, Jim Crow Laws, lynching, segregation, discrimination at all levels from time to time.

Phillis Wheately was the first name of recognition in African American literature. Her "Poems on Various Subjects, Religions and Moral" which received praise even from George Washington triggered the first voice of protest. Her "On Being Brought from Africa to America" seems to question her ideology as she here praises the white .However, "On the Death of General Wooster" helps him overcome this dilemma from the readers. Here he denounces the Whites thus-"But how, presumptuous shall we hope to find / Divine acceptance with th' Almighty mind -/While yet (O deed ungenerous!) they disagree /AND hold in bondage Afric's blameless race?"

Himself a slave George Moses Horton is another voice of emancipation against slavery itself. His fervent lament for salvation from these institutionalised modes of suppression rings thus in "The Slave's Complaint"(II.5-8)

"Must I dwell in Slavery's night /And all pleasure take its flight/Far beyond my feeble sight/Forever." ["The Slave's Complaint"]

"Alas! and am I born for this/To wear slavish chain/Deprived of all created bliss/Through hardship, toil and pain." "On Liberty and Slavery"(ll.1-4)

In poems like "The Slave Auction", "The Slave Mother", "Bury Me in a Free Land", Frances Ellen Watkins Harper reverberates the yearning for freedom of the black Americans from slavery-

"Ye may not know how desolate/Are bosoms rudely forced to part/And how dull and heavy weight/Will press the life drops from the heart." "The Slave Auction" (ll.21-24)

"Make me a grave wherever you will, / In a lowly plain, or a lofty hill, / Make it among earth's humblest graves/But not in a land where men are slaves."

There is also another figure Jupiter Hammon who promoted the gradual emancipation of the negro Americans-

"If we should ever get to Heaven, we shall find nobody to reproach us for being black, or for being slaves." (3)

Harlem Renaissance and the Voice of Emancipation:

The voice of emancipation of the black Americans reached its heyday with the Harlem Renaissance. With this cultural movement they discovered themselves and their universe. The reawakening of their consciousness historically appeared in 1920s and 1930s around Harlem, a place in America. Harlem emerged as the cultural capital of black America. To quote Steven Watson," This movement known collectively as Harlem Renaissance developed at the end of World War-I in 1918, blossomed in the mid-to late 1920S, and faded in the mid 1930S. This movement developed in the African American community in the early 20th century." (4) Many a writer from all over the world and United States came to this new found dreamland. As a result of this great collective body of African Americans coming together, the variety of talents among them, the creativity they offered each-other, and the dynamics of their new found existence, created a rebirth for African Americans now known as the Harlem Renaissance.] A new tendency to assert their black identity and to glorify the same became the vogue. In them we find a certain approach related with their issues of identity. Harlem Renaissance redefined how America and the world viewed African Americans. The prominent figures of this movement are Claude Mckay, Jean Toomer, Countee Cullen and Langston Hughes. There is also another group of poets creating the new black consciousness

after the Harlem Renaissance, and they are Mari Evans, Immam Amiri Barakka, Ted Jones, Margaret Danner and Jay Wright. The voice of emancipation of the black Americans reached its climax with the immortal speech of Martin Luther King Jr. during the 'March on Washington for Jobs and Freedom' on August 28,1963-

"I still have a dream, a dream deeply rooted in the American dream-one day this nation will rise up and live upto its creed, We hold these truths to be self-evident: that all men are created equal...that my four little children will one day live in a nation where they will not be judged by the color of their skin, but by the content of their character. I have a dream today!" (5)

Langston Hughes and the Voice of Emancipation:

Langston Hughes played a very decisive role in the rebirth movement of the black Americans. He was often referred to as "Harlem's Poet". He was a staunch fighter against racial inequalities; he wrote plenty on racism to the point where he was called the "unchallenged spokesman of the American Negro" [Liberty of Congress] He was much altered at the plight of identity crisis of the black Americans. To the question "what is poetry" he, in the tune of G.B.Shaw who said "For art for art's sake I would not face the toil of writing a single line." (5) Poetry for Langston Hughes "is the human soul entire, squeezed like a lemon or lime, drop by drop, into atomic words".(6) He wanted no definition of the poet that divorced his art from the immediacy of life" A poet is a human being"," Each human being must live within his time, with and for the people. Many a black writer suffered from in-betweenness-an ambivalence whether to write for black audience or a white audience or both to draw attention to their voice of emancipation. Langston Hughes did not suffer from from this dilemma. He uses vernacular English resonant with the rhythms of black speech patterns and blues music. Unlike other black poets Claud Mckay, Countee Cullen, Langston Hughes refused to differentiate his personal experience and the common experience of black Americans. In very clear and unambiguous language his poems recurrently deal with the themes of racial discrimination, segregation, identity crisis and the consequent voice of emancipation. The imagery and metaphor used in his poetry create a sense of hope and solemnness, the segregated feel to make things equal. He asserts the blackness of the black Americans with pride and glorifies the same in "My People"

> "The night is beautiful, So the faces of my people. The stars are beautiful,

So the eyes of my people.

Beautiful, also, is the Sun.

Beautiful, also, are the souls of my people." (ll.1-6)

Langston Hughes explores hidden dreams, lost dreams, dreams regained and dreams redeemed of the African Americans. They, from time to time of slavery to the oppression of the Jim Crow Law, were treated like second-class citizen in the eyes of the American law. The inferior social status forced most negro Americans to hide their dreams behind a protectictive psychological barrier. In his poem "Good Morning", the speaker laments the dashed hopes of the people of color who've "come dark/WanWide eyed/Dreaming/Out of Penn station" in New York:

The gates openBut there're bars
at each gate
What happens
To a deferred dream?

Daddy, ain't you heard? (7) In "Dream Variations", Langston Hughes wishes for day he could "fling" [his] arms wide" (ll.1) even though he is 'black'. The imagery deals with Hughes' dream for racial segregation to stop so that all people can enjoy their lives without having any fear of discrimination because they are black. In another poem "Dreams Deferred" the speaker relates the limitations of 'American Dreams' for the African Americans. The speaker here analyses the remote consequences of the long longed dream of the black Americans-

"What happens to a dream deferred

Does it dry up

Like a raisin in the Sun?

Or fester like a sore—

And then run?

Does it stink like rotten meat?

Or crust and sugar over—

Like a syrupy sweet?"(ll.1-8)

The concluding line of the poem "Or does it explode" leads to double meanings. On one level Hughes may mean that the dream woven in the heart of hearts of the people of color in America may be deferred to a certain point of time leading to a condition like that of the two tramps Vladimir and Estragon of availing nothing in "Waiting for godot" by Samuel Becket, but one day it will result into a revolution leading to the establishment of ideal democracy in America. On another level, it may mean that African Americans cannot dream or aspire to great things because of the environment of oppression that surrounds them. Even if they do dare to dream, their grand plans will fester for so long that they end up rotting or even exploding. Hughes may mean that racism will remain timeless issues. The same note of frustration is found in Robert Mugabe's [the president of Zimbabowe] immortal saying-"Racism will never end as long as white cars are still using black tyres. Racism will never end if people still use black to symbolyze bad luck and white for peace. Racism will never end if people still wear white clothes to weddings and black clothes to funerals. Racism will never end as long as those who do not pay are blacklisted, not whitelisted. Even when playing snooker, you haven't won until you've sunk the black ball, and the white ball must remain on the table. But I don't care, as long as I'm still using white toilet paper to wipe my black butt, I'm fine!" (8)

Again in another poem, Hughes says," If dreams die, Life is a broken winged bird' ["Dreams" Line-2-3] Incidentally a bird cannot fly if its wings are broken. Likewise, life without dreams is like a dull dreary desert with no hope to live. Through this metaphor, Hughes asserts his belief that dreams are to be fulfilled instead of forgotten and left to die. Dreams should survive and get accomplished like a flying bird. In the poem "Let America be America Again", the same voice of emancipation from racial segregation is there, and Hughes here shares his thoughts on American Dream. American Dream, however, refers to the ideal by which equality of opportunity is available to any American, allowing the highest aspirations and goals to be achieved. The phrase was first defined by the historian James Truslow Adams. About American Dream he said it is not,"...a dream of motor cars and high wages merely, but a dream of social order in which each man and each woman shall be able to attain to the fullest stature of which they are innately capable, and be recognised by others for what they are, regardless of the fortuitous circumstances of birth or position." (9) Ironically, racism in America makes a mockery of the American Dream. Hughes evokes the fervent dreams of those who came to the United States in hope of realising the American Dream-

> "Let America be the dream that dreamers dreamed-Let it be that great strong land of love

Where kings connive nor tyrants scheme That any man be crushed by anyone above." ("Let America be America Again")

A note of robust optimism about their emancipation from the curses of racism rings thus-

" O,yes,
I say it plain,
America was never America to me,
And yet I swear this oathAmerica will be!" (ll.75-79)

The same note of dissent and disapproval against racism continues in the poem "I Too". The speaker demonstrates his firm conviction that one day the whites will be ashamed of themselves-

"...They'll see how beautiful I am
And be ashamedI, too, am America" (ll.16-18)

In another poem "I Too Sing America" Langston Hughes demonstrates a yearning for equality through perseverance disproving the idea that patriotism is limited by race. This poem too defines Harlem Renaissance. They had discovered the power of literature, art, music, poetry as a means of personal and collective expression. Hughes here describes a ubiquitous racial oppression that degrades African Americans. "Still Here", another poem by Langston Hughes deals with the themes of isolation, alienation, identity crisis of the black Americans-their unfulfilled hopes and commitment to face the situation-

"I been scared scared and battered.

My hopes the wind done scattered." (ll.1-2)

"But I don't care!

I'm still here!" (ll.9-10)

Hughes denounces racism in his own way. He alludes to the lost and forgotten aspirations time and again, insinuating that African Americans are not allowed access to the American Dream because of their race. In another poem "Mother to Son", the mother describes the various vicissitudes she has faced because of the color of her skin. The anonymous mother here in the poem is suggestive of all African American women of predepression American encouraging their sons to strive for success. She advises her sons that he will face many

adversities in life because of his coloured skin, and yet he must overcome them and keep going -

"Well, son, I'll tell you:
Life for me ain't been no crystal stair." (ll.1-2)
"...so, boy, don't you turn back,
Don't you set down on the steps." (ll.14-15)

The mother compares the journey through life to ascending a staircase. She says that for her life has not been a staircase made of crystal. Rather it has been rough. But she kept climbing defying all odds and knots instead of giving up. Needless to say it invariably echoes the spirit of Ulysses-

"To strive, to seek, to find and not to yield." (10)

And the mother wants to get her seemingly unattainable dream through her children-

"...God put a dream like steel in my soul Now, through my children, I'm reaching the goal." ("The Negro Mother")

Hughes advocates that the African Americans' right to American Dream ,of say, access of equal opportunity regardless of social class or circumstances of birth, will not be realised through compromise or taxing time —

"Democracy will not come
Today, this year
Nor ever
Through compromise and fear.

I do not need my freedom when I'm dead I cannot live on tomorrow's bread."(Democracy")

To conclude Langston Hughes was a politician for greater humanity. He uses poetry as a vehicle of cultural protests. He invites the African Americans to "arise, awake and stop not till the goal is reached"—to make an all out effort to put an end to the politics of racism. He is a titanic figure in 20th century American literature. A powerful interpreter of the American experience Hughes stands apart from other black poets .He relates the plights of the black Americans in a language "really used by them." ['Lyrical Ballads'] Ignoring classing forms he uses jazz and black folk rhythms in his poems to invest a realistic touch in his appeal for emancipation of the African Americans from the racial fetters. His poems recurrently bespeak of the truth that "there is no lack within the Negro people of beauty, strength, and power and

he chose to do so on their own level, on their own terms." ["A reviewer for Black world noted in 1970]

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9

ICTs and Empowerment of Indian Rural Women

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Abstract

There has been a lot of interest during the last two decades in employing Information and Communication Technologies (ICTs) for achieving development. While many of these initiatives have benefited rural women by way of access to new information and new employment opportunities, women still face a number of constraints in accessing ICTs. This paper explores the role of ICTs in empowering Indian rural women, through a review of ICT initiatives in India. The paper concludes that, while most of the ICT initiatives are disseminating new information and knowledge useful for rural women, many are not able to make use of it, due to lack of access to complementary sources of support and services. Among the varied tools, the knowledge centres and the community radio were found to have the greatest potential in reaching women with locally relevant content. There is immense potential for ICTs to create new employment opportunities for rural women and to contribute significant gains in efficiency and effectiveness in rural women enterprises. While ICTs can play an important role in empowering rural women, women's access and use of ICTs and empowerment clearly depends on the vision and operational agenda of the organization applying the ICTs. Therefore, strengthening the ICT initiatives of such organizations can go a long way in empowering rural women. Besides generating locally relevant content and enhancing the capacities of rural women in accessing ICTs, efforts are also needed to bridge the different types of digital divide (rural-urban; men-women).

Keywords: *ICTs, Empowering Rural Women, Digital Divide, Knowledge centres & Empowering rural Women.*

Introduction

Information and Communication Technologies comprise a complex and heterogeneous set of goods, applications and services used to produce, process, distribute and transform information. Traditional technologies continue to be important for large numbers of people around the world, particularly in rural areas. However, new technologies have a vast potential for empowerment which needs to be fully exploited. Over the past decade, there has been a growing understanding that these technologies can be powerful instruments for advancing economic and social development through the creation of new types of economic activity, employment opportunities, improvements in health-care delivery and other services, and the enhancement of networking, participation and advocacy within society. ICT also have the potential to improve interaction between Governments and citizens, fostering transparency and accountability in governance.

While the potential of ICT for stimulating economic growth, socioeconomic development and effective governance is well recognized, the benefits of ICT have been unevenly distributed within and between countries. The term "digital divide" refers to the differences in resources and capabilities to access and effectively utilize ICT for development that exist within and between countries, regions, sectors and socio-economic groups. The digital divide is often characterized by low levels of access to technologies. Poverty, illiteracy, lack of computer literacy and language barriers are among the factors impeding access to ICT infrastructure, especially in developing countries. Another hindrance pertains to ICT is lack of its access to women.

Need & Significance

It is imperative for a sustainable development in developing, over-populated countries like India that women have access to education and appropriate need-based technologies. Out of the five thrust areas earmarked for India's Vision 2020, the information and communication technologies (ICT), like the other four, have also given us vital tools to achieve our development strategies. These tools and technologies coupled with the power of knowledge can enable women in developing countries to join the battle for economic, social and political empowerment. Already a "digital divide" implying uneven distribution of the technologies within the societies and across the world has set in, upsetting the balance of gender equality.

Ready access and use of ICT is expected to bridge this "gap" or "divide" to a large extent, provided social and economic benefits are directly linked to these emerging technologies. There are factors like education, financial independence, language barriers, cultural cross-linkages, traditional skills and remoteness of locations, besides cost of technologies, which would determine the participation of women in this sector. Presently, women constitute 31% of the total workforce. NASSCOM has predicted that male-female ratio by the year 2005 would be 65 to 35, which indicates towards a healthy trend. But, the socio-economic disparity would not be removed by these statistics alone. A Herculean task lies ahead to provide ICT to many more segments of women, not considered hitherto.

While it is being strongly felt that women take up the challenges of ICT, the problems at the grass-root level also cannot be ignored. Women's participation in ICT may be in the form of dedicated users, workers, entrepreneurs, technical service facilitators, inventors, managers and policy makers.

Purpose of the Study

Information and communication have been playing an increasingly important role in economic and social development of nations. Experts believe that this century belongs to the power of *Knowledge & Information*. On one side, the recent developments in communication technology have drastically reduced the geographical barriers, while on the other side computers have enormously enhanced the capacity to accumulate and access information. The possibilities for information access are infinite. This 'information society' has grown in the last one decade in leaps & bounds breaking many existing paradigms and creating an image of "indispensability" in our lives.

Unfortunately the access to these technologies is highly unequal, somewhat built-in in all our development sectors. This is true for different geographical regions and diverse socio-ethnic groups inside India. The inequality contributes to increasing the gap between those who have access to abundant information resources and those who are deprived of this access, thus reinforcing the marginalization that already exists in terms of development and technical resources. If not the worst, but a major suffering group of this bias is the women. They are not only under-represented in terms of access to these technologies; they also do not get a fair deal in many social transactions. Developing and less- developed regions inside the country portray a vivid story of this inequality. Ironically, these women contribute

largely to the work force that produces computer components and finer elements of technology in extremely deplorable working conditions.

Women are in high demand for these jobs, but are conspicuously absent in computer systems administration, technical development and decision-making. Women are very few as producers of information, thus with less access than men to the information and networking resources. Naturally they have fewer possibilities of orienting technology to address their specific needs. What are the reasons for this gender inequality? Some of the probable answers can be: a) Lack of a clear National policy for promoting ICT for women's development, b) Poor ICT infrastructure, inefficient telephone services, lack of electricity in many remote, far-flung areas, and frequent power cuts, c) Poor literacy among women (in spite of intensive measures to promote education), and inadequate computer skills, d) Unaffordable costs of computer hardware and software, maintenance and connectivity, e) Little awareness of the full range of opportunities offered by ICT other than access to information; limited online information in vernacular languages, f) Absence of favourable bandwidth and connectivity for smooth operation.

Review of Literature

While there is recognition of the potential of ICT as a tool for the promotion of gender equality and the empowerment of women, a "gender divide" has also been identified, reflected in the lower numbers of women accessing and using ICT compared with men. Unless this gender divide is specifically addressed, there is a risk that ICT may exacerbate existing inequalities between women and men and create new forms of inequality. If, however, the gender dimensions of ICT—in terms of access and use, capacity-building opportunities, employment and potential for empowerment—are explicitly identified and addressed, ICT can be a powerful catalyst for political and social empowerment of women, and the promotion of gender equality. In the past few years, the global community has seen the "gender issue" come onto the agenda.

Despite economic and socio-cultural barriers to women's use of Information and Communication Technology (ICT), when women are able to use them productively, they can substantially improve their lives and increase their income. They have proved useful in: health care delivery; distance education; enhancing rural productivity through access to market information and access to finance; promoting empowerment and participation in national and international policy processes; improving service delivery by governments;

improving environmental monitoring and response systems; and facilitating environmental activism. In general, women make up a small percentage of internet and computer users. This is changing in some countries – generally those which have greater levels of development and gender equality.

ICTs are potentially an important knowledge resource for women, but a focus on access is insufficient. We need also to consider what kind of information is being accessed? Who produced it? Who can use it? What is it used for? In sum, we need to view women not as passive recipients of information, but active knowledge and technology developers. To orient ICT projects so that they address these areas, ICT project planning and implementation for social development and gender equality must take place in a context which consists of five main components: (a) Creating an enabling environment which supports and encourages strategies to promote women's equal access to and opportunity to benefit from ICT projects, as well as creating a regulation and policy environment which supports women's use of ICTs; (b) Developing content which speaks to women's concerns and reflects their local knowledge, and which is of value for their daily lives, business enterprises, and family responsibilities; (c) Supporting increased representation of women and girls in scientific and technical education, and using ICTs to promote their increased participation in education at all levels; (d) Promoting increased employment in the IT sector for women and the use of ICTs for women's SMEs. (e) Implementing e-governance strategies which are accessible to women; and promoting women's lobbying and advocacy activities.

Role of the Government and the NGO Sector

A number of women's organizations have realized the importance of creating and participating in regional and worldwide information exchange which will enable them to share ideas, proposals, documents and information. Computer networks are a form of appropriate technology that makes this exchange possible. Combined with other media forms like printed material, radio, television, to name a few, such exchange can more easily be extended to regions and groups that cannot access computer networks. Need of such networks has mainly arisen due to issues of concern to women, which do not preclude basic housekeeping, health & sanitation, children's education, balancing resources and traditional chores.

ICT is not at all aimed at breaking the traditional role of women. It rather aims at empowerment that will fortify the male bastions. In doing so, they often face obstacles like resource crunch (financial and technological), reduced access to training and technical assistance or non-gender sensitive methodologies, social and cultural barriers for women and girls to access technology, educational short- comings, misconceptions about technology, language barriers, etc., some of which have already been mentioned above. Since problems are inter-linked and solutions are diverse in nature, the endeavours also have to come from different quarters.

There have been attempts to overcome the obstacles of women's access to ICT in India. The major initiatives undertaken in the formal sector may be summarized as: a) Repackaging of Internet-accessed information and combining Internet technology with 'traditional' or more established tools of communication like radio, television and print media, b) Facilitating content development on the web-production and use of ICT resources in different Indian languages, c) Government policies to ensure that women are brought to the mainstream through ICT programmes through accessible technology, relevant and useful to women, d) Institution of scholarships and awards, with incentives, to promote the enrolment of girls and women in ICT programmes, e) Continuing training programmes and awareness workshops on the use and potential of ICT throughout the country. These are significant openings created for women. Decentralisation and devolution of powers through Panchayats (these are smallest units of local administration) have included computerization, installation of kiosks for information and networks for dissemination. The elected women representatives can use these to interact with their constituencies and their colleagues in other parts of the country. ICT can influence changes and restructure in the prevailing power equations.

The Department of Women and Child Development under the Ministry of Human Resource Development is the key agency for development and welfare of women and children. Most of the provincial governments also carry out women related activities through Social Welfare Departments. Ministry of Human Resource Development and Ministry of Information Technology have formulated a number of schemes, particularly in the area of education and training in ICT. These schemes can succeed with gendersensitivity and removal of regional biases.

Opportunities galore in ICT-enabled services in a country like India where there has never been a paucity of ideas or knowledgeable people. Political networks and advocacy groups have been formed due to proliferation of these technologies. Income generation is another area where ICT has been making headway. ICT can link women in various areas, help coordinate agenda, speed up communication, reaching a vast number of people in less time. ICT offers invaluable tools for dissemination of indigenous knowledge. Women's effective participation in the information society needs to be assumed if countries are to successfully achieve their development goals and practices. While there have been lots of development efforts to increase the access and use of ICT in general, there is still a marked difference in their impact on the lives of men and women. That is precisely the reason why international agencies prefer to do their work in India through certain Non-government Organisations (NGO) and voluntary bodies.

As the largest democracy in the world, India has a huge array of non-government organizations active in education and women's issues. There have been numerous experiments in India devoted to addressing the digital divide, particularly because of the high-profile domestic IT industry against an extremely poor and uneducated population. However, only a few are specifically targeted at women. State governments are also investing in IT training and infrastructure amply demonstrated by Andhra Pradesh. According to the Ministry of IT, "State and Central governments have instigated programs to increase the use of computers in poorer regions". Although States like Uttar Pradesh, Madhya Pradesh, Kerala, Tamil Nadu, Rajasthan are prioritizing IT, the poor telecommunications infrastructure is still the major obstacle to broader access and application of IT in India.

Intermediary organisations could also contribute to building capacities of women by providing them training in basic computer skills (like accessing the Internet), and other skills like desktop publishing, website creation, e-commerce, etc. To facilitate access for women from various classes and sectors, the intermediary organisations need to be strategically located in local institutions, such as health centres, women's employment centres and studies departments, libraries, , community centres, etc, to which women have open and equal access. A large number of NGOs are showing genuine interest in this sector.

Methodology

For centuries, women in this country have been socially and economically handicapped. They have been deprived of equal participation in the socio-economic activities of the nation. The Constitution of any country is supreme law of the land and is followed absolutely, subject to the limits provided in the solemn document itself. So much is the importance of the Constitution that if a statutory law is in conflict with it, the same would be "unconstitutional" and void in nature. The Constitution is organic and living in nature. It is also well settled that the interpretation of the Constitution of India or statutes would change from time to time. Being a living organ, it is ongoing and with passage of time, law must change. New rights may have to be found out within the constitutional scheme. It is established that Fundamental Rights themselves have no fixed content; most of them are empty vessels into which each generation must pour its contents in the light of its experience. The attempt of the court should be to expand the reach and ambit of the Fundamental Rights by process of judicial interpretation. There cannot be any distinction between the Fundamental Rights mentioned in Chapter III of the Constitution and the declaration of such rights on the basis of the judgments rendered by the Supreme Court. Thus, horizons of Constitutional law are expanding.

Further, it is presumed that the Parliament intends the court to apply to an ongoing Act a construction that continuously updates its wordings to allow for changes since the Act was initially framed. While it remains law, it has to be treated as always speaking. This means that in its application on any day, the language of the Act though necessarily embedded in its own time, is nevertheless to be construed in accordance with the need to treat it as a current law. Thus, we cannot allow the dead hand of the past to stifle the growth of the living present. Law cannot stand still; it must change with the changing social concepts and values. If the bark that protects the tree fails to grow and expand along with the tree, it will either choke the tree or if it is a living tree it will shed that bark and grow a living bark for itself. Similarly, if the law fails to respond to the needs of changing society, then either it will stifle the growth of the society and choke its progress or if the society is vigorous enough, it will cast away the law, which stands in the way of its growth. Law must therefore constantly be on the move adapting itself to the fast-changing society and not lag behind. Thus, for conferring the strongest protection and to emancipate

women, the provisions of the Constitution should be interpreted liberally and in a purposive manner.

The Constitution of India recognises women as a class by itself and permits enactment of laws and reservations favouring them. Several articles in our Constitution make express provision for affirmative action in favour of women. It prohibits all types of discrimination against women and lays a carpet for securing equal opportunity to women in all walks of life, including education, employment and participation. Article 51 of the Constitution obligates the State to honour international law and treaty obligations. Our natural obligation to renounce practices derogatory to the dignity of women has been elevated to the status of fundamental duty by Article 51-A.[8] The Constitution of India recognises equality of the sexes and in fact provides for certain provisions under the Chapter on Fundamental Rights more favourable to women but in actual practice they are observed more in breach than in compliance. In our society the freedom of women to seek employment outside the family is a major issue. This freedom is denied in many cultures and this attitude in itself is a serious violation of women's liberty and gender equality. The absence of this freedom militates against the economic empowerment of women, with many other deleterious consequences. Thus, these Constitutional ideal have by and large remained unaccomplished and we have to cover a long distance before the benefits of ICT can be reaped by women effectively. One of the ignored ICT issues in India is the "gender sensitisation" that must be adopted while formulating and implementing the ICT policies in India.

It is commonly understood that men and women understand and use Computers and Internet differently. Thus, the policy decisions must make sufficient provision for adopting itself with this aspect. Within India also we must understand that the training, use and adoption of ICT must be "gender neutral". For a gender neutral technology we have to first place the women on an equal platform. They cannot be put on an equal platform till they have equal capacity and opportunity to use ICT. They cannot also effectively use ICT till their "feedbacks and concerns" are incorporated in the National Policies including the Egovernance plans. The position is worst when it comes to women that also rural women. In our society, whether they belong to the majority or the minority group, what is apparent is that there exists a great disparity in the matter of economic resourcefulness between a man and a woman.

Our society is male dominated both economically and socially and women are assigned, invariably, a dependant role, irrespective of the class of society to which she belongs. It must be appreciated that a nation that does not respect its women cannot be described as a civilised nation at all. Such a nation cannot grow and develop and will ultimately perish due to its own rudimentary and tyrannical dogma. Thus, the national consensus should concentrate on betterment of women by suitably empowering them. The plight of the women, however, cannot be improved till they are duly represented in the "power structure" of the nation. In a democratic country the voice of women can be heard only to the extent they are sharing the power structure in the supreme governance of the country. Thus, ICT can play a major role in women empowerment if they are provided employment opportunities at the village level after providing them suitable training. We have to open more village kiosks so that greater women participation can be there. This cannot happen till we first make the e-governance and ICT strategies and policies transparent and accountable. Mere computerisation is not e-governance.

Analysis & Interpretation

The ICT policy when looked at from a gender perspective must take into consideration the various dimensions, including education, employment and empowerment. According to the census, female literacy is 54.16 % as against male literacy of 75.85 % in India. The enrollment of girls in educational institutions decreases as educational level goes higher. The enrollment of girls in Engineering/ Technology/ Architecture at the Bachelors level (in 1998) is 57,968 as against 285,137 boys. This imbalance is largely due to socioeconomic reasons, and a very large concerted drive is required to remove this imbalance.

Since the percentage of women enrolling for higher education is quite low, the benefit of ICT can go to a large section if more and more IT courses at 10+ or 12+ levels are introduced as vocational streams. The girls' polytechnics are promoting some of these with preferences in jobs, and special incentives in the initial years.

Keeping in view the plight of rural women, who are more unaware of new technologies than their urban counterparts, government is providing special packages for them, who are involved in home based or small-scale activities related to handloom, handicraft, sericulture, etc. From identification of projects to the marketing of products, these packages are helping women entrepreneurs to a great extent. Government of India is in the process of establishing Community Information Centres (CIC) at all block levels,

which are designed as the prime movers of ICT in the most economically backward and geographically difficult terrains. CICs are supposed to provide multipurpose information (on health, education, social welfare and small-scale industry, etc). This might prove to be a "shot in the arm" for the rural women that can boost their economic and social status.

Literacy rate of women (as against men 75.85 %)	54.16 %	
Secondary education	38 %	
Education and law	4 %	
Women Tertiary students	36 %	
Women students in natural sciences	30.4 %	
(Natural Sciences include the fields of engineering, math, architecture, transportation, and communications) (S	town planning	

Information and communication technologies have created new types of work that favour women because the technology enables work to be brought to homes and allow for better accommodation of work and family schedules. Women have also been able to capture a large proportion of jobs in ICT-enabled services because of the worldwide shortage of skills necessary for work in this sector.

Many women are software programmers, but very few are in hardware design. New ICT jobs for women especially in India are in the service industries in information processing, banking, insurance, printing and publishing. So far, the most promising potential for women is in the creation of new jobs at "Call Centres" and in work involving data processing. The International Labour Organisation reports that 'telecentres and fax booths have created a quarter of a million jobs in India in the last four years alone, a huge proportion of which have gone to women'.

Women in the Workforce	
Total women in workforce	31%
Women in IT workforce (software sector)	19%
Women Internet users in India	23%
(Source Wom	en and IT in India

While specific gender data on the networking profession in India were not available, fewer women are employed in networking compared to software occupations. This is attributed to the preconceptions that the physical aspects of the work are too difficult for women

such as the long, erratic hours and travelling. The lack of mobility is cited as one of the major constraints to women's ability to participate in the IT work force in India. If women want to work in the IT sector, they have to relocate themselves. However, living alone away from home is not the norm for young, single women because of security issues and the traditional view that women's role is in the home with the family. As a result, the current IT employment opportunities in large cities like Hyderabad or Mumbai are often not appealing or feasible for many women, particularly those from the other parts of the country. So, there are many cases where women have sufficient IT education and training, but do not work in the field because they lack the essential mobility to go to where the jobs are.

Discussion

Success Stories from India

The Self Employed Women's Association (SEWA) has been organizing women in the informal sector in India since 1972. It was one of the first organizations globally to realize the potential of using IT for the productive growth of the informal sector. SEWA is establishing Technology Information Centres in 11 districts of Gujarat to provide computer awareness training and basic computer skills for their "barefoot managers", build the capacity of women organizers and leaders, and strengthen their members' micro-enterprises. Electronic networking is expected to strengthen the connections between the various cooperatives working in different sectors and areas.



IT for barefoot managers (Source: http://www.sewa.org)

Community radio in Andhra Pradesh has become popular due to development of Mana Radio, a community radio station run by members of the women's Self Help Groups (SHG) in Orvakal village, Kurnool district, Andhra Pradesh. Realizing the role that Community Media can play in development, empowerment and the right to information. Budhikote Cable Radio Network is another example run by 36 women's self-help groups in the Indian village of Budhikote are running a cable radio network, first set up by UNESCO. With a contribution of 50 rupees every month from each woman, the network has grown to cover 250 of the 750 households of the village. The audio programs are narrowcast from the Budhikote Community Multi-media Center, where the women use computers to edit and produce the radio programmes on relevant issues, such as organic farming, sericulture, health, local electricity and water problems.

There are many more cases of similar and different nature, which have encouraged the NGOs, the government and the funding agencies to expedite women's development through ICT. From managing water distribution at the village-level to standing for local elections and having access to lifelong learning opportunities, ICT is opening up new vistas of development. The Information and Communication Technologies are for everyone and women have to be an equal beneficiary of the advantages offered by the technology. Moreover, the benefits accrued from the synergy of knowledge and ICT cannot be restricted to the upper strata of the society and have to freely flow to all segments of the women population.

Conclusion

The advent of ICT has changed the global scenario and many unexplored areas are now open for encashment. It is for us to utilise the benefits to the maximum possible extent. The best part about ICT is that it is capable of various adjustments as per the requirements of the segment using the same. The same can also be adjusted as per the needs and requirement of women in India. So much so that it can be operated from every home irrespective of its location. This means that even the traditional and orthodox families can allow the women to participate and use ICT from their respective homes. In India there is an abundance of "women entrepreneurs" who are capable of making their mark at the global level. However, the awareness and facilities are missing drastically. The national policies and strategies have not yet considered this unexplored potential pool of intellectual inputs. With simple training and awareness programmes we can make a big difference. Further, we can also encourage the establishment of "Small and Medium Enterprises" (SMEs), Small Scale Industries

(SSIs), etc. The need of the hour is to show a positive will to achieve that much needed purpose.

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10

Socio-Economic Impact of Tourism upon the Empowerment of Local Women: A Case Study of the Pobitora Wildlife Sanctuary

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Abstract

This study further reveals that empowering women through tourism has gone beyond the individual boundaries of woman. Most women, dwelling on the edge of the Pobitora Wildlife Sanctuary nowadays look beyond their self and use often meager proceeds from tourism businesses to cater for their children's and family's needs and sometimes clandestinely even for the needs of the entire community to which they belong. Henceforth, it is from the above analysis, a conclusion can be drawn that empowering women through tourism undoubtedly empowers their whole community and society. Recognizing the potential of tourism in empowering women, and recognizing the ability of the empowered women to transform communities and the entire world, it can therefore be recommended and emphasized again that there should be more support and assistance from donor agencies, governments both at the state and central level, NGOs and social groups in terms of financial resources, policies, recognition and any other supportive way to help the Women folk help everybody in turn.

Keywords: Empowerment, Donor, Agencies and Women

Introduction

Empowerment is defined as a critical aspect of gender equality. It implies a society in which women an donor agencies d men enjoy the same opportunities, outcomes, rights and obligations in all spheres of life. A critical aspect of promoting gender equality is the empowerment of women, with a focus on identifying and redressing power imbalances and

giving women more autonomy to manage their own lives. Women's empowerment is vital to sustainable development and the realization of human right for all. Women empowerment has become a significant topic of discussion in regards to development and economics of the women in our society. It can also point to approaches regarding other neglected groups or genders in a particular political or social context. While often interchangeably used, the more comprehensive concept of Women empowerment refers to people of any gender and basically stresses upon the distinction between biological genders. It thereby also refers to other marginalized genders in any particular political or social context.

Methods to empower women offer a key way to economically empower women, giving them the confidence they need to tackle the menace of gender discrimination and inequalities. Often, women in developing nations are legally restricted from their land on the sole basis of gender. Having a right to their land and property generally gives women the power to bargain that they wouldn't normally have and in turn they gain the ability to assert themselves in various aspects of their life, both in and outside of the home. Another way to provide women empowerment is to allocate responsibilities to them that normally belong to men. When women have economic freedom and empowerment, it is a way for others to see them as equal members of society. Through this, they achieve more self-respect and confidence by their contributions to their communities. Simply including women as a part of a community can have sweeping positive effects.

Participation, which can be seen and gained in a variety of ways, has been argued to be the most beneficial form of gender empowerment. Political participation, be it the ability to exercise franchise and voice opinions, or the ability to run for office with a fair chance of being elected, plays a huge role in the empowerment of peoples. However, participation should not be limited to the realm of politics. It can include participation in the domestic chores, household activities, home management, in schools, and the ability and the freedom to make choices for one self, the family and at times, even for the society. When women have the agency to do what she wants, a higher equality between men and women is established. Tourism is a tool to empower women from various aspects. Tourism could assist women to increase power and control over natural resources and thereby procure economic

Pobitora Wildlife Sanctuary is a wildlife reserve in Assam located in the district of Morigaon. Considered widely to be a miniature version of the Kaziranga National Park, it is

empowerment, educational empowerment and political empowerment.

located at a distance of about 30 kilometres east of the city of Guwahati, which is regarded as the "Gateway to the North – East India". It is an one-hour drive through a road passing by River Brahmaputra, and a small portion of the village of Mayong. It has a dense population of the Great Indian one-horned rhinoceros. It covers 38.8 km². Though the total notified area of the park is 38.80 square kilometres, only 16 square kilometres is the effective rhino habitat. Pobitora was declared a reserved forest in 1971 and a wildlife sanctuary in 1987. It covers flat flood plains and a hillock called as the Raja Mayong hillock. The extent of the Protected area is 38.81 sq km lays between latitude 26012' N to 26015' N and longitude 91059' E to 92005' E Pobitora originally was a grazing reserve of erstwhile Nagaon district, came into limelight during the year 1961-62 for sighting of One Horned Rhino (Rhinoceros unicornis). The area was declared as a Reserve Forest (RF) way back in 1971. The adjacent Raja Mayong Hill bearing an area of 1191.86 ha was also a RF declared during 1957.

Pobitora is mainly famous for its Great Indian one-horned rhinoceros. Besides the rhinoceros, the other animals abundantly found here are the leopard, wild boar, Barking deer, Wild Asiatic water buffalo etc. Assam's Pobitora Wildlife Sanctuary is also home to more than 375 species of migratory birds and various reptiles. The birdlife at Pobitora is very rich with several unique resident birds. Their number is augmented by migrants in winter. A census done in Jan 2012 showed that there were 26 species of birds at Pobitora. There were approximately 7000 resident birds including about 100 cranes, and approximately 5000 migratory birds. Other reports and websites suggest it has 375 species of birds. It is also regarded henceforth, as a Birder's paradise.

In Pobitora wildlife sanctuary, there are now around 93 rhinos, a ten per cent increase over the last six years. These 93 rhinos are surviving on merely 16 square kilometers area of the park. Pobitora has exceeded its rhino-bearing capacity and is overpopulated. The animals have begun moving outside the sanctuary in search of food, and chances of serious mananimal conflict are quite rife. Besides, the straying animals carry the risk of contracting diseases that afflict domestic animals. Under the Indian Rhino Vision 2020 (IRV 2020) which is a joint programme of the department of environment & forests, Govt of Assam, Worldwide Fund for Nature, India (WWF India), the International Rhino Foundation and the US fish & wildlife service, six rhinos were translocated from Pobitora and re-introduced into the Manas National Park between December 2010 and January 2011. Earlier, under the same programme, two rhinos were similarly translocated from Pobitora to the Manas national Park

in 2008. Pobitora is a very beautiful place bestowed with unparalleled Scenic beauty and abundance of wetlands and greenery. It is quite hilly and thus, due to the variation in altitudes, one can experience diverse vegetation. The vegetation within Pobitora Wildlife Sanctuary generally varies as per the height of the place. There are a large number of coconut trees grown all over the place within the premises of the Sanctuary..

Other attractions to visit in the vicinity of the Pobitora Wildlife Sanctuary area include the Haduk Hanging Bridge and the Garanga Beel pond. The morning and evening elephant and jeep ride is the high point of the day. If anybody is visiting on a day trip, one can definitely enjoy the bird life there and also walk around the wildlife sanctuary. It is a pleasant place for a walk. There is a small place to enjoy a picnic and a children's playground close to the Haduk Hanging Bridge. Local visitors can combine picnic with elephant rides and enjoy the stunning scenery of Pobitora. Elephant rides and jeep safaris are major activities which are frequently organized by the Wildlife Sanctuary management. The Wildlife Sanctuary opens officially on 1st November every year and closes down by 30th April of the next year, just before the onset of the Monsoon season in the region, which results in flash floods causing disturbance to the natural habitats of many a fauna. Even different varieties of flora found within the Wildlife sanctuary fall prey to the perennial problem of floods and get submerged in the water-clogged areas.

Scope of the Study

The present study is descriptive in nature . The study focuses basically on the impact that tourism makes upon the local women folk and their empowerment from the perspective of the socio-economic consumption system while focusing on the potentials of tourism development at the Pobitora Wildlife Sanctuary of Assam. The proposed work on Tourism industry empowering the women folk dwelling on the periphery of the Pobitora Wildlife Sanctuary, will promote women's economic empowerment in tourism through partnerships with tourism stakeholders including the improvement of employment opportunities for women such as skills, supply chain, career advancement and gender awareness. It is important to provide educational activities for women to better improve their opportunities for working within the tourism industry.

Objectives of the Study:

The study has been pursued with the following objectives in view:

- 1. To highlight the social impact of tourism upon the empowerment of the local women dwelling on the fringes of the Pobitora wildlife sanctuary;
- 2. To bring to light the economic impact of tourism upon the empowerment of the local women dwelling on the fringes of the Pobitora wildlife sanctuary.

Methodology of the Study:

The study is basically descriptive in nature. By going through the various available literatures within the proximity of the researcher it is evident that the socio-economic impact of tourism upon the empowerment of the women folk of Pobitora Wildlife Sanctuary has been widely explored, though there remains ample scope to improve the level of empowerment in the local women and make them self sufficient and self—reliant as a result of such tourism impacts. Henceforth, the present study attempts to unravel this latent aspect.

Data Requirement:

Secondary data has been made available from books, websites, journals and monographs, compiled and authored by competent writers pertaining to the travel and tourism sector. Articles and write-ups, both of national as well as international standards have been used to gather relevant and informative data. Further the data and information available with the Assam Tourism Development Corporation (ATDC), and the regional Sarba Siksha Abhijan office, etc. were the sources of secondary data.

Discussion:

According to World Tourism Organization, women make up the majority of the tourism workforce, but that they tend to be in the lowest paid, sometimes even un-paid, and are often provided with the lowest status jobs. In order to promote gender equality, support opportunities for women and end violence against women, it is important to empower women as a first step. The tourism industry can contribute to this effort by creating opportunities for women and spread awareness of gender issues. Having economic opportunities and education is one of the most important ways for women to empower themselves to seek a better quality of life for themselves, their families and their communities. Engaging in tourism enterprises not only breaks the social bubble that has always kept the woman in doors, but also raises her self esteem whilst providing an opportunity for the entire society to acknowledge what woman can accomplish outside the traditional home tendering. By this, woman attains social empowerment which further provides her with ladders for further success.

Conclusion:

This study has shown that women involvement in tourism in and around the Pobitora Wildlife Sanctuary brings many positive impacts in terms of promoting development in economically marginalized regions, encouraging sustainable use of natural resources and enhancing the control of local people over development in their surrounding area. There is a great potential for tourism to promote equitable and sustainable development among the women folk pertaining to the aforesaid region and the corresponding premises. Through training, proper mentoring and counseling and through the efforts of the Self Help Groups and different Women forums, females dwelling around the Pobitora area are not only getting enlightened regarding the usage of various tools to ensure sustenance through tourism aids, but are also getting hugely motivated and deeply enriched in enhancing their own confidence levels, efficiency, effectiveness and productivity. They are gradually and slowly with the advent of more and more tourists to the Wildlife Sanctuary and also with the gradual developments in the field of science and technology, have developed their own capacity building process and have become much more self-assured and assertive than ever before.

Women empowerment around the vicinity of the Pobitora Wildlife Sanctuary is vividly exhibited through the plethora of tourism and hospitality related activities undertaken and performed by the local masses, especially the native women folks. They have realized the true potential and the prospects that are offered to them by the Tourism, Travel & Hospitality sector and they have made every effort to make optimum and rich use of the opportunities available. Acting as tour guides, running hotels, resorts, dhabas and restaurants around the Pobitora Wildlife Sanctuary, serving as inn keepers and managers of the tourism properties, apart from selling traditional and customary goods and wares, pertaining to the ethnic tribes and masses of the place have been a few of the commonly seen activities performed by the local women so as to ensure their self-sustenance. Preparation of ethnic dishes and delicacies, pickles, jewellery and costumes and conventional handicrafts and items of aesthetic value have been a trademark in the development of the tourism promise that the females of Pobitora bear.

With more exposure and experience, they have realized their Unique Selling Proposition (USP) and by developing their communication skills as well as overcoming their nervousness and lack of confidence of their initial years, they have been able to master their weaknesses into strengths. With this has come the ability to gain confidence which in the

long run should equip them well and place them in an even better position to realize their true potential and justify their concealed talent and skills. However, the support of outside agencies or local NGOs will often be needed in order to equip the women with relevant skills, to expose them to the highs and lows of involvement in tourism and to provide technical assistance to deal with the dynamics.

This study further reveals that empowering women through tourism has gone beyond the individual boundaries of woman. Most women, dwelling on the edge of the Pobitora Wildlife Sanctuary nowadays look beyond their self and use often meager proceeds from tourism businesses to cater for their children's and family's needs and sometimes clandestinely even for the needs of the entire community to which they belong. Henceforth, it is from the above analysis, a conclusion can be drawn that empowering women through tourism undoubtedly empowers their whole community and society. Recognizing the potential of tourism in empowering women, and recognizing the ability of the empowered women to transform communities and the entire world, it can therefore be recommended and emphasized again that there should be more support and assistance from donor agencies, governments both at the state and central level, NGOs and social groups in terms of financial resources, policies, recognition and any other supportive way to help the Women folk help everybody in turn.

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11

A study of Achievement in Geography of Secondary School Students

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Abstract

The primary purpose of social studies is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. Social studies seek to examine and understand communities, from the local to the global, their various heritages, physical systems, and the nature of citizenship within them. Students acquire knowledge of key social studies concepts, including change, culture, and environment and the dynamics of the marketplace. Normally, social studies is divided into History and Geography when the student has reached sixth grade or near. Knowledge of geography helps students to be better citizens. Through geography they learn to locate important events. Students can understand the relationship between geography and national or international policies and can use geographical knowledge to make informed decisions regarding the best use of the nation's resources. Finally, geographic knowledge helps all to ask important questions about policies that lead to changes in landscape and land use. Knowledge of geography helps students to be better citizens. Through geography they learn to locate important events. Finally, geographic knowledge helps all to ask important questions about policies that lead to changes in landscape and land use. Hence it is decided and also felt to undertake the present study - "A study of Achievement in Geography of secondary school students in West Tripura District, Tripura". For this purpose Descriptive survey method of research was used. A sample of 230 secondary school students were selected randomly from seven schools located in west Tripura district. The methodology includes 't' test.

Keywords: Geography, Landscape, Culturally Diverse, National or International Policies, Geographical Scales.

Introduction

Education frequently takes place under the guidance of others, but may also be autodidactic. Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Children of today are citizens of tomorrow and are also considered as the backbone of a nation as their proper upbringing and development in the domains of cognitive, affective and co native does cast a phenomenal impression to the very existence and civilization. It is to be noted that, the students as learners have many roles to play to gain various lessons providing knowledge and information. Knowledge of geography helps students to be better citizens. Through geography they learn to locate important events. Students can understand the relationship between geography and national or international policies and can use geographical knowledge to make informed decisions regarding the best use of the nation's resources.

Human life and its various facets, including thinking, are influenced by geography. It is Geography that influenced by cultural development of human race. Without the knowledge of Geography, the knowledge of various subjects shall remain truncated. Today we are living in an age where barriers of land have ceased to exist. Man lives in an international age with a cosmopolitan outlook. We have to understand the like and the culture of other countries. It is the Geography which provides knowledge of all these things. If, at all, we are anxious and interested to know the history of any country, we shall have to take a lot of help from the knowledge of Geography of that particular country. It is the stage on which the drama of history is enacted. Literature has a lot of description of geographical things. Description of nature, which forms an important and integral part o literature, is nothing but a part of Geography. Geography has, therefore, to find a place in our syllabus and curriculum.

No country can plan its education without having a keen eye on its social objectives. These social objectives are very much governed and guided by the geographical factors. In facts, it is the Geography which, to a very great extent, determines and influences the socioeconomic value of a country. Geography has, therefore, been given an important place in our curriculum. It tries to train and develop good citizens who may be able to solve various socioeconomic and political problems of the country. The importance of geography can be understood more clearly by considering the effect of geography teaching on man as a human being, as an administrator, as a politician etc.

Through the study of geography, students learn to read maps and interpret information at geographical scales, from local to global. They will be able to use data from maps, tables, graphs and texts to recognize patterns and solve problems. Students also can integrate concepts from many different areas of science, social science and the humanities and apply critical thinking to understand and dealing with current issues of local, national and international importance. Finally, geographic knowledge helps all to ask important questions about policies that lead to changes in landscape and land use. Geographically informed students will be effective leaders for our country. Hence it is decided and also felt to undertake the present study -"A study of Achievement in Geography of secondary school students in West Tripura District, Tripura".

Objectives

- 1. To find out the level of achievement in geography of secondary school students.
- 2. To find out the influence of variables such as 'gender, locality, types of school and medium of instruction' on the level of achievement in geography of secondary school students.

Hypothesis

- 1. Secondary school students are not possessing high achievement in geography.
- 2. There is no significant difference in achievement in geography of boys and girls of secondary school students.
- 3. There is no significant difference in achievement in geography of private and government secondary school students.
- 4. There is no significant difference in achievement in geography of rural and urban secondary school students.
- 5. There is no significant difference in achievement in geography of Bengali medium and English medium secondary schools students.

Design and Methodology:

Descriptive survey method of research is been employed for the present study. Stratified random samples of 230 secondary school students were selected through lottery method from the government and private schools of West district in Tripura. Sample consists of boys and girls of rural and urban students.

Tools: Standardized Madhyamik Examination Paper conducted by Tripura Board of Secondary Education is found most suitable for the study.

Statistical Analysis: The mean scores are considered to compare the sub-sample variation in achievement levels. The values of standard deviation are applied to identify the dispersion of scores in each case. The data was analyzed using 't' test.

Analysis and Interpretation

Hypothesis-1

Secondary School Students are not possessing high achievement in Geography.

Table 1: Level of Achievement in Geography possessed by the Whole Sample

Sample size	Mean	Standard deviation
230	52.57	22.44

According to above table, mean score indicates that the students are average at achievement in Geography. As per the standard deviation value, the scores in the units are dispersed to a high degree.

Hypothesis-2

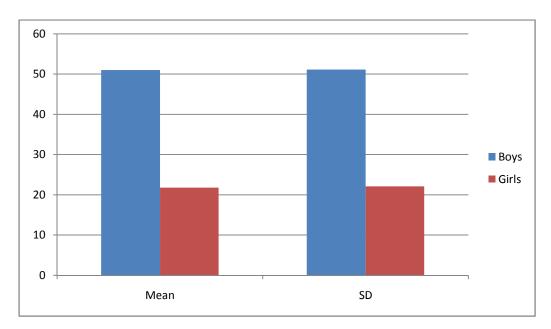
There is no significant difference in achievement in Geography of boys and girls of Secondary school students.

Table 2: Comparison of Achievement in Geography in Boys and Girls

Sample size	N	Mean	SD	't'Value
Boys	115	51.03	21.78	0.03#
Girls	115	51.12	22.10	

 d_{f} : 228 P at 0.05 Level is 1.97 # Not significant at 0.05

From the above table it can be seen that, there is no significant difference in the level of achievement in Geography possessed by boys and girls of Secondary school students. The difference is not significant as the 't' value (0.03) is less than 't' table value (1.97) at 0.05 level of significance.



Graph 1: Mean and SD Values of Achievement in Geography among Boys and Girls

Hypothesis-3

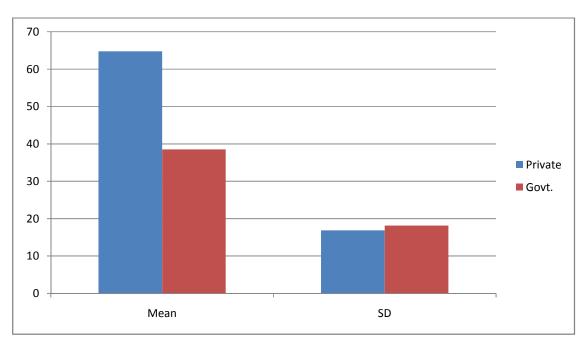
There is no significant difference in achievement in Geography of private and government secondary school students.

Table 3: Comparison of Achievement in Geography in the students of Pri and Govt Schools

Sample Size	N	Mean	Standard Deviation	't' Value
Pvt.	110	64.78	16.84	11.38 ^{\$}
Govt.	120	38.51	18.16	

\$ Significant at 0.05 Level

From the above table it can be seen that, there is a significant difference in the level of achievement in Geography possessed by private and government school students. The students studying in government schools are found with better achievement in Geography than those of private schools.



Graph 2: Mean and SD Values of Achievement in Geography among Private and Government School Students

Hypothesis-4

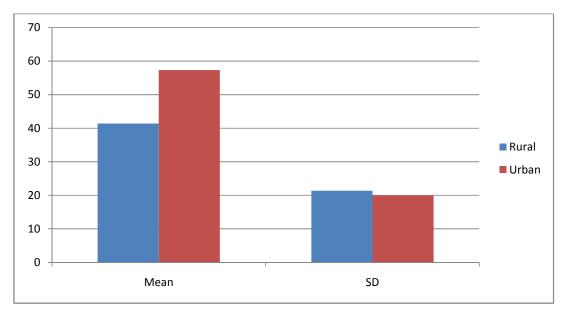
There is no significant difference in achievement in Geography of rural and urban secondary school students.

Table 4: Comparison of Achievement in Geography in the Students of Rural and Urban Schools

Sample Size	N	Mean	SD	't'Value
Rural	90	41.38	21.33	5.67 ^{\$}
Urban	140	57.31	19.96	

\$ Significant at 0.05 Level

According to table-4, it can be seen that, there is significant difference in the level of achievement in Geography possessed by rural and urban school students. It can be seen that the students studying in urban schools are holding better achievement in Geography than those of rural school students.



Graph 3: Mean and SD values of Achievement in Geography among Rural and Urban School Students

Hypothesis-5

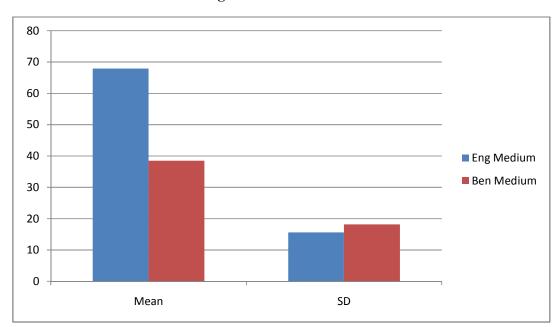
There is no significant difference in achievement in geography of Bengali medium and English medium secondary school students.

Table 5: Comparison of Achievement in Geography in English Medium and Bengali Medium School Students

Sample Size	N	MEAN	SD	't'Value
Eng.	110	67.9	15.58	13.18 ^{\$}
Ben.	120	38.51	18.16	

\$ Significant at 0.05 Level

From the above table it can be seen that there is significant difference in the achievement in Geography possessed by Bengali medium and English medium school students. It is clearly seen that the English medium students are found far better in holding achievement in Geography than those of Bengali medium students.



Graph 4: Mean and SD values of Achievement in Geography among English medium and Bengali medium school students

Findings

From the study it is observed that Secondary school students hold average achievement in geography. No significant difference was found between boys and girls in their achievements. Significant difference was found between Private and Government school students, and Private school students were showing greater achievement in geography than government school students. Students from urban area were found to have better achievement than rural areas in their achievements. And, English medium students showed greater performance in their achievement in geography than Bengali medium students.

Suggestions

The teachers/facilitators should explain all subject matter in a way that each student can comprehend in order to arouse their interest in the subject. The teacher should device a means of making the lesson interesting to the students by using variety of methods while delivering the lesson. Teachers have to care towards below average students, who are slow in education. They must follow and see if students are taking education in proper way or not. Teacher should meet with parents of those students who are poor in education. If required must give counselling to both students and parents. Students must be motivated / encouraged to share their ideas and comments. So that they can get students excited and willing about learning.

Suggestions for Further Research

Based on the present study, a good number of new areas can be studied by the future researchers. The areas and variables which are not covered by this study may be put to test to enlighten the factors associated with inculcation and development of achievement in Geography. The present study is limited to particular district; Studies may be extended to state level by selecting a large sample. A comparative study can be taken on achievement in geography by the students studying in state and central schools. A study can be done to identify the influence of educated and uneducated parents on the achievement of the students.

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12

A study of Achievement in History of Secondary School Students at Gomati District, Tripura

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Abstract

Social studies is the integrated study of the social sciences, humanities and history. It is the study of man and physical environment. And History is the study of the environment of man; physical, social, particularly in its relation to human activities. The primary purpose of social studies is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. It is an interdisciplinary subject which has potential capabilities to achieve the aims of education than any other fields of learning. It is a subject which is expected to help in the promotion of consciousness and knowledge of and pride in the child's local culture as well as an understanding of other cultures both within and outside their national boundary. One of the primary concerns of social studies, therefore, is to promote an understanding of man's way of living, his basic needs, the activities in which he engages to meets his needs - social, economic, cultural and political- and the institutions he has developed with his knowledge and initiation with all pervading quality in every aspect concerned. Considering all these "A Study of achievement in history of Secondary School Students at Gomati District" was conducted. For this purpose Descriptive survey method of research was used. A sample of 210 secondary school students were selected randomly from nine schools located at Gomati district. The methodology includes 't' test.

Keywords: Social studies, History, Democratic Society, Human Welfare, Critical Thinking Skills.

Introduction

Education, in its broadest sense, may be defined as a process designed to inculcate the knowledge, skills and attitudes necessary to enable individuals to cope effectively with their environment. Its primary purpose is to foster and promote the fullest individual self realization for all people. Achieving this goal requires understanding of commitment to the proposition that education is a primary instrument for social and economic advancement of human welfare. Social Studies is the field of study which deals with man and his relations with other people and his environment. Its content is drawn from several social sciences and bears a direct relationship with the purposes for which it is taught in schools. One of the primary concerns of social studies, therefore, is to promote an understanding of man's way of living, his basic needs, the activities in which he engages to meets his needs – social, economic, cultural and political- and the institutions he has developed with his knowledge and initiation with all pervading quality in every aspect concerned.

History is a means to understand the past and present. The different interpretations of the past allow us to see the present differently and therefore imagine and work towards different futures. Through the study of history we can investigate and interpret why society developed as it has and determine what influences have affected the past and present and shape the future. It helps one to understand the immense complexity of our world and provides insights to help cope with the problems and possibilities of the present and future. History also provides a sense of identity to understand the collective past that has have made us what we are today. In one sense history is the only thing that is real. The way in which people identify and interact with one another is by and large a consequence of history, which shapes and conditions individuals and societies whether they fully understand it or not.

History helps us develop critical thinking skills to look beyond the headlines, to ask questions properly, and to express our own opinions. History trains our mind and teaches how to think and process information. History students are rounded individuals who develop an understanding of both past and present. History helps us to understand change and how the community, nation and world we live in came to be. History helps one to understand the origins of modern political and social problems. Thus, a lack of historical knowledge prevents people from truly understanding the world they live in. The present study is carried out in Gomati District. From education point of view Gomati District is getting developed

and is progressing towards academics. In such a scenario it is felt to study the performance of students through their achievements in this District.

Objectives

- 1. To find out the level of achievement in history of secondary school students.
- 2. To compare the achievement in history of secondary school boys and girls.
- 3. To compare the achievement in history of secondary school students studying in private and government Secondary school.
- 4. To compare the achievement in history of secondary school students residing in rural and urban areas.
- 5. To compare the achievement in history of secondary school students studying in Bengali medium and English medium schools.

Hypothesis

- 1. Secondary school students are not possessing high achievement in History.
- 2. There is no significant difference in achievement in History of boys and girls of secondary school students.
- 3. There is no significant difference in achievement in History of private and government secondary school students.
- 4. There is no significant difference in achievement in History of rural and urban secondary school students.
- 5. There is no significant difference in achievement in History of Bengali medium and English medium secondary schools students.

Methodology

Descriptive survey method of research is been employed for the present study. Through Stratified Random sampling, 210 students were selected for the study. Sampling was collected through lottery method from nine different government and private schools of Gomati district in Tripura. Sample consists of boys and girls of rural and urban students.

Tools: Standardized Madhyamik Examination Paper conducted by Tripura Board of Secondary Education is found most suitable for the study.

Statistical Analysis: The mean scores are considered to compare the sub-sample variation in achievement levels. The values of standard deviation are applied to identify the dispersion of scores in each case. The data was analyzed using 't' test.

Analysis and Interpretation

Hypothesis-1

The Secondary School Students are not possessing high achievement in History.

Table 1: Level of achievement in History possessed by the whole sample

Sample Size	Mean	SD
210	54.77	20.69

The mean score, according to table-1, indicates that the students are average at achievement in history. As per the standard deviation value, the scores in the units are dispersed to a high degree.

Hypothesis-2

There is no significant difference in achievement in History of boys and girls of Secondary school students.

Table 2: Comparison of Achievement in History in boys and girls in the secondary schools

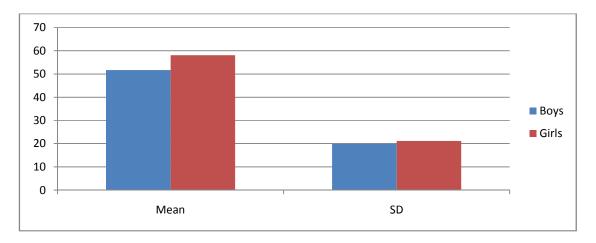
Sample Size	N	Mean	SD	't' value
Boys	110	51.73	19.882	2.25 ^{\$}
Girls	100	58.11	21.135	

P at 0.05 Level is 1.97

\$ Significant at 0.05 level

From the above table it can be seen that boys and girls of secondary schools differ significantly in their achievement in History. The difference is significant as the 't' value (2.25) is greater than 't' table value (1.97) at 0.05 level of significance. And there is significant difference in achievement in History of Boys and Girls of secondary schools.

Graph 1: Mean and SD values of Achievement in History among Boys and Girls



Hypothesis-3:

There is no significant difference in achievement in History of private and government secondary school students.

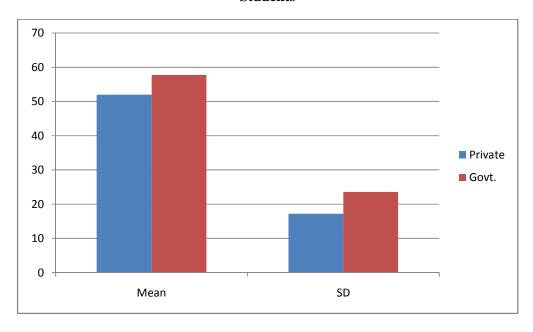
Table 3: Comparison of Achievement in History in private and government secondary school students

Sample Size	N	Mean	SD	't' value
Private	108	51.97	17.72	1.99\$
Govt	102	57.73	23.54	

\$ Significant at 0.05 Level

According to table-3 it can be seen that there is significant difference in the achievement in History possessed by Private and Government school students. The students studying in government schools are found holding better achievement in History than those of private school students.

Graph 2: Mean and SD values of Achievement in History among Pri and Govt. School Students



Hypothesis-4

There is no significant difference in achievement in History of rural and urban secondary school students.

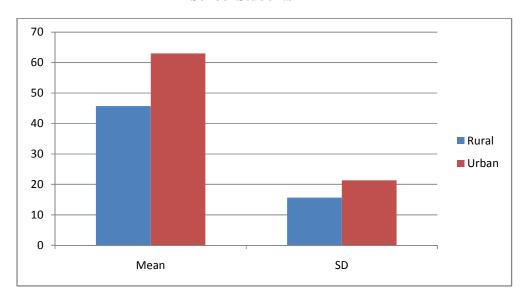
Table 4: Comparison of Achievement in History in Rural and Urban secondary school students

Sample Size	N	Mean	SD	't' value
Rural	100	45.74	15.68	6.71\$
Urban	110	62.97	21.32	

\$ Significant at 0.05 level

From the above table it can be seen that the students studying in urban schools are found far better in holding achievement in History than those of rural schools. Hence, it can be said that there is significant difference in the achievement in History possessed by Rural and Urban school students.

Graph 3: Mean and SD values of Achievement in History among Rural and Urban School Students



Hypothesis-5

There is no significant difference in achievement in History of Bengali medium and English medium secondary school students.

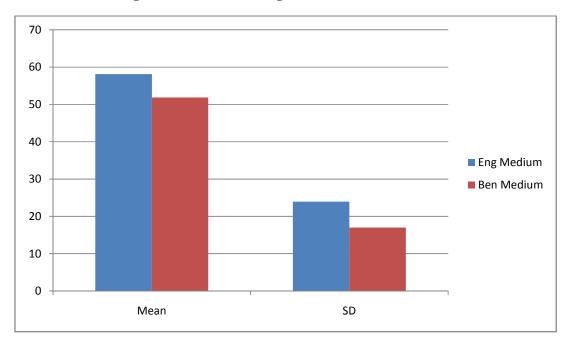
Table 5: Comparison of Achievement in History in English and Bengali medium secondary school students

Sample Size	N	Mean	SD	't' value
English Medium	97	58.17	23.95	2.17 ^{\$}
Bengali Medium	113	51.85	16.99	

\$ Significant at 0.05 level

It is evident from the above table that there is significant difference in the achievement in History possessed by Bengali medium and English medium school students. English medium students seem to posses' better achievement when compared to Bengali medium students.

Graph 4: Mean and SD values of Achievement in History among English medium and Bengali medium school students



Findings

From the present study it is observed that the students studying in secondary schools hold an average level of achievement in history. No significant difference was found between boys and girls in their achievements at 0.01 level of significance. Girls are found with higher achievement in History when compared to boys at 0.05 level of significance. Government school students were showing better achievement in History when compared to private school students. Students from urban area were found to have greater achievement than rural areas. And English medium students showed better performance than Bengali medium students at 0.05 level of significance.

Suggestions

The number of variables (home environment, peer pressure, etc.) over which teachers have no control would truly make it difficult to tie students' achievement to the teachers' ability to instruct. Students must be encouraged to share their ideas and comments, even if they are incorrect. We'll never know what students don't understand unless been asked. Parents must try to increase those times that give their child the message that parents are listening to them. Parents must try to decrease criticisms, rapid speech patterns, interruptions and questions when the children want to share their views, especially related to academics. Parents must have regular touch with school and subject teachers to know the behaviour of their child. They must also attend parent-teacher conference/ meeting to discuss child's progress in school during the school year.

Suggestions for further Research

Based on the present study, a good number of new areas can be studied by the future researchers. The areas and variables which are not covered by this study may be put to test to enlighten the factors associated with inculcation and development of achievement in History. The researchers can extend their studies to state level by selecting a large sample. The present study is limited X class only; studies can be taken up at different levels. Studies can be conducted to identify the relation between different academic subjects regarding to the development of achievement in History. A comparative study can also be taken on achievement in different areas of social studies.

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13

Discovering the Secrets in Managing the Business

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Introduction

Jet speeded changes in competition, technology, and workforce values are compelling organizations to search for new and more human ways of increasing productivity and competitiveness. The biggest changes have been due to the impact of information and communication technology. The ability to access vast information resources within a matter of minutes and to communicate across huge distances at ever lower costs and improving quality and convenience is transforming the way people and companies interact. Virtually, it is becoming harder to achieve market leadership and to stay on top

Keywords: Globalization, Competition, Change, Business Environment, Srategy, Change Management.

Reflecting the Scenario

Is it not the fact that the path to success is an elaborate one? A long journey before one comes out of the tunnel indeed! In today's fast changing world business is not just a cake walk / goodwill tour that one lands, grabs the opportunity and then vanish. Myopic approach is suicidal. Truly, success means a long term phenomenon – continuous market scans and adapting to change-friendly approaches. Strategy existing today may not be liked by the next generation and thus quick adaptability system is required to remain inbuilt.

Little did we think that the airlines could compete with the railways, the then sanctioned housing loans turning to be a giant sub-prime crisis and great recession would be

visiting the biggies at a time when mankind wishes to look at the other plants to find out the existence of the counterpart...

So, complexities galore – business space, technologies, processes, business models as well have turned out to be more complex - new characteristics are added frequently [subtracted infrequently]. The dimensions of business space keep increasing, adding complexity, while at the same time furnishing attractive new opportunities for those who can successfully navigate in the new environment. This complexity, in turn, also inhibits greater size and greater value creation. Global business arena has been changing very fast making it difficult for the poor-walkers to retain the market. There is a lot of noise out there. Merger / amalgamation / tie-up arrangements / outsourcing are being watched out – still something more is needed and that too on an urgent basis especially considering the existence of a very competitive world where there are many hungry competitors – the number too going up by leaps and bounds.

Of course initiating any change is a stupendous process apparently, but the same is possible and there is no short cut general prescription for the same in as much as all depends on the case concerned. There is a tendency to resist change, but the change itself in a business environment impacts employees, business relationships, customers, bosses, subordinates. It is up to the managers to carry out the duties of the company towards its customers while helping employees navigate through the change du jour. The change could be due to economic crisis, losing a customer, gaining a new customer (thus much more work), a new project, etc.

The issue is a burning one in as much as the same not only affect liquidity, profitability and equity of individual company but affects the national economy by freezing the supply link also, which, in turn, terribly affects the process of capital formation.

Clearly, in today's business world competition comes in many forms: price / service / quality / speed of delivery / uniqueness / experience / experience / knowledge / contacts / resources / brand equity, so on and so forth. Boosting of service quality, keeping in view the very nature of effective demand, is the crying need. The challenge is not only to acquire the customer, but also to retain him in the business for furthering the process of improved customer value. What is more : the fact remains that the market share once gone would be very difficult to regain as not only the number of C O R E[Competitors, Opponents, Rivals

and Enemies] is on the rise but technology also is being continuously replaced / is on a continuously changing positions.

And success means a long term phenomenon – continuous market scans and adapting to change-friendly approaches. Strategy existing today may not be liked by the next generation and thus quick adaptability system is required to remain inbuilt.

Practically speaking, global business arena has been changing very fast making it difficult for the poor-walkers to retain the market. There is a lot of noise out there. Merger / amalgamation / tie-up arrangements / outsourcing are being watched out – still something more is needed and that too on an urgent basis especially for our indigenous banks especially considering the existence of a very competitive world where there are many hungry competitors – the number too going up by leaps and bounds.

The World of Business

It is crystal clear that today's business environment is more complex – customer centric and risk centric - where efficiency alone or tinkering around the existing strategy-skill-input-levels cannot give the desired level of success. The very nature of banking business today, calls for technically countering the hurdles while at the same time ensuring profitability through marketing of the product/service range/value-addition. Especially, in today's fiercely competitive world these players have to learn from the past - as well as ongoing experiences - the art of winning over and at the same time retaining the more demanding customers. Renovating and adaptability to the changing scenario is the arena where the players have to apply more sophisticated service rendering skills and abilities. And hence a market-centric approach could give rich dividends.

Change is not a new phenomenon to the business world. From the barter system to today's e-commerce, from a system of transacting between individuals to transacting to bring transformations across the continents in an invisible scenario, the business world have experienced the change. The business of any business should be business and as such business should be directed to be customer-oriented to ultimately enable one to optimize wealth in an ethical manner since unethical practices ultimately leads one to roll down the shutter. Unless this basic principle is realized, the business will become an "endangered species".

Side by side: the fact remains that people are trained for success, whereas failure is far more common than success - poverty is more prevalent than wealth. There is no achievement

without failure. The difference between average and achieving people is their perception of response to failure. The entire concept of "change" is influenced by the state of mindset. How one looks at a business is the question – will it give greater returns or will it cause more damage than good? It is like looking at "half glass full or half glass empty". Are you failing backward or failing forward is the question. Change management thus appears at the top of the agenda as acceptance of change is inevitable and always forward looking in nature. "It's neither the strongest nor most intelligent of the species that survive; it is the one most adaptable to change." rightly said Charles Darwin.

That is why time is ripe to examine and assess the degree of emerging rapid changes vis-a -vis the roles of the finance-world-personnel in the arena of marketing of product/service range and management thereof; to review and refresh various marketing management tools [innovative indeed] required for boosting environment- friendly-operations via scanning of existing and potential business avenues attaching adequate importance to risk management concept, ways and means to identify, measure and mitigate the risks in different operational areas of business system to be enable to acquire necessary skill, strength and ability in order to turn around the operational zone into better profit centers.

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And of course the formula for trade off comes into play in such a vital context. Be it a commodity marketing or services marketing ultimately it is the quality that matters. Quality is nothing but a summation of cost and time. Changing any one of these variables would lead to change the outcome. If the amount of time is shortened to complete the assignment, either the cost is to be increased or quality is to be lowered. Quality refers to identifying the quality standards relevant to the assignment and determining how to measure and satisfy them.

Under such facts and circumstances managing capital and risk exist at the front door. Tapping the high growth opportunities ensuring capital efficiency stay thus at the forefront. Essentially, before the broad objectives / strategies are set the crucial aspects are to be kept in mind. The risk factor, that is to say determining the risks, is likely to affect the implementation and evaluating possible responses. Business without risk is similar to day without night! It is just like sugar and salt in life. One has to continuously and spontaneously bear in mind that it is pure business – a long term process – and nothing else.

Consolidation would definitely continue to be the key factor – but obviously is not the end as is presently thought of, rather the tip of an iceberg!! Tying up / amalgamation / merger with the stronger is definitely one of the way outs. But what are the things that are to be done thereafter – have the problems faced by the regional rural banks been solved after the mergers which are already taking place in a big way! Actually, in today's unprecedented talent crunch, the business world as a whole is grappling with developing the leadership, talent, risk awareness and of course the very task of building up / inculcate positive- change- adapting-attitude.

Next, the very aspect of communication comes into play – what information each stakeholder / customer need and how to deliver the same. Organization's roles and responsibilities exist in such a boiling context as one of the major determinants. – roles, assignments, relationships to make sure that the right people are assigned with the right job, especially if the crucial arena are accounted for [like : manpower utilization, Non Performing Assets' recovery / recovery management, capital shortages? Credit, market, liquidity as well as operational risk factors being positively and appropriately encountered? Sure?

Why not to try with the joint endeavours in a more pronounced way - may be with the telephone, insurance, non-conventional energy agency, post offices having a reach deep and wide and also resorting to PPP (Private- Public – Partnership) drive. Otherwise, watch like a silent spectator and be ready to capsize! The market share is gone! Crying over spilt milk does not help anyway!

Comprehending the Writings on the Wall

In such a process it is also as clear as anything - the stake holders cannot shark off the responsibility, obviously, under the ongoing facts and circumstances. Measures already taken are good beginnings only – the need is there to continuously changing the strategies best suited under a given situation.

The choice of strategy also depends on facts and circumstances – may be one particular strategy becomes outdated or calls for supplements not necessarily by discarding the older one. This renovation is thus a continuous process. The redesigning of existing processes can effectively lead to dramatic enhancements in performance that enables the organization to deliver greater value to customers in ways that also generate higher profits to the stakeholders.

The happenings thus require a conscious and undivided attention. A well-groomed strategy could not only help protect the fund deployed, but also enable to face competition through customers' confidence building.

Business processes must become more mature and the Institution must be able to deliver higher performance – spatially, temporally, hierarchically and functionally. Obviously, to achieve the same the starting point is designing [the comprehensiveness of the specifications as to how the process is to executed]; followed by the performers [people executing the process based on skill and knowledge]; owner [persons shouldering the responsibility for the process as well as the results]; infrastructure [information / MIS that support the process]; and of course the metrics_[the measures the company uses to track the process's performance].

Enterprise capabilities are the crucial factors for the ultimate achievement – leadership_[executives who support the creation of processes]; culture [values of customer focus, teamwork, personal accountability and of course the very willingness to change]; expertise [skills in / methodology for, process design]; and governance [the very mechanisms for managing complex projects and change initiatives].

For developing high performance processes, Institutions need to offer the very supportive environments. It is that greater competent Institutions that emerge as the victor; while others struggle to keep the heads over water.

So, focusing on, measuring and redesigning the customer-facing and internal processes improvements could be there in areas like: cost, quality, speed, profitability and other key areas. Arranging for such change-over calls for more than rearranging work- flows – which does what tasks, in what locations, as well as in what sequence.

So for making the new process work the need is there to ensure that the jobs are redefined broadly backed by updated training system to support these jobs and at the same

time enabling decision making. The process and the outcome are to be studied for next course of action.

The broad areas under such a change-over method include, among others: reshaping organizational cultures to emphasize on team performance, fixation of personal accountability, customer's importance; managers overseeing the tasks rather than supervising and realigning the information system so that the cross-functional processes work smoothly than simply support departments.

In Lieu of Conclusion

Without knowing what to concentrate on and when the executives would be unable to master the science of transforming the business processes! Even when the BPO is resorted to [Peter F Drucker Sir's forecast during the 1950's and 1960's now appearing as the indispensible one] the need remains as to managing the outsourced matters. Process implementation road map must be developed.

Finally, quality now is all set to become a commodity. The age of quality improvements has passed. Quality has already become a commodity overseas. In another five years, the picture will be no different in India. Noted Japanese management guru Shoji Shiba – currently on a mission to help Indian manufacturing companies become champion organizations as part of a Japanese government initiative - has rightly noted that for a country where no visit to a store is often complete without getting to hear shop-keepers use terms like 'export quality' to indicate that the items in question are better quality-wise than the ones made for domestic markets, its somehow difficult to imagine an India where such descriptions don't exist. But, this seemingly impossible thought is what—thinks is just a few years away from turning into a reality. It has been rightly located that currently, quality standards in India, in most cases, mirror those that prevailed in Japan in the 1950s and 60s. 'But given the fast clock-speed of Indian companies, I expect them to also come up to levels that exist internationally by 2014,' according to the 'breakthrough management' expert.

In fact competition itself would leave domestic players with little choice but to work towards making a rapid transition from simply offering a range of products – not only high on quality but still on price, to ones which meet the 'latent requirement of customers.'

Those Indian banks which cater to the latent requirement of customers could find their market wide open. Others have to strive towards this end so that they can also say that their products offer additional value. Doing so would enable the former to meet competition from

foreign banks, for example, which concentrate on the added value proposition they provide buyers.

Thus, we can jolly well conclude following Management Wizard Shiba's advice that the best prospects for Indian companies lay at the 'bottom of the pyramid'. "Don't start out targeting the No. 1 slot and a dominant market share. Instead, try to be unique, rewrite the business by focusing on the bottom of the pyramid, and soon you would have found that you have achieved what you wanted to – the top position...."

Tasks remain unending: [a] building the credibility; deciding on what to do; identifying the competitive edge; locating what makes service successful; understanding what makes the service fail; what makes ourselves stand out [b] knowing about our customers & prospects: who needs us - at the market, in order of importance, whom do we want to be our customers, whom don't we want, where are they, how do we get to them, when is the best time to get to them, what turns them on and of course what turns them off???? It is the goodwill ladder that is to be ascended. One only get a single chance to make a first impression & to most of the demanders' first impression becomes the last impression – rightly or wrongly! The fact remains - the world wants to see the results only.

The happenings thus require a conscious and undivided attention. A well-groomed strategy could not only help protect the fund deployed, but also enable to face competition through customers' confidence building.

What good is more business if you don't get paid?

About the Publisher

The Institute of Chartered Financial Analysts of India (ICFAI Society) was established in 1984 as a not-for-profit educational society in Andhra Pradesh, India. ICFAI University refers to the universities sponsored by the Institute of Chartered Financial Analysts of India and is established in the state of Uttarakhand, Tripura, Sikkim, Meghalaya, Mizoram, Nagaland, and Jharkhand under respective State legislations. The University Grants Commission (UGC) has recognized the above seven ICFAI universities established under State legislations in terms of Section 2(f) of the UGC Act 1956.

The Institute of Chartered Financial Analysts of India University, Tripura (IUT) or The ICFAI University, Tripura was established in 2004 through an Act of State Legislature (Tripura Act 8 of 2004). UGC has approved the university under Section 2(f) of the UGC Act, 1956 and hence included in the list of universities maintained by UGC under Section 2(f) of the UGC Act, 1956. The campus at Kamalghat Sadar, Tripura is a blossoming green campus spread over 32 acres and is nearest to the state capital Agartala. The university is a member of the Association of Indian Universities (AIU), New Delhi, the Federation of Universities, India and the Association of Commonwealth Universities' London. Consequently, these universities can confer degrees at Bachelor's, Master's and Doctoral levels.

Presently the university has following faculties- Faculty of Management Studies; Faculty of Science and Technology Faculty of Education and Faculty of Law. The ICFAI University, Tripura is committed to provide new career-oriented educational programs at Bachelor's and Master's level in management, finance, science and technology, education and other areas. University offered the following programmes in Bachelor's and Master's level-

- Undergraduate Programmes: BBA, BCA, B.Tech, B.Tech (lateral), B. Ed, LLB, B.Lib, BBA-LLB.
- Postgraduate Programmes: MBA, MBA (Rural Management), MCA, BCA-MCA Integrated, MA (Education), LLM.
- Ph.D programme: Management

The university has received the approval of National Council for Teacher Education (NCTE) to offer a Bachelors Program in Education. The Distance Education Council (DEC) has approved the programs of the university. The Bar Council of India has given its approval for three year and five year Law Courses to award degrees in law.