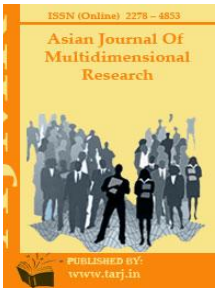

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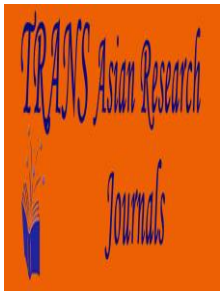

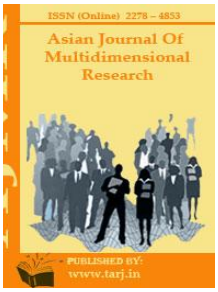

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OPINION ANALYSIS ON HEALTH ISSUES AMONG WOMEN CONSTRUCTION WORKERS IN KODAIKANAL

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1. INTRODUCTION

In India women workers constitute a major portion in the work force of the construction industry. Sad to say they remain not only unorganized but also unskilled as compared to male construction workers, who by virtue of their gender preference have progressed ahead in their career form an unskilled worker to a skilled one, specifically as a mason, carpenter, welder and electrician. While on the other hand women construction workers start as unskilled helpers and remain unskilled throughout their life and as a result are victims of gender discrimination. Traditions, culture and customs along with the attitude of society towards women have placed women workers at a great disadvantage. In addition to this, they are also unorganized and dependent on their husbands without any empowerment socially and economically. Unfortunately, in this system, women workers do not have an opportunity to receive any type of skills training which has left them stagnant without any chance of promotion of upgrade of any sort in their job[1].

2. STATEMENT OF THE PROBLEM

Construction workers are the backbone of the economy as they create the infrastructure necessary for industrial growth. They contribute in infrastructural development of India by building the roads and highways, the railway tracks and airports and ports, the IT cities, the call centre's and mega malls that are creating new forms of wealth today. Construction Women are almost unskilled labourers' and they face serious problems related to work, viz., wage discrimination, gender and sexual harassment, unhealthy job relationship, lower wages. Despite these, construction industry over whelming attracts female workers. Their skills are never upgraded as they are allowed to perform only certain types of work and usually they assist the male work force.

Hence the study is undertaken to analyse the conditions of women construction workers in Kodaikanal

3. REVIEW OF LITERATURE

Gangrade, K.D and Joseph Gathis. A (1983), in their study define the problems and perspective of women workers in the workshop report. The women in the unorganized sector face a lot to

problems such as low wages, long hours of work, insecurity regarding job and sexual harassment. In spite of the law prescribing equal work, women are seldom paid wages on par with men workers. The employers give two reasons for this: (i). that women are less productive; and (ii). that they are less skilled. In fact, these reasons are not convincing[4].

Usha Rao N.J. (1983), in her study, deals with all India patterns of varied types of women workers. For her, there has been a growing concern in recent years regarding the declining work participation rates of women in India. Regarding in the services sector, it may be mentioned that according to the occupational categories of the census, there has been a marginal increase in the proportion of women in white collared occupations, viz., doctors, nurses and other health personnel, teachers, clerical staff and office workers. This increase has been offset by the decline in the number of women in trade, commerce and other categories. This expression requires lot of in-depth secondary data analysis[5].

Usha Talwar (1984), in her study, observes that the major aspects of working to identify the reasons of the employment to analyze the role of working women in decision- making. Since work conditions have an important bearing on the employment of women, a brief discussion of this aspect is made here. Most of the working women did not find any difficulty in securing a job. If there was any hurdle, it was the initial opposition by the family members. Many of the working women were satisfied with their present job and by and large they did not want any change[6]

Nirmala Banerjee (1985), in her study, has seen that the expected income of women workers in an unorganized sector was significantly below the minimum income for the organized sector at the time of her survey. Even in the formal sector, the workers were not always guaranteed this protection. Nevertheless, during the period under study, most sections of the organized sector labour force did receive some compensation in the form of increased money income both through annual increments and through an increase in their dearness allowance[7].

Kiran Devendra (1985), in his study says, "women are a great power in society; but if they misuse their power, it can shutter to bits the whole fabric of society'.

This is also what Ghandhi said women. The Government of Madras (now the government of Tamil Nadu) pioneered steps for women's welfare being the first state government to establish a separate Women's Welfare Department. This lead was followed by Uttra Pradesh in 1954. The Government of India decided to promote adequate services for women's welfare in the same year. For this, it was important to have a co-ordination between public and private organizations[8].

Rohini Nayar (1987) talks about the female participation rates in rural India and factors responsible for increasing the female participation rate. It was found that female work participation is highly correlated with poverty and landlessness in India. Poverty has a great influence in increasing the female participation rate. Increasing in the earnings of the household due to greater propensity in agriculture leads to with drawl of some of the labour from the labour market. The other factor, which is inversely related to female labour participation, is landlessness. On the whole, it can be said that both economic and socio-cultural factors determine female participation in rural India[9].

Sapru, Sushma (1991), the desperate pressure to work is reflected in the migration of poorer women to the informal sector with poor working conditions outside the state. The most

intriguing factor is the sex discrimination in wages. The condition of women in the unorganized sector is more depressing, since they stand at the lowest ebb of the society. Women in the unorganized sector work as agricultural labourers, servant maids, construction workers, sanitary workers, beedi workers, petty traders etc[13].

4. OBJECTIVES OF THE STUDY

This paper aims to analyse

- the Health issues faced by the female construction workers and their agreement level with regard to those issues
- to test whether there is any significant relationship between marital status and opinion on Health Issues

5. METHODOLOGY

The study is depends on primary data and based on survey method. Survey is conducted among the sample respondents using Interview schedule. Women Construction workers residing in Kodaikanal, Dindigul Disrtict, Tamil Nadu were the sample respondents and were interviewed.

6. SAMPLING DESIGN

Since the respondents belong to unorganised sector and there is no record on their appointment, salary, classification, education. They could not be classified or stratified on suitable basis. Hence researcher used non random sampling technique for the selection of sample respondents. 100 respondents were selected as samples.

7. ANALYSIS OF THE STUDY

The objective is analysed with the help of percentage analysis and chi square test

A) HEALTH ISSUES

Working environment should be conducive to work to the workers. Especially, the organisation (whether formal or informal) should give importance to health issues - drinking water facility in work place, toilet facility, less work during periods of menstruation and medical leave available worksite and so on. Hence, an attempt is made to analyse the agreement level of the respondents on health issues and the result is presented in Table 1

TABLE 1 AGREEMENT LEVEL OF THE RESPONDENTS ON HEALTH ISSUES

Health Issues	SA	A	NA	DA	SDA	TOTAL
Drinking water facility in work place	0 0	0 0	0 0	7 7%	93 93%	100 100%
Toilet facility in workplace	0 0%	0 0%	0 0%	0 0%	100 100%	100 100%
Work during periods of menstruation	67 67%	24 24%	0 0	2 2%	7 7%	100 100%
Suffer from any skin disease, arthritics hypertension high BP& muscular pain	53 53%	47 47%	0 0	0 0	0 0	100 100%
Medical leave available in your worksite	51 51%	45 45%	2 2%	0 0	2 2%	100 100%

SA- Strongly Agree; A- Agree; NA-Neither Agree nor Disagree; DA- Disagree SDA- Strongly Disagree

It is inferred from the table that 93 per cent of the respondents strongly disagreed on drinking water facility in workplace.

100 per cent of the respondents strongly disagreed that there is toilet facility.

67 per cent of the respondents strongly agreed that they work during periods of menstruation.

53 per cent of the respondents strongly agreed that they suffer from skin disease, arthritics hypertension high BP & muscular pain.

51 per cent of the respondents that their organization provides medical leave facility.

B) AVERAGE RANK ANALYSIS

Average rank analysis describes the ranking pattern of the construction women workers opinion on Health issues

TABLE 2 AVERAGE RANK ANALYSIS

Level of agree	**Drinking water facility in workplace**			**Toilet facility in workplace**			**Work during periods of menstruation**			**Suffer from any skin disease, arthritics, hypertension, high BP & muscular pain**			**Medical leave and sick facility available in your work sites**		
	X	**W**	**XW**	**X**	**W**	**XW**	**X**	**W**	**XW**	**X**	**W**	**XW**	**X**	**W**	**XW**
Strongly Agree	0	5	0	0	5	0	67	5	335	53	5	265	51	5	255
Agree	0	4	0	0	4	0	24	4	96	47	4	188	45	4	180
Neither agree nor Disagree	0	3	0	0	3	0	0	3	0	0	3	0	2	3	6
Disagree	7	2	14	0	2	0	2	2	4	0	2	0	0	2	0
Strongly Disagree	93	1	93	100	1	100	7	1	7	0	1	0	2	1	2
TOTAL	**100**		**107**	**100**		**100**	**100**		**442**	**100**		**453**	**100**		**443**
$\frac{\sum xw}{n}$			**1.07**			**1.00**			**4.42**			**4.53**			**4.43**
RANK			**IV**			**V**			**III**			**I**			**II**

It is inferred from the table that the weighted average was computed to assess the rank of safety issues. It is noted that the statement suffer from any skin disease, arthritics, hypertension, high BP & muscular pain placed I rank level of agreeability with average points 4.53, II place agreeability level was given to the statement medical leave and sick facility available in your workplace with average score 4.43, III rank is given to statement work during periods of menstruation with score of 4.42, **IV** place agreeability is on drinking water facility at work place with score 1.07, V rank is on Toilet facility in workplace with average score 1.00

8. SUGGESTION AND CONCLUSION

In a globalizing economy, it is construction workers who are constructing the new economy. They contribute in infrastructural development of India by building the roads and highways, the railway tracks and airports and ports, the IT cities, the call centre's and mega malls that are creating new forms of wealth today. It is they who are laying the cables for a rapidly expanding country-wide telecommunications network that connect the vast sub-continent and make India one country, to shorting the distance and supporting the business activity in order to upgrade the economic development. Yet these workers, who are creating the base of the new economy, lives in a time warp, trapped in low skilled, low paid, insecure working conditions. About one-third of these workers are women and children.

Hence, it is suggested and concluded that the practice of common working hour, follow of reliable wage system, care by employer on health related problems of women workers and implementation of social security measures by the government and medical facility must be ensured.

REFERENCES

1. R. Poongodi, Socio Economic Characteristics of Women Construction Workers in Tamil Nadu – Some Evidences, Volume 1, Issue: 4 September 2012
2. Rameshwari Pandya & Sarika Patel, Women workers problem in unorganized sector of India, New century publications, New Delhi, 2010,. P. 70.
3. Murali Manohar.K., (1983), Socio-economic Status of Indian Women, Seems Publications, Delhi, p.29.
4. Gangrade. K.D., Joseph A. Gathia, (1983), Women and Child Workers in the Unorganized Sector, Work ship Report, New Delhi, p.29.
5. Usha Rao. N.J., (1983), Women in a Developing Society, New Delhi, p.43.
6. Usha Talwar, (1984), Social Profile of Working women, publishing by Jain Brothers, Jodhpur, p.181.
7. Nirmala Banerjee, (1985) "Women Workers in the Unorganized Sector – The Calcutta Experience, Sangham Books Pvt. Limited, Hyderabad., p 98
8. Kiran Devendra, (1985), Status and Position of Women in India with Special Reference to Women in Contemporary India, Vikas Publishing House, New Delhi, Pp. 62-71.
9. Kamala Kanta Mohapatra , "Women workers in informal sector in India: understanding the occupational vulnerability" International Journal of Humanities and Social Science, November 2012, p.8.

10. Usha Talwar, (1984), Social Profile of Working women, publishing by Jain Brothers, Jodhpur, p.181.

11. Nirmala Banerjee, (1985) "Women Workers in the Unorganized Sector – The Calcutta Experience, Sangham Books Pvt. Limited, Hyderabad., p 98

12. Kiran Devendra, (1985), Status and Position of Women in India with Special Reference to Women in Contemporary India, Vikas Publishing House, New Delhi, Pp. 62-71.

13. Sapru, Sushma, (1991), Socio-Economic Status of Women-Problems and Perspectives, Ashish Publishing House, New Delhi.

14. Dhanalakshmi.S, (1998), "Women in the Informal Labour Market – A case study of Domestic Servants in Thiruvananthapuram city", M Phil. Dissertation, Kerala University.

15. Sen, Abhijit, (1988), 'A Note on Employment and Living Standards in the Unorganized Sector.' Social Scientist, Vol. 16, No. 2, Four Decades of Economic Development (Feb., pp. 50-59.

16. Unni, Jemmol, (1989), "Changes in Women Employment in Rural Areas 1961-81", Economic and Political Weekly, p. 23.

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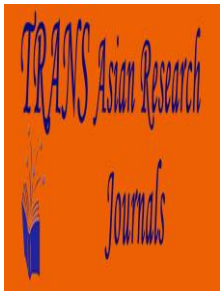

A STUDY ON BUYING BEHAVIOUR OF LG LAPTOPS BY MANAGEMENT AND ENGINEERING STUDENTS (A CASE STUDY OF HYDERABAD CITY)

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ABSTRACT

Nowadays, many businesses such as banks, insurance companies, and other service providers realize the importance of Customer Relationship Management (CRM) and its potential to help them acquire new customers retain existing ones and maximize their lifetime value through providing need based services in the changing economic scenario. At this point, close relationship with customers will require a strong coordination between IT and marketing departments to provide a long-term retention of selected customers/segmented customers. This paper deals with the role of customer Relationship Management in banking sector and the need for Customer Relationship Management to increase customer value and customer base by using some analytical methods in CRM applications. CRM is a sound business strategy to identify the bank's most profitable customers and prospects, and devotes time and attention to expanding account relationships with those customers through individualized marketing, repricing, discretionary decision making, and customized service – all delivered through the various sales channels that the bank uses. Customer relationship management is a broad approach for creating, maintaining and expanding customer relationships. CRM is the business strategy that aims to understand, anticipate, manages and personalizes the needs of an organization's current and potential customers. At the heart of a perfect strategy is the creation of mutual value for all parties involved in the business process. It is about creating a sustainable competitive advantage by being the best at understanding, communicating, and delivering and developing existing customer relationships in addition to creating and keeping new customers. So the concept of

product life cycle is giving way to the concept of customer life cycle focusing on the development of products and services that anticipate the future need of the existing customers and creating additional services that extend existing customer relationships beyond transactions.

KEYWORDS: *Customized services, Customer life cycle, customer satisfaction, client interaction.*

INTRODUCTION

Customers generally use banks for services such as savings and current accounts, mortgages, loans (e.g. personal, housing, auto, and educational), debit cards, credit cards, fund transfer, depository services, fixed deposits, investment advisory services etc. e.g. Mutual funds, ULIP, Insurance policies.

Before Internet era, customer largely selected their banks based on how convenient the location of bank's branches was to their homes or offices. With the Advent of new technologies in the business of bank, such as Internet banking and ATMs, now customers can freely chose any bank for their transactions. Thus the customer base of banks has increased, and so has the choices of customers for selecting the banks.

This is just the beginning of the story. Due to globalization new generations of private sector banks and many foreign banks have also entered the market and they have brought with them several useful and innovative products. Due to forced competition, public sector banks are also becoming more technology savvy and customer centric.

Thus, Non-traditional competition, market consolidation, new technology, and the proliferation of the Internet are changing the competitive landscape of the banking industry. Today' banking sector is characterized by following:

1. Multiple products (deposits, credit cards, insurance, investments and securities)
2. Multiple channels of distribution (call center, branch, Internet and kiosk)
3. Multiple customer groups (consumer, small business, and corporate)

Today, the customers have many expectations from bank such as

(I) Service at reduced cost

(ii) Service "Anytime Anywhere"

(iii) Personalized Service

With increased number of banks, products and services and practically nil switching costs, customers are easily switching banks whenever they find better services and products. Banks are finding it tough to get new customers and more importantly retain existing customers.

According to a research by Reichheld and Sasser in the Harvard Business Review, 5% increase in customer retention can increase profitability by 35% in banking business, 50% in insurance and brokerage, and 125% in the consumer credit card market. Therefore banks are now stressing on retaining customers and increasing market share.

WHAT DOES THE BANK NEED?

The banks now need to find out what to sell, whom to sell, when to sell, how to sell and how to be different to increase profitability. Banks need to differentiate themselves by adding value-added services, offerings and building long-term relationship with their customers through more customized products, enhanced value offerings, personalized services and increased accessibility. Banks also need to identify customers and products that would be more profitable and target customers with products that are most appropriate to their needs and serve the customers with greater cost efficiency.

Banks also need to find out the avenues for increased customer satisfaction, which leads to increased customer loyalty. This may be explained better from two initiatives bank took in the past:

1. Earlier what drove many bankers to invest in ATMs was the promise of reduced branch cost, since customers would use them instead of a branch to transact business. But what was discovered is that the financial impact of ATMs is a marginal increase in fee income substantially offset by the cost of significant increases in the number of customer transactions. The value proposition, however, was a significant increase in that intangible called customer satisfaction. The increase in customer satisfaction has translated to loyalty that resulted in higher customer retention and growing franchise value.
2. Bankers invested in Internet banking, believing that the Internet was a lower-cost delivery channel and a way to increase sales. Studies have now shown, however, that the primary value of offering Internet banking services lies in the increased retention of highly valued customer segments. Again customer satisfaction drives the value proposition.

Thus, banks need to retain existing customers with enhanced personalized services and products, which best suits their needs and satisfies them the most.

HOW CAN CRM HELP BANKS?

CRM primarily caters to all interactions with the customers or potential customers, across multiple touch points including the Internet, bank branch, call center, field organization and other distribution channels.

CRM can help banks in following ways:

1. **CAMPAIGN MANAGEMENT -** Banks need to identify customers, tailor made products and services to meet their needs and sell these products to them. CRM achieves this through Campaign Management by analyzing data from banks internal applications or by importing data from external applications to evaluate customer profitability and designing comprehensive customer profiles in terms of individual lifestyle preferences, income levels and other related criteria. Based on these profiles, banks can identify the most lucrative customers and customer segments, and execute targeted, personalized multi-channel marketing campaigns to reach these customers and maximize the lifetime value of those relationships.
2. **CUSTOMER INFORMATION CONSOLIDATION -** Instead of customer information being stored in product centric silos, (for e.g. separate databases of savings account & credit card customers), with CRM the information is stored in a customer centric manner covering

all the products of the bank. CRM integrates various channels to deliver a host of services to customers, while aiding the functioning of the bank.

3. **MARKETING ENCYCLOPEDIA -** Central repository for products, pricing and competitive information, as well as internal training material, sales presentations, proposal templates and marketing collateral.
4. **360-DEGREE VIEW OF COMPANY –** This means whoever the bank speaks to, irrespective of whether the communication is from sales, finance or support, the bank is aware of the interaction. Removal of inconsistencies of data makes the client interaction processes smooth and efficient, thus leading to enhanced customer satisfaction.
5. **PERSONALIZED SALES HOME PAGE –** CRM can provide a single view where Sales Mangers and agents can get all the most up-to-date information in one place, including opportunity, account, news, and expense report information. This would make sales decision fast and consistent.
6. **LEAD AND OPPORTUNITY MANAGEMENT -** These enable organizations to effectively manage leads and opportunities and track the leads through deal closure, the required follow-up and interaction with the prospects.
7. **ACTIVITY MANAGEMENT –** It helps managers to assign and track the activities of various members. Thus improved transparency leads to improved efficiency.
8. **CONTACT CENTER –** It enables customer service agent to provide uniform service across multiple channels such as phone, Internet, email, Fax.
9. **OPERATIONAL INEFFICIENCY REMOVAL –** CRM can help in Strategy Formulation to eliminate current operational inefficiencies. An effective CRM solution supports all channels of customer interaction including telephone, fax, e-mail, the online portals, wireless devices, ATMs, and face-to-face contacts with bank personnel. It also links these customer touch points to an operations center and connects the operations center with the relevant internal and external business partners.
10. **ENHANCED PRODUCTIVITY** – CRM can help in enhanced productivity of customers, partners and employees.
11. **CRM WITH BUSINESS INTELLIGENCE -** Banks need to analyze the performance of customer relationships, uncover trends in customer behavior, and understand the true business value of their customers. CRM with business intelligence allows banks to assess customer segments, which help them calculate the net present value (NPV) of a customer segment over a given period to derive customer lifetime value. Customers can be evaluated within a scoring framework. Combining the behavior key figure and frequency to monetary acquisition analysis with a marketing revenue quota can optimize acquisition costs and cut the number of inefficient activities. With such knowledge, banks can efficiently allocate resources to the most profitable customers and reengineer the unprofitable ones. Data warehousing solutions have been implemented in Citibank, ReserveBank of India, and State Bank of India, IDBI, ICICI, MaxTouch, ACC, National Stock Exchange and PepsiCo. And Business Intelligence players hope many more will follow suit.

A WORD OF CAUTION!

Customers may not want what they get: A CRM system apart from improving front office operations and customer servicing also helps in coping with many services that do not need manual intervention. These are serviced by channels like IVR, Internet and ATM. Customers can get account information, information on credit balance, issue instructions for drafts or even transact through these. At the same time there may be a few customers who still prefer the traditional methods of banking. Banks need to be flexible enough to continue to extend the "personal touch" that such customers prefer.

MAKE CHANGES INTERNALLY BEFORE GOING FOR CRM: Many banks have spent a lot of money on CRM, finding it easier to buy CRM technology than to make the major internal changes necessary to really make CRM work for them. Unfortunately for these banks, the software has often failed to deliver goods.

CRM IS BUSINESS TRANSFORMATION: Too often banks have focused on the wrong areas of CRM. CRM is really about business transformation—changing the business from services-centric to customer-centric.

HAVE DEFINED OBJECTIVES: Many CRM implementations have been approved without examining aspects like profitability, turnover etc. CRM implementations should have well defined objectives, such as ROI, Sales etc.

CONSIDER COMPLETE LIFE CYCLE COSTS WHILE BUDGETING: Measurements of profit are often constructed to embrace only the initial cost of sale. This is of little use if the ongoing cost of servicing a customer outweigh the margin of profit that customer is generating. It is critical that banks have recognized and embraced the importance of the trend towards customer development, and that this is reflected in actual marketing budget allocation.

CRM IMPLEMENTATION IN BANKS IN INDIA

According to Nasscom report "Strategic Review 2004", Indian CRM market was estimated at US $ 14 million and is forecast to grow to US $ 26 million in 2005. Banking and financial services segment has a high growth potential and accounts for 22 percent of CRM license revenue. There are many banks such as ICICI Bank, HDFC Bank and Citibank, which are using CRM products.

Disciplined work along four dimensions can significantly improve results from CRM initiatives:

CUSTOMER SEGMENTATION – Do intensive data analysis and value-based segmentation to highlight the value of different customer segments and the underlying drivers of that value.

DESIGN PROGRAMS - Design innovative programs focusing on customer acquisition, cross-sell, retention, loyalty, and customer service, based on customer insights, experience and industry best practices.

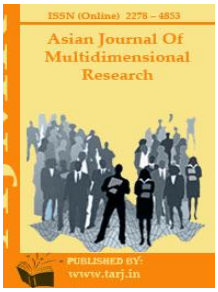
DESIGN PROCESSES - Design internal and external processes to support and sustain successful programs.

GOOD DECISIONS BASED ON RIGHT INFORMATION - The information from a CRM program can often guide better operational business decisions at many levels of the organization. Gather customer information at a broader set of touch-points, perform in-depth analysis, and make critical information available to relevant stakeholders.

The retail banking industry is undergoing revolutionary change. There are many players and competition is tough. Customer Relationship Management is an important weapon in this fight. The ability to mass customize the customer experience and refresh the value proposition is necessary to retain the right to do business with the customer. Consolidation and technology would become must for sustenance and growth. The pressure will be on banks to integrate data from every channel and know what customers say so that the banks deliver what they want. As the competitions increase, banks will require the robust CRM functionalities in order to manage their most valued asset – their customers.

REFERENCES

1. "Customer Relationship Management in Banking Sector", Effulgence Vol 4 No 1 Jan- June (2005) page 21-25.
2. "Emerging Trends in Customer Relationship Management in Banking Sector", Management Edge Vol 1 No 2 Jan-June (2005) page 18-22.
3. Stanly A. Brown, Customer Relationship Management, TMH., New Delhi, 2008.
4. Prahlad C.K., Krishnan, MS, The New Age of Innovation, TMH, New Delhi,2008
5. Ankita , "The India That Will Be", Indian Management (AIMA),New Delhi, May, 2008.
6. www.crmcommunity.com
7. www.destinationcrm.com



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WOMEN ENTREPRENEURS IN INDIA – PROBLEMS AND SUGGESTIONS

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ABSTRACT

Women entrepreneurs may be defined as the women who commence, classify and operate a business enterprise. Women enterprises are playing an important role for the sustained economic development and social progress. Entrepreneurship is a state of mind which every woman has in her but in India their entrepreneurial ability has not been properly broached due to lower status of women in society. With the change in environment, now people are accepting their leading role in society. With the increase in dependence on service sector now many entrepreneurial opportunities are open for them. Like a male, a women entrepreneur has many functions to perform. Increased educational status of women and desires for better living has lead to change in their life style. She has competed with man in every walk of life. Women leaders are assured of taking risks. They succeed in facing cut- throat competition with their hard work and dedication. The Government of India has also initiated several policies and programmes for development of women entrepreneurship in India. This paper discusses about problems faced by women entrepreneurs and makes some suggestions to remove them.

KEYWORDS: *Women entrepreneurs, Economic development, Skill development.*

INTRODUCTION

Entrepreneurship refers to an act of transforming innovations into economic goods. Entrepreneurs create new jobs by inventing new products and services and thus lead to economic development of society. The countries which have higher percentage of entrepreneurs have developed much faster as compared to those which have lesser. A large number of women around the world have set up and managed their own businesses. They have been successful in creating jobs for themselves as well as for others. The Government of India ahs defined a women entrepreneurship as an enterprise owned and controlled by women having a minimum financial interest of 51% of the capital and at least 51% of employment generated in the enterprise to women. In India women constitute around 48% of population but their participation in economic activities is only 34%. The gender empowerment measures, estimates the participation of women

in country's economic and political activities, rank India as 110th of 166 nations. Now role of women is not confined as housewives. Some of the factors responsible for this are better education, changing socio cultural values and need for supplementary income. Women are faced with some obstacles that needed to be overcome.

NEED FOR WOMEN ENTREPRENEURESHIP

Women have established their talents as successful entrepreneurs. Rural areas where women are in vicious circle of poverty, social traditions and customs this development of women have not yet taken place. But they have more dominant predictors of success such as work experience and years of self employment. They have various characteristics such as integrating abilities, sharp communication skills, tolerance of ambiguity, innovativeness, self motivation. They view business as not a profit generating entity but as cooperative network of relationships. Thus there is need for investment in women entrepreneurship as it is an investment in economic independence as well as well being of women.

BUSINESS ASSOCIATIONS AND WOMEN ENTREPRENEURSHIP

Some business associations supplemented by NGOs are playing an important role for promoting women entrepreneurship:

1. BUSINESS ASSOCIATIONS

- Entrepreneurship development, Perm business women's club, Novgorod women's parliament of Russia
- Business and professional women, National Association of women business owners (NAWBO) of US
- Women Entrepreneurs Associations of Nepal(WEAN)

2. WOMEN ENTREPRENEUR ASSOCIATION IN INDIA

- Federation of Indian Women Entrepreneurs (FIWE)
- Self Employed Women Association (SEWA)
- Tie Stree Shakti(TSS)
- Women empowerment corporation
- Women Entrepreneurs Promotion Association (WEPA)

PROBLEMS OF WOMEN ENTREPRENEURES IN INDIA

The problems faced by women entrepreneurs are different from male entrepreneurs in both dimensions and magnitudes. These problems act as a hurdle and prevent them in realizing their potentials. Some of the problems faced by them are :

(1) FAMILY PROBLEMS: Women are supposed to fulfill their family responsibilities along with managing the business. By spending long hours in business it is not possible for them to fulfill the demands of their family members such as paying attention to husband, time for children education. In such situation, it is difficult to run enterprise successfully.

(2) SOCIAL PROBLEMS: Women are always seen with suspicious eyes. Traditions and customs prevailing in Indian societies are major problems for them. Castes and religions are responsible for dominating their roles as women entrepreneurs.

(3) SHORTAGE OF RAW MATERIAL: Women entrepreneurs face major problems in getting required raw materials and other inputs. Non availability of adequate raw material is major cause of failure of enterprises run by women entrepreneurs. For example: In 1971 women corporations engaged in basket making were failed due to inadequate forest based raw materials.

(4) FINANCIAL PROBLEMS: Finance is life blood of every business. Women entrepreneurs face o lot of problems in raising finance. They perhaps do not have adequate knowledge about financial institutions providing finance and bankers, financial institutions are not providing adequate finance to them because of less credit worthiness and more chances of failure of their business.

(5) MARKETING PROBLEMS: Women entrepreneurs face marketing challenges from substitute products, delayed payment and liberal credit terms. They do not have proper access to market and have to depend on middlemen who exploit them by adding their own profit margin.

(6) LIMITED MOBILITY: Women mobility is limited in society. They are looked upon with suspicious eyes if they stay out in the night for business purpose. Sometimes women also feel uncomfortable in dealing with men.

(7) CUT- THROAT COMPETITION: Women entrepreneurs have to face cut throat competition from organized sector as they usually employ low technology, have imperfect organizational set up.

(8) HIGH COST OF PRODUCTION: Use of obsolete technology and inefficiency of management leads to high cost of production. High cost of production is a major problem in development and expansion of women's enterprises. These enterprises need to expand their production capacity, use latest technology to survive in long run.

(9) RISK BEARING CAPACITY: Women being suppressed by protected environment more over they are weak, shy by nature. They are not able to bear the risk essential for running the business.

(10) LEGAL FORMALITIES: For running an enterprise fulfilling the legal formalities is a challenging task because of procedural delays for licenses, electricity and water.

SUGGESTIONS TO OVERCOME THE PROBLEMS

To overcome the problems faced by women entrepreneurs there is need to change attitudes and mindsets of people in society in addition to increasing opportunities for them. Some of suggestive measures are:

(1)TRAINING FROM INITIAL STAGES: The basic of entrepreneurship should be imparted to them right from their childhood. For this curriculum should be designed very carefully that will provide them with practical implications of an enterprise.

(2) ADOPTING STURUCTURED SKILL TRAINING PACKAGE: It will lead to development of women entrepreneurship. Structured skill training programmes provide them

assistance to achieve their goals. Through this they can be provided training on information technology to take advantage of new technology and improve their work.

(**3) ADVISORY SERVICES:** The well established and successful women entrepreneurs can provide advice to upcoming women enterprises. This will help them by making them more confident and make them to participate actively.

(4) PROPER INFRASTRUCTURAL FACILITIES: Government should take initiatives to provide for proper allocation of plots, sheds and other facilities. Sound infrastructure is basic of sound organization.

(5)SKILL DEVELOPMENT PROGRAMMES: For developing managerial capabilities, leadership marketing, financial and other skills proper skill development programmes are to be initiated in industrial training institutes. Training- cum- production workshops should be arranged to make them understand production processes.

(6) AWARENESS PROGRAMMES: Awareness programmes should be conducted on large scale so as to make women entrepreneurs aware about how to conduct business. These programmes should be aimed to inspire encourage and cooperate women entrepreneurs.

(7) GOVERNMENT AND NON GOVERNMENT SUPPORT: Women entrepreneurs need support from government as well as from non government agencies. Local, National, International trade fairs, seminars, conferences should be organized from time to time to facilitate interaction with other women entrepreneurs.

CONCLUSION

Encouraging women entrepreneurship is a very important way to utilize them for economic development. Today women participation is increasing at considerable rate. Initiatives are being taken at the economy as well as global level. To remove the obstacles faced by women entrepreneurs there is need for multidimensional approach that is from government as well as from financial institutions. This will not only lead to economic development but also will change status of women in society.

REFERENCES

(1)Arora, R and Sood, S.K.(2005)- fundamentals of entrepreneurship and small business.

(2) DR. Mohd Ashraf Ali(2012)- Women entrepreneurship in globalized era- issues and challenges

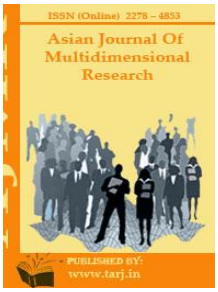
(3)Singh Kamala (1992), Women entrepreneurs, Ashish publications house, New Delhi

(4) Baporikar,N (2007) Entrepreneurship development and project development- Himalaya publishing house

(5) Robinson S. (2001) Journal of developmental entrepreneurship, vol. 6(2)

(6) Gordon E $ Natarajan K (2007) Entrepreneurship development- Himalaya publishing house second revised edition

(7) Gurendrea Nath Bhardwaj, Swati Parashar, Dr. Babita Pandey, Puspamita sahu- Women entrepreneurship in India: opportunities and challenges.



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ROLE OF MICROFINANCE IN TRIBAL DEVELOPMENT: A REVIEW OF LITERATURE

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ABSTRACT

The present study is an attempt by the authors to understand various gap areas of microfinance for the future research in the said subject. For this more than 41 reviews were made and those are pertinent to the topic of research are included in this paper. Most of the studies were done on microfinance, however no substantial studies have been made on the tribal development.

KEYWORDS: *Microfinance, SHG, Poverty & Empowerment.*

INTRODUCTION

Agriculture used to be the mainstay of the economy of India. For the greater part of the 20th century, it was agriculture whose contribution to the GDP of the country was highest. Same was the case with Odisha. All that has changed. The Economic Survey Report of Odisha 2012-13 shows that the share of agriculture in Odisha's GDP is on a decline and it is hovering around 17% at present. The highest contribution to the GDP of Odisha, 58%, is by the Services sector. This goes to prove that 'Land', which is the main resource for agriculture, is no more the key to economic stability. In other words, there is 'Life beyond Land' in the 21st century. Land is, in a way, a depleting source of asset. It is so because while the supply of land remains unaltered, the size of population is constantly on the rise. Therefore land cannot be allotted to each inhabitant of the tribal communities or to the economically vulnerables for cultivation, so that his/her economic conditions develop. What can definitely be provided instead is 'Finance' – by the formal institutions at affordable costs. And when it is the economically vulnerable person, giving finance in the hands of a Group of such persons is anydayadvisable than giving it in the hands of an Individual. Because, in that case, no single person can deploy such finance in the way s/he pleases. Collective intelligence is anyday less susceptible to failure than the intelligence of an

individual.This the idea on which microfinance by way of group lending, through the SHGs, is based.

The target of financial intermediation in the group lending method through SHG-Bankslinkageis socio-economically deprived segments of the population of India who live in dismal poverty. The aim of microfinance is reduction of poverty. The poor people, in a country like India, live mostly in its rural areas. They are not necessarily always people of scheduled tribe communities. Quite a few empirical studies have been undertaken in India to analyze the role of microfinance in the life of the rural poor, which includes rural inhabitants belonging to scheduled castes, scheduled tribes and general category. Therefore not very many studies are found focusing on the role of microfinance specifically in the life of people belonging to scheduled tribes only. The target group of suchstudies have been, by and large, the rural poor. And 'rural poor' includes people of scheduled tribes among others. Likewise, 'rural areas' in those studies cover the hilly and forest tracts,usually inhabited by various tribal communities.

K.G. Karmakar[1](1999) in his work "Rural credit and Self Helf Groups: Microfinance needs and Concepts in India", examines the existing credit delivery system in India with special reference to the credit needs of the rural poor. He studies the importance of the micro-credit needs for tribal women in rural areas and the micro enterprises in the non-farm sector in Odisha. The study focuses on the availability, credit requirements and the problems faced by the tribal people in availing of it. He feels that the setting up of micro-enterprises particularly in the non- farm sector would go a long way in reducing poverty in rural areas. According to him, the micro-credit approach through SHGs would be the only best mechanism to deliver credit to the rural poor.

Puhazhendhi and Satyasai[2] (2000) assessed the living conditions of SHG members after they were linked to banks. Their study covered 560 households in 223 SHGs encompassing 11 states. These states spanned over central, southern, northern, western and eastern regions of the country. The findings noted that the impact of the post-linkage period was reflected in an increase of self-worth, better communication ability and increased awareness of social evils.

N.P.Y. Raman[3] (2000) in his work "Self Help Groups : The Kerala Experiments" shares his research experience with the Kerala-based Primary Agricultural Cooperative Societies(PACS) extending credit to SHGs. PACS of Kerala had provided financial assistance to both SHGs and others(that is, individuals not attached to SHGs) for the same purpose. Recoveries of those loans from the SHGs was far better than from those who were not members of any SHG. He advocated in his study that the SHG mode of formal institutional finance to the rural poor which is backed by government interest subsidy, is playing a role in reducing poverty. The SHG route of funding, he opines, has proved beneficial to the PACS too, as incidence of non performingassets(un-recovered loans) has declined.

K.R. Lakshmikandan[4] (2000) in his study titled "Self Help Groups in the life of Rural Poor – A Philibhit case study" covered 74 SHGs, out of which 57 were all-women groups and 17 all-men ones. Membership of all these Groups consisted of small land-holders and agricultural labourers. Only 11 of them were disbursed loans by Bank of Baroda, the Lead Bank of the district, amounting to a lowly Rs 20,000/- to Rs 30,000/-. The useful ways in which those SHGs had deployed the funds, made him observe that avenues for entrepreneurial development are very much a reality in the far flung rural regions, if and when SHGs are provided the much needed capital support by financial institutions by way of loans.

Dadhich C.L.[5] (2001)in his work on "Microfinance: a panacea for poverty alleviation" analyzed the performance of SHGs formed by Oriental Bank of Commerce for micro lending and underlined that this project of the bank has established beyond an iota of doubt that meticulously designed and effectively implemented microfinance can be a means not only of alleviation of poverty and empowerment of women but also a viable policy measure for rural development. There is, however, always a scope for further refinement of this program. He is of the opinion that the increasingly proactive role-play of Reserve Bank of India, the central banking authority of the country, in this area will surely facilitate further expansion of microfinance in India in the days to come.

Sabyasachi Das[6] (2003) in his paper entitled "Self Help Groups and Micro Credit : Synergy Integration" opines that the phenomenal growth of SHGs in the recent years indicates that the weaker sections of the society are capable to sharpen their micro-entrepreneurial skills with the help of their own savings and that additional timely bank credit. Micro credit is an alternative source of credit for the poor who, earlier, were considered non-bankable. The system not only provides credit, the single most crucial input for development, to the poorer segments of the society but also aims for their capacity building. The system has also proved that Group Lending has a distinct advantage in the form of excellent recovery rate and improvement in income level. He concludes stating that micro credit-SHG integration could be the only way forward for rural development vis-à-vis poverty alleviation.

Archana Sinha[7] (2004) in her article "Microfinance for Women's Empowerment: A perspective" puts forward a debate on microcredit for discerning policy makers, researchers and development practitioners. She says that understanding the viability of microfinance requires a comprehensive analysis from the right perspective. She continues to say that microfinance can contribute to solving the problem of inadequate housing and urban services as an integral part of poverty alleviation programs. According to her, the challenge lies in finding the level of flexibility in the credit instrument that could make it match the multiple credit requirements of the low income borrowers without imposing unbearably high cost of monitoring its end use upon the lenders. She is of the view that a promising solution is to provide multiple purpose loans or 'composite credit' for income generation, housing improvement and consumption support.

Mrs M. Selvachandra[8] (2004) in her paper "Microfinance through Self Help Groups" concludes that banking through SHGs and the existing decentralized formal banking network, allow for a large scale outreach of microfinance services to the poor in India. These banking services, she observes, are made available at low cost, easy accessibility and flexibility to meet the needs of the poor. She avers that the proper promotion of the scheme will be a big help to drive away poverty from the country. Thus the SHG-Bank linkage is a boon to the poor and at the same time a via media for the banks to expand their outreach to a large number of beneficiaries.

K. Manoharan Nair and Girija[9] (2005) in their article "Microfinance – The New Development Paradigm for Poverty Eradication and Women Empowerment" state that experience has shown that many of the poverty alleviation programs through organized credit channels in the past have not achieved the required success. Hence, they are of the view, to bridge the gap between the demand and supply of funds in the lower rungs of rural economy, the microfinance schemes of the National Bank for Agriculture and Rural Development (NABARD) have made a smooth foray into the domain of micro credit in eradicating poverty and empowering women to manage their own enterprises.

Bibhudatta Nayak[10](2006), concludes in his study entitled "Socio Economic Change in KBK Region Through SHG-Bank linkage Programme" saying "SHG-Bank linkage programmes empowered the rural women with dignity, identification, recognition and respect. They were able to save, borrow, invest and earn. The male members and other members of the family changed their attitudes towards women folk with the SHG movement taking off in rural areas. The rural poor who remained always in the borrowing domain could find themselves with surplus and on lending side probably because of the magic of microfinance and the group approach under the SHG-Bank linkage programme. Credit became easily accessible to the members without the rampage of money lenders and hassles at banks. This created a sense of ability and willingness-to-perform among women."

KalavatiKamble and Gangadhar B. Sonar[11](2006) in their work "The Role of SHGs in Women Empowerment: A Study on Selected SHGsPromoted by Voluntary Organizations in Gulburga District of Karnataka" observe that the socio economic conditions of the SHG-women are increasing to a significant level irrespective of their different backgrounds. Earlier they were confined to home and not exposed to the society and were a part of the traditional system. Now, the authors find, they can come out and approach the government machinery, conduct meetings, put their signature on deliberations made and, most importantly, have a good amount of money in their hands. They are of the view that SHGs are mostly focused on financial aspects rather than social ones and that this trend is pronounced in the SHGs promoted under government-led programs. A clearly emerging trend is, they aver, SHGs are increasingly attracting the younger generation – the generation that not only needs social and economic empowerment but also assertive capacity, freedom from atrocities and a new self image to claim themselves as fully human.

N.V. Namboodiri[12](2006) in his work entitled "Financial Intermediation in the Dynamics of Rural Economy" espouses the role of financial intermediation of SHGs in rural economy and asserts "The SHGs shall no more be seen as only a cost effective delivery channel for the banks to reach the rural poor. Instead, it is necessary to acknowledge their ability to mobilize resources, undertake income-generating activities both individually and collectively, control over economic resources, build linkages with other organizations for their financial and other services. What is intended here is to demonstrate the decisive role played by such financial intermediaries in achieving upliftment of the poorest of the poor in the rural areas through group-based approach. The role of intermediary is very critical in the sense that majority of the rural folks have hardly any asset base and therefore undertaking any viable economic economic activity at the individual level is very remote. Under such conditions, the first and foremost step of an MFI is in identifying appropriate economic activities at the group level which suit the local conditions and are feasible with the target group".

Navin Bhatia and Anju Bhatia[13] (2006) in their work entitled "Financial Institutions as Change Agents for Rural Development" examined the political potential of micro credit delivery in the Group mode and observed that "The political potential of group finance is also being realized now. SHGs are solicited in order to facilitate the participation of women in local political life; the use of SHGs as voting banks was a source of controversy during the weeks preceding the national elections of 2004. In the last local elections organized in Tamilnadu in 2001, as many as 2,612 women members of SHGs were elected. While on the one hand, this has dangers of Groups falling into the hands of political parties, on the other hand, it may also lead to a strengthening of the democratic process in the country".

Navin Bhatia and Anju Bhatia[13] (2006), in their same study visualize a bright future for rural development in India in the Group-financing method when they state "Thus, the potentialities in financing to groups in rural areas go far beyond economic considerations. Group financing has the potential to unleash multi-dimensional change in the lives of people. The financial system is destined to perform the functions of a change agent in this task. However, in doing so, while formal financial institutions may have to change their methodologies to cater to this need, MFIs would need a suitable enabling environment to function effectively. There may have to be a convergence between the formal financial institutions and MFIs. The specific needs of rural people and the inadequacies of the institutions and processes that are available may also give rise to new institutions or models in the coming years".

Shibalal Meher[14] (2007) in his study entitled "Impact of Micro-Finance on Poverty: A Study of Self-Help Groups in Orissa" states "The findings from the present study show that SHGs have the potential to tackle poverty and can be an important weapon for poverty alleviation in Orissa. The study shows that there is increase in income and assets and reduction in the level of poverty as a result of intervention through SHG based microfinance. The net impact of borrowing on income is positive not only in case of all the borrowers but also in case of the poorest borrowers, showing the better outreach of the programme. However, certain shortcomings are observed. Though there is positive impact on poverty, the process of empowerment is poor. Since these are women groups, the lower empowerment can lead to the failure of the programme in the long run.

M.A. Lokhande[15] (2008) in his work "Socio-Economic impact of Microfinancing Through Self Help Groups in Marathwada Region" observes that microfinance for micro enterprises can be one of the most effective poverty reducing instrument. The need of the hour is to promote more and more microfinance institutions and strengthen them, so that they provide more service to the needy poor people. These tiny business activities can be started mostly based on local resources. In order to give impetus to micro entrepreneurial activities by poor people in rural as well as urban areas, microfinance institutions should be promoted to provide adequate, regular microcredit to the needy entrepreneurs. He is of the conviction that microfinance programs is the most promising strategic weapon for attacking poverty by way of providing development funds for the neglected groups.

Sukhbir Singh[16] (2008) in his article "SHG-Bank Linkage Programme: Progress and Prospects" states that the involvement in the Group significantly contributed in improving the self-confidence of the members. The feeling of self-worth and communication with others improved after association with SHGs. The members were relatively more assertive in confronting social evils and problem situation. As a result, there was a fall in the incidence of family violence. There has been considerable gains on the socio-economic front.

H.R. Dave[17] (2008) observes in his article "SHGs and Savings Mobilizations" that what makes the SHG-bank linkage programme design unique is its heavy emphasis and reliance on mobilization of savings. Members have to save a fixed amount regularly. From the demand side, the savings pooled give the group the required strength to leverage and negotiate higher resources from the banking system in the form of loans.

N. Srinivasan[18] (2008)notes in his study entitled "Sustainability of SHGs" that as a financial services delivery model, the Self Helf Group approach is unique; it has emerged as a clearly superior model compared to the Grameen bank or MFI models. By emphasizing savings before

credit, it takes care of both the legs of basic financial services. People's participation is fully enable groups to access loans as also keeps their savings safely.

M. Ramakrishnayya[19](2008), the founder chairman of NABARD, records his optimism in his 'Foreward' to "Microfinance in India" saying "Microfinance in the form of bank SHG linkage model has been able to inspire hope in the lives of thousands of rural people, women in particular, and also enable them to contribute to their families' well-being, through their savings and enterprise. For banks, it is a business opportunity and for bank officials, it is an opportunity to extend their rural clientele without much risk, as the recovery levels exceed 95 per cent. The SHG members of today could turn out to be clients for several financial products over the years !".

Debadutta Kumar Panda[20](2009) in his work "Impact of Microfinance on the Rural Households: Empirical Evidence from a Coastal District of Orissa" records his findings stating "The microfinance intervention in coastal regions of Orissa was found positively impacting the rural households in their income, assets creation and consumption pattern. There was an increase in monthly income(12.81 per cent) and monthly expenditure (2.09 per cent in food, 113.76 per cent in entertainment, 22.80 per cent in education, 3.97 per cent in productive assets and 40.32 per cent in social obligations) due to microfinance intervention. The increase in the monthly household income was the highest for village traders, followed by farmers, handicraft artisans and rural entrepreneurs respectively. The treatment households had a greater increase in their expenditure on entertainments. The income and expenditure patterns had registered only a small change, and the reasons might be that the period of microfinance intervention was less than 24 months (17.57 months), and small size of the loan (Rs 20,050) as the microfinance programmes yield optimum impact after having intervened for some time which could be of 4 to 5 years. The increase in productive assets was also less (3.97 per cent) which might be due to small loan size".

REFERENCES

1. Karmakar, K.G., "Rural Credit and Self-Help Groups. Microfinance needs and concepts in India" , Sage Publications, New Delhi, 1999, pp 137-174
2. Puhazhendhi, V. and Satyasai, K.J.S., "Microfinance for Rural People: An Impact Evaluation", National Bank for Agriculture and Rural Development, Mumbai, 2000
3. Raman, N.P.Y., "Self Help Groups – Kerala Experiments", NCKC Bulletin, Vol. XXXII, No. 586, December 2000
4. Lakshmikandan, K.R., "Self Help Group in the life of Rural Poor: A Philibhit Case Study", Women's Link, April-June 2000, pp 9-14
5. Dadhich, C.L., "Microfinance: A Panacea for Poverty Alleviation", Indian Journal of Agricultural Economics, Vol. 56, No.3, July-September 2001, pp 420-425
6. Das, Sabyasachi, "Self Help Groups and Micro-credit: Synergy Integration", Kurukshetra, August 2003, pp 23-30
7. Sinha, Archana, "Microfinance for Women Empowerment – A Perspective", Kurukshetra, Vol. 52, No. 6, April 2004, pp 31-38

8. Selvachandra, Mrs, M., "Microfinance through Self Help Groups", Kisan World, Vol.31, No.11, December 2004, pp 23-34

9. Nair Manoharan K. and Girija, "Microfinance: The New Development Paradigm for Poverty Eradication and Women Empowerment", Kuruksetra, Vol. 53, No.6, April 2005, pp 18-30

10. Nayak, Bibhudatta, Rural Development and Social Change, Discovery Publishing House, New Delhi, 2006, pp 373-392

11. Kamble, H. Kalavati and Sonar, Gangadhar B., "The Role of SHGs in Women Empowerment: A Study on Selected SHGs Promoted by Voluntary Organizations in Gulbarga District of Karnataka", Journal of Global Economy, Vol. 12, No.3, October 2006, pp 216-221

12. Namboodiri, N.V., "Financial Intermediation in the Dynamics of Rural Economy", Rural Development and Social Change, Discovery Publishing House, New Delhi, 2006, pp 349-359

13. Bhatia Navin and Bhatia Anju, "Financial Institutions as Change Agents for Rural Development", Rural Development and Social Change, Discovery Publishing House, New Delhi, 2006 , pp 337-348

14. Meher, Shibalal, "Impact of Micro-Finance on Poverty: A Study of Self-Help Groups in Orissa", Journal of Rural Development, Vol. 26, No.3, July-September 2007, pp 315-333

15. Lokhande, M.A., "Socio-Economic impact of Microfinancing through Self Help Groups in Marathwada Region", The Indian Journal of Commerce, Vol. 61, No. 4, October-December 2008, pp 151-164

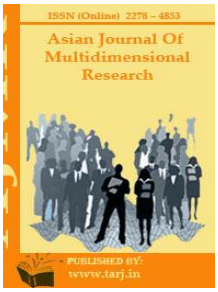
16. Singh, Sukhbir, "SHG-Bank Linkage Programme: Progress and Prospects", Microfinance in India, SAGE Publications India Pvt Ltd., New Delhi, 2008, pp 113-123

17. Dave, H.R., "SHGs and Savings Mobilizations", Microfinance in India, SAGE Publications India Pvt Ltd., New Delhi, 2008, pp 125-134

18. Srinivasan, N., "Sustainability of SHGs", Microfinance in India, SAGE Publications India Pvt Ltd., New Delhi, 2008, pp 176-187

19. Ramakrishnayya, M., Foreward to Microfinance in India, SAGE Publications India Pvt Ltd., 2008, pp 15-16

20. Panda, Debadutta Kumar, "Impact of Microfinance on the Rural Households: Empirical Evidence from a Coastal District of Orissaaa", Metamorphosis, Vol.8, No. 2, July-December 2009, pp 48-60



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THE ROLE AND IMPACT OF FDI IN DEVELOPMENT OF INDIAN EDUCATION SECTOR

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ABSTRACT

In India, education is the key to the task of nation-building. It is also a well-accepted fact that providing the right knowledge and skills to the youth can ensure the overall national progress and economic growth. The Indian education system recognizes the role of education in instilling the values of secularism, egalitarianism, respect for democratic traditions and civil liberties and quest for justice. The ongoing demand to strengthen the Indian education sector has opened up many avenues for people of India as well as non-residents of India (NRI) to invest in education sector. Mumbai, Nov. 2013: India, which has the third largest higher education system in the world in terms of enrolments, after China and the US, needs more FDI to meet its target of doubling the Gross Enrolment Ratio (GER) by 2020, a global consultancy firm has said in its report. The private sector's role in the higher education sector has been growing at a rapid pace over the last decade and needs to further expand at an accelerated rate in order to achieve the GER target, Deloitte Touche Tohmatsu India said in a recent report titled 'Indian Higher Education Sector: Opportunities aplenty, Growth unlimited. It says higher education is the one of the largest opportunity in the Indian education sector and it is important for foreign direct investment (FDI) to flow in this sector in order to transform Indian higher education institutions into the world's top league. Success in leveraging knowledge and innovation that could contribute to hi-tech manufacturing and high value-added services is only possible with a sound infrastructure of higher education. As per projections, the sector is expected to register a CAGR of 12% from 2008 to reach a size of $31.47 billion, the report says. With the estimated number of students at 16 millions enrolled in the academic year 2010-11 in the formal system, consisting of regular universities and colleges and excluding the enrollment in open universities and distance learning, the Indian higher education system stands only third in the world after US and China. India is also believed to have the largest higher education systems in the world in terms of

number of institutes. The university and higher education system comprises 610 universities and in addition, there are 33,023 colleges. An estimated $13 billion is spent outside the country. The government has set an aggressive target of doubling the GER (gross enrollment ratio) in higher education from the existing 15% to 30% by 2020. To meet such a target, huge investment will be required in terms of capital and operating expenditure which the government alone will not be able to provide. Thus the role of private sector in higher education has significantly increased in the last decade. However due to various impediments the amount of FDI attracted by this sector since 2000 is dismally low at just $ 400 million. This paper quantifies the impact of FDI in Indian education sector. It aims to gain an insight into current scenario which implies need to have more FDI to achieve GER target. The results hold that increase in FDI will have significant relationship with increase in employment & improvement in infrastructure.

KEYWORDS: *Education System, FDI, Gross Enrolment Ratio (GER), Compound Annual Growth Rate (CAGR), Egalitarianism.*

INTRODUCTION

In India a higher education qualification at degree level takes a minimum of three years to complete, more typically four. It will have a theoretical groundwork, it will be at a level which would qualify someone to work in a professional field and it will usually be trained in an environment which also includes advanced research activity. Shortly, Higher education mainly and generally means university level education. It offers a number of qualifications ranging from Higher National Diplomas and Foundation Degrees to Honors Degrees and as further step, Postgraduate programs such as Masters Degrees and Doctorates. These are recognized throughout the world as representing specialist expertise supported by a wide range of skills that employers find very useful.

HIGHER EDUCATION SYSTEM IN INDIA

Three main key determinants of quality in higher education are the adequate availability of quality faculty, optimum and adequate infrastructure and resources and availability of third party quality assurance system. It has been observed that while majority of students in higher education go to universities and colleges which come under the state system, they lack adequate resources in terms of manpower and infrastructure. While state governments are striving to address these issues, the Central government has decided to significantly support the states through an ambitious centrally sponsored scheme, namely Rashtriya Uchchtar Shiksha Abhiyan (RUSA). This is in synch with the objectives of the Planning Commission as stated in the 12th Five Year Plan—of making the Indian higher education system globally competitive and strong by focusing on state higher education system.

A sound higher education sector plays an important role in economic growth and development of a nation. Higher education, in terms of its relevance and importance, enjoys a significant position in the education system as it equips people with appropriate knowledge and skills to be gainfully employed. India has one of the largest systems of higher education in the world offering facility of education and training in almost all aspects of human creativity and intellectual endeavour. In the context of current demographic structure of India where the majority of population is below the age of 25 years, the role of higher education is critical.

NUMBER OF HIGHER EDUCATION INSTITUTIONS

Higher education in India has witnessed an impressive growth over the years. The number of higher educational institutions (HEIs) has increased from about 30 universities and 695 colleges in 1950-51 to about 700 universities (as of 2012-13) and 35,000 colleges (as of 2011-12) as per a recent UGC report1. With an annual enrolment of above 25 million (including enrolment under Open and Distance Learning system), India is today ranked as the third largest higher education system in the world after US and China.

GROWTH IN ENROLLMENT BY TYPE OF INSTITUTIONS

Prepared by : DrEducation.com

Category	2007-2008	2011-2012	Increase	Growth Rate (%)
Central Institutions				
Degree Awarding Institutions	75	138	63	13.0
Colleges	58	69	11	3.5
Diploma Institutions	14	24	10	11.4
Sub Total	147	231	84	9.5
State Institutions				
Degree Awarding Institutions	253	316	63	4.5
Colleges	9,500	13,024	3,524	6.5
Diploma Institutions	2,151	3,207	1,056	8.3
Sub Total	11,904	16,547	4,643	6.8
Private Unaided Institutions				
Degree Awarding Institutions	80	191	111	19.0
Colleges	13,706	19,930	6,224	7.8
Diploma Institutions	7,220	9,541	2,321	5.7
Sub Total	21,006	29,662	8,656	7.2
Total	**33,057**	**46,446**	**13,383**	**7.0**

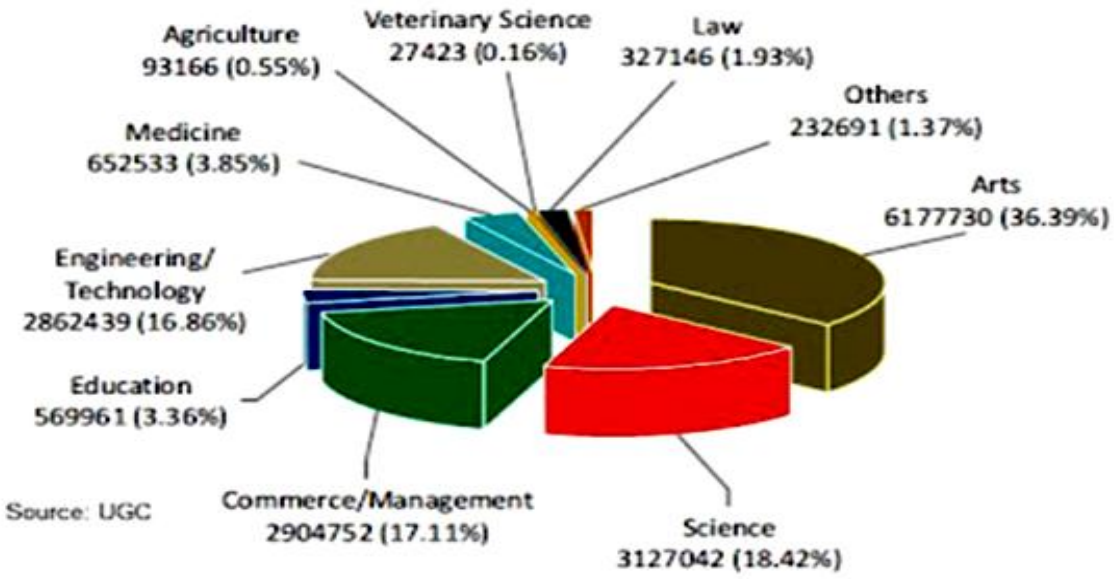
Source: XIIth Five-Year Plan of the Government of India.

Student Enrollments and Graduates in Indian Higher Education

Level	Student Enrollment (2012-13)	Students Graduates/year (2012-2013)	Avg. Duration of program	*Student Enrollment (2014-15 Est.)*	*Students Earning Degree/year (2014-2015 Est.)*
Graduate (Bachelor's)	17,456	5,576		*23,086*	*7,375*
Graduate (Bachelor's three-year B.A., B.Com., B.Sc.) - Est.	*14,547*	*4,849*	*3 years*	*19,238*	*6,413*
Graduate (Bachelor's Engineering -B.E.) - Est.	*2,909*	*727*	*4 years*	*3,848*	*962*
Post-Graduate (Master's)	2,492	1,246	2 years	*3,296*	*1,648*
Research (Doctoral)	161	40	4 years	*213*	*53*
	20,109	6,862		*26,594*	*9,076*

Prepared by DrEducation.com

Fig. no – 1.2



Indian Higher Education Enrollments in Top 7 Receiving Countries, 2005 - 1012								
Year	**USA**	**UK**	**Australia+**	**Canada**	**NZ**	**China**	**Germany**	**Total**
2012	96,754	N/A	12,629	28,929	11,349	10,237	5,745	190,055**
2011	100,270	29,900	15,395	23,601	12,301	9,370	4,825	228,774
2010	103,895	39,090	21,932	17,549	11,616	9,014	3,821	253,743
2009	104,897	38,500	28,020	9,561	9,252	8,468	3,236	247,631
2008	103,260	34,065	28,411	8,325	6,348	8,145	3,217	216,516
2007	94,563	25,905	27,078	7,304	3,855	7,190	3,431	205,852
2006	83,833	19,228*	25,497	6,927	2,599	3,245	3,583	158,215
2005	76,503	16,872*	22,529	6,688	N/A	N/A	3,807	N/A

Sources: IIE Open Doors, UK Higher Education Statistics Agency, Australia Education International, Citizenship and Immigration Canada, New Zealand Ministry of Education, China Scholarship Council, DAAD/HIS (Germany).
** Inferred from percentage of total international student body*
*** Minus UK total for 2012, which is not currently available*
+Higher education (University) enrollments only; no VET

GOVERNMENT INITIATIVES TO BOOST INVESTMENTS

The education sector in India is also considered as one of the major areas for investments as the entire education system is going through a process of overhaul, according to a report 'Emerging Opportunities for Private and Foreign Participants in Higher Education' by PricewaterhouseCoopers (PwC). Ever since, the Government of India has allowed foreign direct Investment (FDI) up to 100 per cent through the automatic route, many people find it convenient and profitable to invest in education sector.

Following steps taken by the Government for the infrastructural development of the sector and to increase the business opportunity in education are

- For the year 2012-13, Rs 25,555 crore (US$ 4.63 billion) have been allotted for RTE-SSA (Right to Education – Sarva Shiksha Abhiyan) which represents an increase of 21.7 per cent over the previous year allotment in 2011-12
- 6,000 schools have been proposed to be set up at block level as model schools in the Twelfth Five Year Plan (2012-17)
- Rs 3,124 crore (US$ 566.69 million) have been provided for the RMSA (Rashtriya MadhyamikShiksha Abhiyan), which is an increase of 29 per cent over 2011-12
- India and Republic of Korea have signed a memorandum of understanding (MOU) for cooperation in the field of education
- Prime Minister's fellowship scheme for doctoral research has been launched in New Delhi by Mr S. Jaipal Reddy, Union Minister for Science and Technology, according to Confederation of Indian Industry (CII)
- The Ministry of Human Resource Development (MHRD) plans to set up ten community colleges in collaboration with the Government of Canada in 2012. The Government of India has decided to set up hundred community colleges this year
- The Government of India plans to set up an Indian Institute of Agricultural Biotechnology at Ranchi with an investment of Rs 287.50 crore (US$ 52.15 million). The Institute will be a deemed university and will have different schools to import knowledge in genomics, bioinformatics, genetic engineering, nano biotechnology, diagnostics and prophylactics and basic and social sciences and commercialization

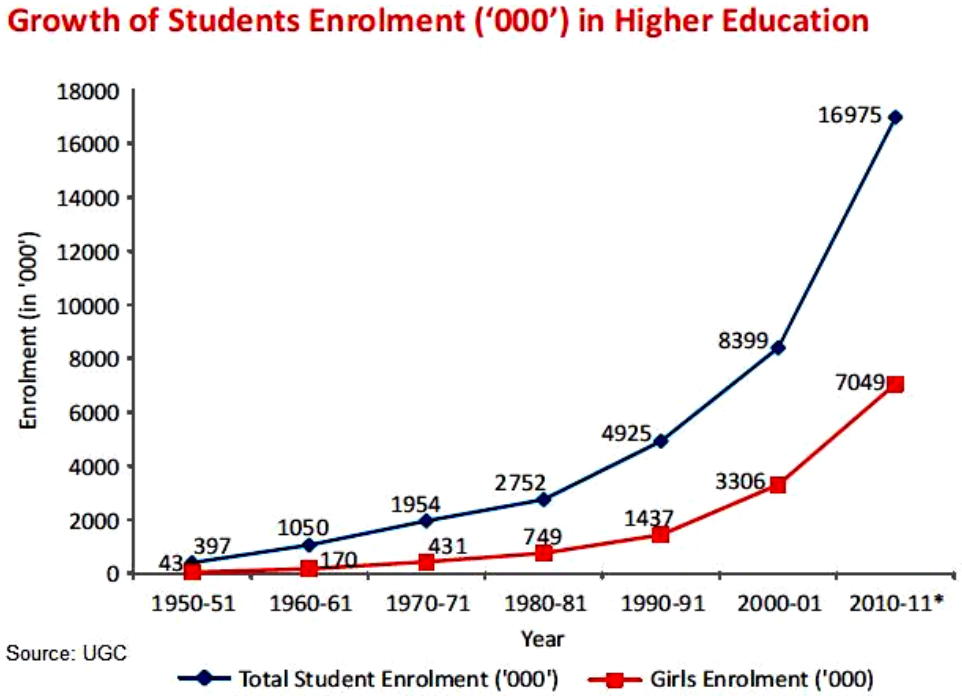


FIG. NO – 1.5

INVESTMENT IN INDIAN EDUCATION SECTOR

Education in India is also considered as one of the major areas for investments as the entire education system is going through a process of renovation, according to a report 'Emerging Opportunities for Private and Foreign Participants in Higher Education' by Price water house Coopers (PwC).

Under current rules, 100 per cent FDI is allowed in education through the "automatic route". This means a foreign company can directly invest in an Indian firm without prior approval from the government or the RBI. However, within 30 days of the receipt of the FDI, the Indian company is required to report to the RBI's regional office.

EDUCATION SECTOR FDI INFLOWS FROM APRIL 2000 TO JANUARY 2012

TABLE. NO – 2.1

Source: http://business.mapsofindia.com/fdi-india/sectors

SECTOR	AMOUNT INVESTED THROUGH FDI IN INDIA		% AGE TOTAL FDI INVESTMENT
	IN RS CORES	IN US $ MILLION	
EDUCATION	2306.13	491.99	0.31
G RAND TOTAL OF ALL 64 SECTORS	723366.76	160094.5	

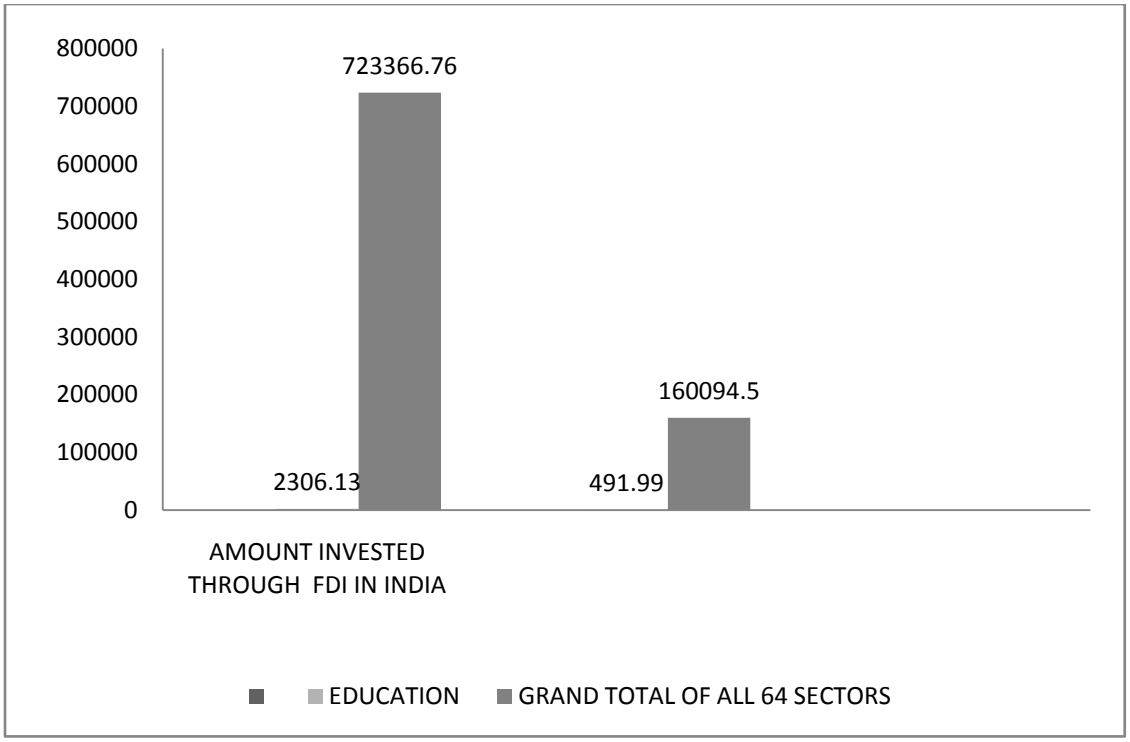


FIG. NO – 1.6

GOVERNMENT INITIATIVES FOR PROMOTING EDUCATION SECTOR IN INDIA

Some of the initiatives taken by the Government of India for infrastructural development of education sector are as follows:

- The Ministry of Human Resource Development plans to set up ten community colleges in collaboration with the Government of Canada in 2012. The Government of India has decided to set up hundred community colleges this year.
- The Government of Gujarat plans to set up a farming educational institute in collaboration with Israel, offering post-graduation and Ph.D programmes with practical training and degree from Israeli universities.
- The Government of India also plans to set up an Indian Institute of Agricultural Biotechnology at Ranchi with investments of Rs 287.50 crore.

FUTURE OF INDIAN EDUCATION SECTOR

Consulting firm Technopak s very positive about the growth of the sector and estimates private education sector alone to grow to US$ 70 billion by 2013 and US$ 115 billion by 2018 in its study 'A Report Card on India's Education Sector'.

There are clear investment opportunities for private players to enter the Indian education space. The opportunity exists in all three segments – schooling, higher education and vocational training. Some success stories are Manipal University, Amity University and the Indian School of Business. Public-private partnerships (PPP) arrangements, tax concessions for education and encouraging foreign capital to build infrastructure in India would encourage the creation of new capacities by the private sector. India's education sector is expected to witness huge investments from PE funds over the next couple of years on the back of increased Government spending and expansion plans of private players.

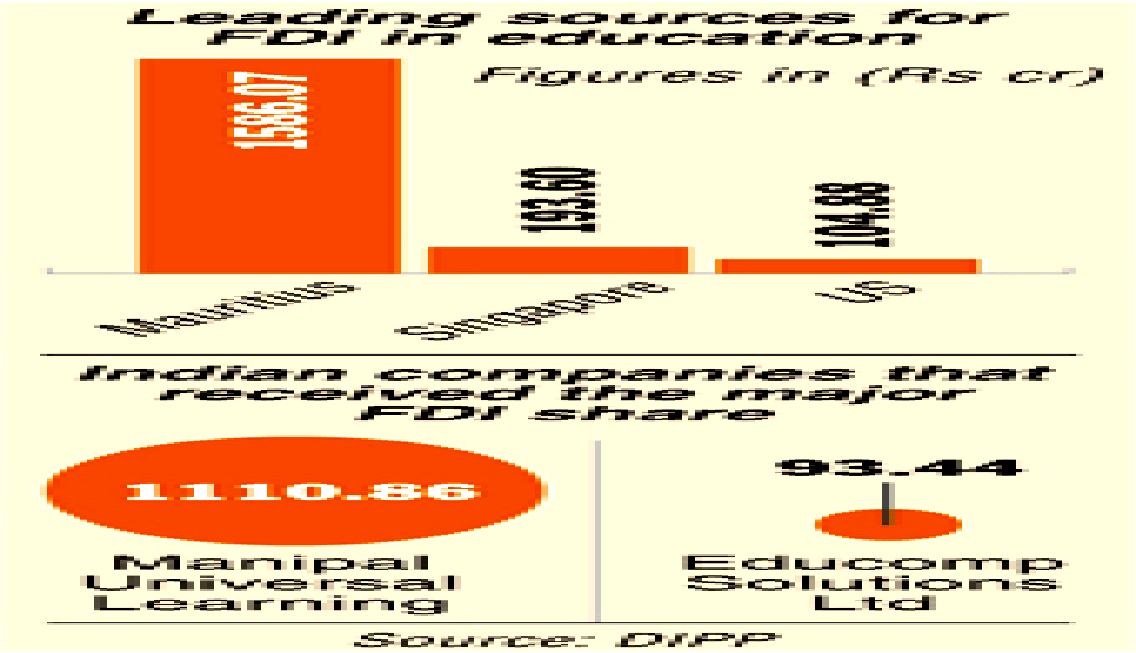


FIG. NO – 1.7

NEED FOR IMPLEMENTATION OF FDI IN HIGHER EDUCATION SECTOR

- Various new tools and techniques will be used in teaching.
- Indian money and talent going abroad will come in check.
- FDI in higher education sector will improve the Infrastructure.
- It might occur that India may develop one of its own world class universities.
- An increase in conveniences, both in terms of physical magnitude and geographical spread, for inculcation of vocational skills backed by an increase in the general excellence of higher education.
- India needs to fill up the technological lag as fast as it can to compete with China.
- The resulting competition with local universities would also encourage us to become internationally competitive through quality improvements brought about by changes in curriculum and other responses to an evolving market.
- FDI in education would produce employment.
- FDI in education might lead to export of Indian education abroad in which there are great potentials
- There will be enhanced the scope for research as foreign universities have different methodology to run and generate revenues.
- India may shift towards practical study based learning rather than rote learning.
- Existing institutions need to be rebranded to overcome their poor image.

OBJECTIVES

1. To study the position of Indian higher education system.
2. To evaluate the need of FDI in higher education in India.
3. To find out the implications of bringing in FDI in Indian higher education sector.
4. To study the aspects of FDI entry in different countries in higher education.
5. To consider FDI as a determinant for improvement of Education Sector
6. To estimate the impact of establishment of foreign universities in India.
7. To study the aspects of FDI entry at different levels in Indian education system.
8. To map out the barriers for FDI in Indian education.

METHODOLOGY OF THE STUDY

The study is based on secondary sources of data. The main source of data is various Economic Surveys of India and Ministry of Commerce and Industry data, RBI bulletin, online data base of Indian Economy. Economic and Social Survey of Asia and the Pacific, Country Reports on Economic Policy and Trade Practice- Bureau of Economic and Business Affairs and from websites of World Bank, IMF, WTO, RBI and etc

CHALLENGES FACED BY THE EDUCATION SECTOR IN INDIA

1. ACCESSIBILITY: Because of more political inference, it's difficult to have better accessibility.

2. DROP-OUT RATE: It is nearly about 40 per cent drop out at the primary stage.

3. SOCIAL BARRIERS: Social barriers had also brought about the problem for FDI in education sector.

4. RELEVANCE: more skill-oriented – both in terms of life-skills as well as livelihood skills.

5. MANAGEMENT: There is a great need to build in greater decentralization, accountability, and professionalism.

6. Approval procedures are cumbersome and tedious. It is on "Not-for-profit" basis.

7. QUALITY AND RELEVANCE OF EDUCATION: Infrastructure, curriculum, industry involvement and Employability of graduates due to lack of effective training.

8. TECHNOLOGY: There is low technology penetration which acts as obstacle.

FINDINGS

- Alternate education should be encouraged.
- Be rated by independent rating agencies like CRISIL, ICRA or CARE and publicly announce their rating.
- If international educational institutions come to India, then students would be able to get foreign education in India, cheaper.
- The seats are limited in the Indian educational institutions and so foreign direct investment in the educational sector would result in more opportunities for the Indian students.
- Availability of world class research facilities.
- It motivated the top universities across the world to set up their branches in the country.
- It helps Indian students to come in touch with the best professors from across the world.
- The Indian students will get libraries and labs that are of world class standards.
- FDI in education will also direct to high number of Indian students receiving jobs in internationally established companies.
- FDI in education help the country to become an important destination education sector.

SUGGESTIONS

- Provide public funding only for those higher education activities such as R&D that have public goods characteristics and which would not be privately funded to the socially optimal degree.
- Ensure equality of opportunity and access to higher education in reply to expressed needs and demands of the population.
- A competitive market-liberal system must be allowed to operate instead of central planning.

- Should monitor the quality of the programmes
- Verify the experience of the investor-institutions
- Revenue generated by foreign institutions should be invested in primary education so that the base will also get stronger
- The Government formed apex body should not delay in their decision-making process
- Incentives for indigenous research
- Publish an annual report with details of the infrastructure available, the staff, the fees charged, the number of students, the results of the examinations, the amount of funds available to the institution and the sources of funding, affiliation to any foreign bodies with details of those bodies etc.
- Programmes offered are in accordance with the priorities in this country and the national Policy in terms of equity, affordability and access.
- To suggest the elimination of various barriers for FDI in Indian education system

CONCLUSION

In terms of development, there is a general agreement of the potential benefits of Foreign Direct Investment. The relationship between GDP Growth and the increase of the relationship between FDI and GDP can be clearly established. Foreign Direct Investment, therefore, becomes an important financial source for capital projects, vital for Emerging Country's development. The flow of financial capital in the economies of the countries has become vital, shaping in occasions the policies and political decisions of governments to attract Foreign Direct Investment (FDI). Studies on role of FDI in education sector shows that general institutional framework, effectiveness of public sector administration and the availability of infrastructural facilities enhance FDI inflows to these nations. Education industry in India remains among the fastest growing industries of the present Indian economy, industry has benefited a lot from the Indian rapid economic growth coupled by the rising earnings levels in India. FDI is a predominant and vital factor in influencing the contemporary process of global economic development. The study attempts to analyze the important dimensions of FDI in India. The study works out the trends and patterns, main determinants and investment flows to India. The study also examines the role of FDI on economic growth in India. FDI is considered as the most suitable form of external finance. And it is increase in competition for FDI inflows particularly among the developing nations. The assumption that FDI was the only cause for development of Indian economy in the post liberalized period is debatable. No proper methods were available to segregate the effect of FDI to support the validity of this assumption. As far as providing quality education is concerned, the foreign universities may achieve this set objective for Indian students, but there are lots of concerns as to whether Indian strata would be able to afford this education facility.

It is found that FDI as a strategic component of investment is needed by India for its sustained economic growth and development.

REFERENCES

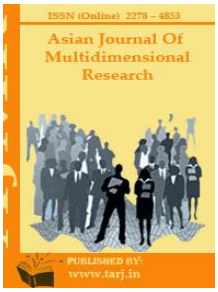
WEBSITES

- http://warse.org/pdfs/2013/icacsesp94.pdf

- http://www.thehindubusinessline.com/industry-and-economy/education/higher-education-sector-needs-more-fdi-deloitte-report/article4093386.ece
- http://ssc2pg.com/indian-education-sector-in-need-of-fdi-says-deloitte-touche-tohmatsu-report/
- http://archive.indianexpress.com/news/montek-wants-fdi-in-medical-education/882843/
- http://www.deloitte.com/assets/Dcom-India/Local%20Assets/Documents/Thoughtware/AnnualSstatusofHigherEducationofStatesandUTsinIndia,%202013.pdf (ministry of human resource development, Govt. of India)
- http://monitor.icef.com/2013/07/mixed-signals-continue-regarding-the-extent-of-australias-international-education-recovery/
- http://www.ibtimes.com/are-indias-higher-education-standards-lagging-its-asian-peers-1113526
- http://business.mapsofindia.com/fdi-india/sectors/education.html
- http://www.ukessays.com/essays/economics/role-of-fdi-in-higher-education-economics-essay.php
- http://business.mapsofindia.com/fdi-india/sectors

SOURCES

- www.academia.edu
- www.imf.org
- www.ifc.org
- www.worldbank
- www.wto.org
- www.telegraphindia.com



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FOOD SECURITY IN WEST BENGAL IN TERMS OF ADULT CONSUMPTION UNIT COEFFICIENT

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ABSTRACT

The green revolution resulted in the attainment of self-sufficiency in food-grains at the national level is one of the India's major achievements in the post-independence period. Surplus stock of food grains and food grains export/import are two major indicators to claim attainment of self-sufficiency. As a result India was overcoming transitory food insecurity though chronic food insecurity at micro level exists in various parts of India despite mounting buffer stock. Existence of Chronic food insecurity is reflected in Global Hunger Index and National family and health survey 3.The present study revisit the thinking that our country was really overcoming transitory food insecurity. To do this the estimated requirement of food-grains is compared with the net domestic production in West Bengal, eastern states of India. Food grain requirement is estimated with the help of dietary recommendation of Balance diet of ICMR in post reform era. Consumption needs for the people distribution by age, sex, body weights, height, nature of work, state of health is captured by Adult Consumption Unit coefficient. The study shows that there was an excess requirement of food grains in West Bengal over the domestic production in the post liberalization period 1991, 2001, 2006 and 2011. Food gap in West Bengal as a percentage of total requirements of the respective year was 31.9%, 36.8%, 23.6%, 35.0% in the above period. Hence in the sense of balance diet west Bengal (highest rice producing state in India) did not achieve self-sufficiency in cereal production. Study projected that cereal requirement in west Bengal will be 13030.2, 13463.3, 13812.3 thousand tone in the years 2016, 2021, 2026 respectively.

KEYWORDS: *Adult Consumption Unit coefficient, Balance Diet, Cereal Requirement, Food Gap, Food Security.*

INTRODUCTION

In 1960's Indian planners understood that food availability and stability at macro level is the prime importance to solve the acute food crisis. Government of India gave importance to attain self sufficiency in food grain and to increase purchasing power of all section of people through distribution of land and non land asset, employment generation etc. To attain self sufficiency in food grain government of India introduce new and improve method of cultivation which contains HYV seeds, chemical fertilizer, pesticides, insecticides and deep-tube-well irrigation. India became more or less self-sufficient in cereals mainly in rice and wheat but deficit in pulses and oilseeds. Table 1 shows surplus stock of food grains and food grains export/import are two major indicators to claim attainment of self-sufficiency (A.K Giri 2006, Dev, S.Mahendra et.al 2009, Golait, Ramesh et.al 2006, P. Nasurudden et.al 2006).

TABLE1: INDIA'S FOODGRAINS STOCK AND NET IMPORT (MILLION TONNE)

	1951	**1961**	**1971**	**1981**	**1991**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Procurement	3.8	0.5	8.9	13.0	19.6	35.6	42.6	40.3	34.5	41.1	41.5	37.0	35.8	54.2	60.5	56.1
PDS Supply	8.0	4.0	7.8	13.0	20.8	13.0	13.2	18.2	23.2	28.3	31.0	31.8	32.8	34.7	47.3	43.7
Buffer Stock	-4.2	-3.5	1.1	00	-1.2	22.6	29.4	22.1	11.3	12.8	10.5	5.2	3.0	19.5	19.2	12.4
Net import	4.8	3.5	2.0	0.5	-0.6	-1.4	-4.5	-8.5	-7.1	-7.7	-7.2	-3.8	-7.0	-14.4	-7.2	-4.7

Source: Das et.al 2005, http://indiabudget.nic.in

Using minimum dietary energy requirement norm Planning Commission has defined poverty line as monthly per capita income of Rs 350.17 in village and Rs 409.22 in urban areas. In 1996-97 west Bengal government define poverty line as Rs 274.35. Using index number of Indian Labor journal Feb 2006 poverty line in west Bengal was Rs 387.64. According to the above measurement poverty has reduced from 56.44% in 1973-74 to 27.09 in 1999-2000 in India and 73.16% to 31.85% in west Bengal in the same period.

As per Tendulkar Committee recommendations (using implicit price indices and NSSO data), anyone earning Rs. 672.8 monthly that is earning Rs. 22.42 per day in the rural area and Rs. 859.6 monthly or Rs. 28.35 per day in the urban area is lie above the poverty line at the national level. Where as in west Bengal the poverty line estimated as monthly income of Rs 643.2 in rural and Rs 830.6 in urban areas (though World Bank criterion of poverty line is $1.25 per day). According to this estimate 29.8 per cent of the Indian population alone was below poverty line (BPL) in 2009-10 which was 37.2 per cent in 2004-05, where as in West Bengal, BPL population declined from 34.2% in 2004-05 to 26.7% in 2009-2010.

In all-India level Head Count Ratio (HCR) has declined by 7.3 percentage points from 37.2% in 2004-05 to 29.8% in 2009-10, with rural poverty declining by 8.0 percentage points from 41.8% to 33.8% and urban poverty declining by 4.8 percentage points from 25.7% to 20.9%.

(http://planningcommission.nic.in/news/press_pov1903.pdf)

Production and stock of food-grains has increased in India. India has enhanced capacity to cope with inter year fluctuation in production of food-grains. As a result there has been a paradigmatic shift in the concept of food security, from food availability and stability to household food security, and from assessment of input measures like comparing per capita consumption of food, per capita food energy intake with required norms to output indicators such as anthropometric measures and clinical signs of malnutrition like weight of newborn babies, weight under five years, weight and height because nutrition depends not only on the nutrient intake but also non-nutrient food attributes, privately and publicly provided inputs and health status. (Radhakrishna, R 2002).

Existence of chronic food insecurity at micro level in many parts of India has illustrated in various studies. The Global Hunger Index 2013 ranks India at the bottom with 63rd position (out of 84 countries) with a GHI of 21.30 and which the index characterizes as "alarming" food insecurity situation. About 50% of Indians children below three years of age are malnourished. India has largest number of malnourished children in the world. One third of India's adult population has a body mass index of less than 18.5. (IFPRI, U.b.I.2009).

National family and health survey 3 (NFHS-3) reported that average percentage of undernourished children under five years of age in India is 46% which is far above the average (25%) of 26 sub-Saharan African countries. Weight and height of Indians have shown insignificant improvement. 21.5% babies in India born with low weight, a problem begins at womb. Child malnutrition is higher in rural compare to urban implying a lower food intake. Majority of socially marginalized people lives in rural areas. Highest percentage of underweight and stunted children among social group was recorded for STs followed by SCs and among religious group was recorded for Muslim.

Data on calorie intake as revealed by various round of National Sample Survey Organization (NSSO) shows that average per capita calorie intake has been declining in India both in Rural and Urban areas over four decades.

TABLE-2: PER-CAPITA INTAKE OF CALORIES IN INDIA, 1972-73 TO 2009-2010

	Kcal/day		**Change over previous year**			
			Rural		**Urban**	
	Rural	**Urban**	**Absolute**	**% ge**	**Absolute**	**%ge**
1972-73(27th round)	2266	2107				
1983(38th round)	2221	2089	-45	-1.099	-18	-0.85
1993-94(50th round)	2153	2071	-68	-3.061	-18	-0.86
1999-00(55th round)	2149	2156	-4	-0.100	+85	+4.10
2004-05(61th round)	2047	2020	-102	-4.740	-136	-6.30
2009-10(66th round)	2020	1946	-27	-1.320	-74	-3.66
Percentage change between 1972-73 and 2009-10	-10.9	-9.5				

Source: NSS 66th round, computed from p70

Table 2 has shows that, in the period 1972-73 to 2009-2010 per day per capita calorie intake was decreases by 246 Kcal in absolute and 11 percentage from 2266 Kcal to 2020 Kcal per day in rural India where as in urban India it has decreased from 2107 Kcal to 1946 Kcal in absolute and 10% in percentage term. In Rural India calorie intake has been decreased gradually in all the NSS round. Over the period 1993-94 to 1999-2000 decreasing calorie was lowest in absolute

term as well as in percentage term, where as in that period urban India shows an exceptionally increase in calorie intake. In the period 1900-2000 to 2004-05 decreasing calorie intake was highest both in rural and urban. In last 37 year period average calorie intake in Rural India did not touch recommended calorie norms, where as in urban India, only in 27th round and in 55th round touch the calorie requirement at recommended level. The share of food in consumption expenditure decreases from 72.9% to 53.6% in rural areas and 64.5% to 40.7% over the 37 year period 1972-73 to 2009-10.

Table 3 has shows that, in absolute term monthly per capita consumption of cereal have been declining gradually over the period of 1972-73 to 2009-10. The fall in cereal consumption is sounder in rural areas than urban. But the rate of decline had decrease significantly between the periods 1993-94 and 1999-2000 NSSO rounds compare to previous rounds. The cereal consumption per person per day before and after 1993-94 NSSO rounds has declined by 1.19 and 0.74 percents annually in the rural areas, and 0.91 and 0.24 percents in the urban areas.

TABLE: 3 MONTHLY PER CAPITA CONSUMPTION OF CEREAL (KG) IN DIFFERENT NSS ROUND

	27th	**32th**	**38th**	**43rd**	**50th**	**55th**	**56th**	**57th**	**58th**	**59th**	**60th**	**61st**	**66th**
Rural	15.26	15.68	14.8	14.40	13.40	12.70	12.40	12.20	12.10	12.30	12.40	12.12	11.35
Urban	11.24	11.62	11.30	11.20	10.60	10.40	10.00	9.80	9.80	9.90	10.00	9.94	9.39

Source: Source: computed from various round of NSSO

Declining poverty, increasing of buffer stock and increasing export of food grain have shown India's progress on food security. The bright picture of food security shall be blunt when we noticed that chronic food insecurity at micro level exists in various parts of India, average calorie intake has been declining, decreasing percentage share of cereal (major and cheapest source of energy) on Monthly Per Capita Expenditure (MPCE) and declining monthly per capita consumption of cereal in absolute term (Kg) both in rural and urban population. Simultaneous existence of two opposite scenario raises the question of food security in India.

Again to overcome chronic food insecurity, Government of India takes several measures. Out of which most important and historic steps is the clearance the food security bill by the Union Cabinet on 4th July 2013. The Bill has made provision for the State Government to provide 5 kilograms of food grains per person per month at subsidized prices to person belonging to priority households. Households that come under Antyodaya Anna Yojana scheme will be provided with 35 kg of food-grains per household per month as allotted by the Central Government to the respective States. For the proper implementation of the food security act, macro level self-sufficiency of food-grains is necessary.

In this background an attempt is made to study whether there is self-sufficiency in food-grains in India at macro level or not. The study is made on a smaller dimension and take highest rice producing Indian states i.e. West Bengal. In other words, the present study verifies that West Bengal was overcoming transitory food insecurity which is associated with the risk related to either access or availability of food.

PLAN OF THE STUDY

Section II contains literature survey. Section III has stated Research Gap and Objective of the study. Section IV has described the Methodology used in the study and mentioned the Sources of data. Total Cereal Requirement has estimated in Section V. Section VI has presented the Estimation of Production of Food-grains. Section VII has represented the Food Gap. Section VIII is dealing with Conclusion and Policy prescription.

I. LITERATURE REVIEW

In the literature of food security many demand systems is found with varying scales and assumption. Scholars in the past have projected India's food grain demand for 2020 (Bhalla et al. 1999, Kumar 1998, Rosegrant et al. 1995 and 2002; Radhakrishna and Reddy 2004). These studies, in varying degrees have accounted the emerging trends of increasing animal product consumption and the resulting feed demand. However, most of the studies concentrated only on the grain demand. Demand elasticities are an important parameter in predicting food demand. The magnitude of these elasticities depends largely on the methodology used in computing the price and expenditure elasticity. Dyson and Hantche (2000), based on the spatial and temporal trends between 1987 and 1988 and between 1993 and 1994, have projected the grain and non-grain crop demand at the state level up to 2020. A two-stage budgeting framework is used in Mittal (2006), to model the consumption behavior of households. The model assumes that there is a non-linear relationship between income and expenditure. Quadratic equation is used as a specific case to nonlinear function. Since the model is quadratic in per capita expenditure it is named as the quad-AIDS (QUAIDS) model. The demand projections are made using the demand elasticities as derived from the QUAIDS model. Demand projection of cereal in India is 159.9 mt, 182.2 mt, 196 mt for the year 2011, 2021, 2026 respectively. Rosegrant et.al (1995), based on IMPACT model, used demand elasticity and technical coefficients synthesized from other sources, primarily from past studies, and have projected demand for total cereals in India at 237.3 million tons for the year 2020. Kumar (1998), computed the expenditure and price elasticities for food and non-food commodities using various econometric (Transcendental Logarithmic Demand System (TLDS), Normalized Quadratic Demand System (NQDS) and Linear Expenditure Demand System (LEDS)) and non-econometric (Food Characteristic Demand System (FCDS)) techniques. The total demand for cereals is projected to be 223.7 mt in 2010 and 265.7 mt in India for 2020 in Kumar's study. Praduman Kumara (2010), used translog cost function model and the system of factor demand equations has been derived. Using factor demand parameters, the output supply elasticities have been derived. Bhalla and Hazell (2001), has computed demand for total cereals in 2020 as 374.7 million tonnes. This study used new estimates on livestock growth. These estimates are based on the IMPACT model and based on the assumptions of GDP growth of 7.5-7.7 per cent. Chand (2009), prepared Per capita demand projections for year 2011-12 and 2020-21 separately for rural and urban population and for rice, wheat and coarse cereals based on the changes observed in consumption between 1993-94 and 2004-05, and by using income elasticity of demand for various foodgrains, growth rate in per capita income and rate of change in demand due to shift in preferences and taste. The basis of demand analysis in the paper of Seale et.al (2003), is the maximization of utility subject to budget constraint. Thamarajakshi (2001), estimated the total demand for cereals 2020 to be 274 million tones under different assumptions of population and growth in urbanization. To study the urban Ethopian, Worako (2009), employed Working-Leser expenditure share model to estimate income elasticity of demand and determinants of urban household consumption for Addis Ababa

city and six major towns. The study also extended its analysis by running simulations for rise in per capita income.

Goyal and singh (2001), Growth in population and urbanization, changes in per capita real income and consumption behavior are the most important factors which influence the future foodgrains demand. The rate of growth in per capita consumption was worked out for each commodity by multiplying income elasticity of demand with growth rate in per capita income. The per capita human demand so obtained was multiplied by projected population for the respective period. To estimate the aggregate demand (human and non-human), the demand for non-human uses such as seeds, feeds, and wastage was assumed to be 12.5 per cent of the aggregate demand of each commodity.

Existing literature focused their analysis based on budget constraint; price, income and expenditure elasticities; changing food consumption pattern; GDP growth; population growth and livestock growth.

II. RESEARCH GAP

Existing demand model for Food grains does not capture the Impact of intra-household food distribution (men, women, boys, girls,). It is well known that requirement of food is different for the person of different age and sex. Again Calorie requirement of a person in terms of age and / or sex is a simplification of real situation, since the role of various other factors such as body weights, height, nature of work, state of health is ignored. Hence estimation of food grain requirement incorporating all such consideration is much urgent.

III.I OBJECTIVE OF THE STUDY

Attempt of the present study is to find out whether our state West Bengal is self-sufficient in food grains (Cereal) at macro level or not in the post reform period? In other words, the objective of the present paper is to verify that West Bengal has been produced enough food grains to meet the requirement of dietary recommendation of balance diet of ICMR for all the people distribution by age, sex, body weights, height, nature of work, state of health in post reform era.

IV. METHODOLOGY

IV.I THE STUDY CONSISTS OF THREE BROAD STEPS

In the first stage, the study estimates direct requirement of cereal in some specific year of post reform period at state level to meet the recommended balance diet of the population of West Bengal (highest rice producing state) of different age, sex, body weight, nature of work. To do this the study, use the concept of Adult Consumption Unit Coefficient (AUC). Calculation of the diets consumed per head of family will not yield accurate data. Adult Consumption Unit Coefficient overcomes these difficulties.

In the second stage, the study estimates Net domestic production of cereal available in some specific year in West Bengal.

In the Third stage, the study estimates the Food Gap by comparing the requirement and availability of cereal at macro level in west Bengal in each specific year.

Total requirement of cereal in the period‘t’ in West Bengal is estimated as under:

$C_t^c = \sum_{i=1} p_{tjo} . auc_{jo} . c_m^i + \sum_{i=1} p_{tjm} . auc_{jm} . c_m^i + \sum_{i=1} p_{tjf} . auc_{jf} . c_m^i$

Where, C_t^c = requirement of cereal in the year t,

i=1,2,,,,,365; j=age group; o= children; m=male; f=female

p_{tjo} = No of child population of j age group in the year t

p_{tjm} = No of male population of j age group in the year t

p_{tjm} = No of male population of j age group in the year t

auc_{jo} =Adult consumption unit coefficients of child population of j age group

auc_{jm} =Adult consumption unit coefficients of male population of j age group

auc_{jf} =Adult consumption unit coefficients of female population of j age group

c_m^i = per capita per day requirement of cereal of an adult of male of the age group 20-39

$\sum_{i=1} p_{tjo} . auc_{jo} . c_m^i$ = Total requirement of cereal of jth age group of children in year t

$\sum_{i=1} p_{tjm} . auc_{jm} . c_m^i$ = Total requirement of cereal of jth age group of male in the year t

$\sum_{i=1} p_{tjf} . auc_{jf} . c_m^i$ = Total requirement of cereal of jth age group of female in the year t

Net domestic production of cereal in a given year in West Bengal (Y_t)is estimated as:

Net domestic production of (Rice + Wheat + Coarse Cereal)

Net domestic production of cereal $Y_t^C = Y_t^R + Y_t^F + (1- 0.125)Y_t^{CC}$

Production of rice in period t ($Y_t^{R)}$ = (1-0.125)*(0.65) Y_t^P ; Y_t^P = production of Paddy in period t

Flour production (Y_t^F)= (1- 0.125) Y_t^W ; Production of Wheat in period t= Y_t^W

Production of Coarse Cereal in period t= Y_t^{CC}

Food gap is defined as the excess requirement of cereal over net domestic production (thousand tonne) in a particular year in West Bengal.

IV.II SOURCES OF DATA

The study has used secondary data from following sources:

i) Consumption Pattern and Calorie intake as available in various rounds of 27th (1972-73), 28th (1973-74), 32th (1977-78), 38th (1983), 43rd (1987-88), 50th (1993-94), 55th (1999-2000), 61st (2004-05), 66th (2009-10) in NSSO reports.

ii) Number of population by age and sex in different years (actual population of 1991, 2001 and projected population of 2006, 2011, 2016, 2021, and 2026) from the Census of India.

iii) Adult consumption unit from the 66th round NSS reports

iv) Recommended balance diet of Indian Council of Medical Research (ICMR) for Indian people in different age, sex from Parks Text Book of preventive and social medicine, seventh edition 2002 pp 456.

v) Data on production of food grains is extract as available in Economic Survey, Government of India; Economic review, Government of West Bengal; Statistical Abstract of West Bengal; Hand Book of the Economy, RBI.

IV.III ADULT CONSUMPTION UNIT COEFFICIENTS

Families vary in size and consist of person of different age groups. The proper distribution of food within household to meet the needs of the various age groups is important. For example, preschool children; expectant and nursing mothers need greater amounts of protective and protein rich foods than older children and ordinary adults. Hence it is important to record the type of foods consumed by the vulnerable sections in the family while conducting the diet survey. The calculation of the diets consumed per head of family will not yield accurate data. In order to overcome this difficulty, the results should be expressed in terms of adult consumption unit. If the diet survey results are expressed in terms of adult consumption units, then the results obtain for one family are comparable with those of others (Swaminathan,2011).

Calorie requirement of a person in terms of age and / or sex is a simplification of real situation, since the role of various other factors such as body weights, height, nature of work, state of health is ignored.

Consumer Unit is a unit used as an indicator of energy requirements of a group of person of different person of different age and sexes. Taking the calorie requirement of an average male in the age group of 20-39, doing sedentary work as the norm, the average calorie requirements of males and females of other age groups are expressed as a ratio to this norm. The requirement of calorie per consumer unit in reality is not a fixed amount but a variable depending upon all these factors. Nutritionist attempting to asses calorie requirements per consumer unit differs in their approach to the problem. Some nutritionist specifying calorie requirements as a function of body weights, while others assign requirement depending on nature of work (sedentary/ moderate/ heavy). Expressing calorie intake per consumer unit is aimed at adjusting for differences in calorie requirements among person on a/c of age and sex different and thereby obtaining a sharper indicator of adequacy of intake than the per capita figure provide (NSSO 2009-10).

Now the present study has taken consumer unit provided by NSSO and expressed as Adult Consumption Unit coefficient. Adult consumption unit coefficients for person of varying ages are given in following Table-4. Here is some adjustment and taking weighted average in the age-sex distribution to match with the age sex distribution in population data.

TABLE-4: ADULT CONSUMPTION UNIT COEFFICIENTS FOR PERSON OF VARYING AGES

Age years	**0-4**	**05-09**	**10-14**		**15-19**		**20-39**		**40-49**		**50-59**		**60-69**		**70 and above**	
sex	M+F	M+F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
auc	0.558	0.810	1.006	0.878	1.008	0.763	1.000	0.710	0.950	0.640	0.900	0.640	0.8	0.510	0.700	0.500

Source: Computed from 66th round NSS report, 2009-10

IV.III WHY CEREAL IS IMPORTANT

Despite the shift in dietary pattern from cereal to non cereal and animal product, food-grains (cereals) are considered to be of paramount importance for household food and nutrition security. This is because of four reasons.

I. Cereals are staple foods and there is no perfect substitution between staple foods and other foods.

II. Due to inadequate level of intake of almost all foods, increased consumption of other foods, in most cases, fill dietary deficiency.

III. Food-grains are the major and the cheapest source of energy as compared to other foods and are thus vital for food and nutrition security of low income masses.

IV. Increased production and consumption of livestock products resulting from rising per capita income require high growth in use of grain as feed for livestock.

The eleventh plan observes that cereals are a major source of energy intake for the Indian population. Percentage breakup of calorie consumption over nine food group over the period 1993-94 to 2009-10 shows that cereal is the major source of calorie intake of Indian people. 64.16% of calories come from cereal in rural India and 55.01% of calorie comes from cereal in urban India in 2009-10.Average per capita cereal consumption has decline in both rural and urban areas. Consumption of non-cereal has not been able to make up for this decline. That means decrease in cereal consumption is the major reason of decline in calorie intake over time. With increasing price coarse cereal, cereals become still cheapest source of calorie (Suryanarayana 2011).

Because of these reasons, food-grains (cereals) continue to be the main pillars of food security in the country and any slack in their production translates into persistent price shock and adverse impact on common people.

Thus the present study is trying to judge the state West Bengal is food secure or not in terms Cereal? For that, the study estimates direct requirement of cereal at state level to meet the recommended balance diet of the population West Bengal (highest rice producing state) of different age, sex, body weight, nature of work using adult consumption unit coefficient.

V. ESTIMATION OF CEREAL REQUIREMENT

Direct requirement of cereal implies human consumption of cereal as food. Requirement of cereal for livestock feeding and industrial use like production of bio-diesel are not included in the estimation. As, providing sufficient food-grains to all people is primary importance, an attempt is made to know how much food grains (mainly cereal) is required for direct human consumption of West Bengal population. As the estimation is based on balance diet, the estimated cereal requirement for direct consumption is differ from the demand of cereal as market demand needed to consider purchasing power and other uses.

To avoid the problems arising in consumption data on per-capita basis , the study uses Adult Consumption Unit Coefficient provided by NSSO.

The study has taken recommended balance diet of Indian Council of Medical Research (ICMR) for Indian people in different age, sex from Parks Text Book of preventive and social medicine, seventh edition 2002 pp 456. The ICMR balance diet per adult consumption unit is 475 gm.

TABLE-5: POPULATIONS (THOUSANDS) OF WEST BENGAL BY AGE, SEX

		Actual Population		Projected Population				
Age	**Sex**	**1991**	**2001**	**2006**	**2011**	**2016**	**2021**	**2026**
0-4 yrs	M+F	8170	8573	7366	6890	6945	7032	6715
5-9 yrs	M+F	8850	9047	8473	7286	6819	6879	6968
10-14 yrs	M	4261	4695	4601	4264	3703	3469	3501
	F	3908	4368	4389	4160	3542	3313	3342
15-19 yrs	M	3196	4162	4659	4568	4233	3675	3443
	F	2931	3817	4328	4351	4124	3509	3282
20-39 yrs	M	11474	13430	14403	15661	16693	17196	16713
	F	10474	12778	13733	14809	15646	16177	15874
40-49 yrs	M	3343	4727	5522	6092	6433	6760	7384
	F	2995	3929	4824	5683	6330	6676	6986
50-59 yrs	M	2241	2851	3564	4388	5150	5701	6038
	F	1903	2490	3006	3722	4588	5425	6059
60-69 yrs	M	2107	1684	1937	2368	3003	3738	4424
	F	2003	1726	1892	2165	2646	3311	4116
70 yrs and above	M	223	951	1211	1457	1758	2192	2803
	F	177	948	1311	1633	1940	2332	2887

Source: Census Report

Table-5 gives the actual population of West Bengal of the year 1991, 2001, and projected population of the year 2006, 2011, 2016, 2021, 2026 by age and sex. Population statistics is collected from the census report of government of India. As distribution of population by age and sex are unavailable the study has taken projected population of 2011.

Incorporating the statistics of adult consumption unit coefficient and population, shown in Table-4 and Table-5 respectively, ICMR balance diet per adult consumption unit and using the methodology stated in section III , the study has calculated how much cereal is required for all person of different age, sex, body weight, nature of work in West Bengal to meets its balance diet and live healthy. The estimated requirement of cereal both aggregate and disaggregates level in West Bengal in the respective years of post liberalization period has shown in Table -6.

TABLE-6: REQUIREMENT OF CEREAL ('000 TONNE) IN WEST BENGAL IN DIFFERENT YEARS, 1TONNE=10 QUINTAL

		Years						
Age	**Sex**	**1991**	**2001**	**2006**	**2011**	**2016**	**2021**	**2026**
0-4 yrs	M+F	789.0	827.9	711.3	665.4	670.7	679.1	648.5
5-9 yrs	M+F	1242.8	1270.5	1189.9	1023.2	957.6	966.0	978.5
10-14 yrs	M	743.2	818.9	802.5	743.7	645.9	605.0	610.6
	F	601.0	671.7	675.0	639.7	544.7	509.5	513.9
15-19 yrs	M	558.3	727.0	813.8	797.9	739.4	641.9	601.4
	F	387.5	504.6	572.2	575.2	545.2	463.9	433.9
20-39 yrs	M	1989.3	2328.4	2497.1	2715.2	2894.1	2981.4	2897.6

	F	1289.3	1572.9	1690.5	1822.9	1926.0	1991.3	1954.0
40-49 yrs	M	550.6	778.6	909.5	1003.4	1059.6	1113.4	1216.2
	F	332.3	436.0	535.3	630.6	702.4	740.8	775.2
50-59 yrs	M	349.7	444.9	556.1	684.7	803.6	889.6	942.2
	F	211.2	276.3	333.5	413.0	509.1	602.0	672.3
60-69 yrs	M	292.2	233.6	268.7	328.4	416.5	518.5	613.6
	F	177.1	152.6	167.3	191.4	234.0	292.8	363.9
70 yrs and above	M	27.1	115.4	147.0	176.8	213.4	266.0	340.2
	F	15.3	82.2	113.6	141.6	168.2	202.2	250.3
Total		9555.9	11241.4	11983.3	12553.2	13030.2	13463.3	13812.3

Source: computed by author

In the above Table 6, Last three column shows the projected cereal requirement as 13030.2, 13463.3 and 13812.3 thousand tonne in the years 2016, 2021, 2026 respectively.

VI. ESTIMATION OF PRODUCTION OF FOOD-GRAINS

In the supply side the production statistics of cereal (Rice, wheat, coarse cereal) has taken from the Economic review 2004-05, 2009-10, 2011-12 Government of West Bengal. The production figures of rice wheat and coarse cereal of West Bengal in different years are represents in Table-7. To arrive at net domestic production, one must, therefore, make allowance for seed, feed, and wastage. The conventional official method is to deduct 12.5 per cent from the gross food-grain production for uses other than human consumption. Several research workers have challenged this Figure and their estimates vary from 10 to as high as 25 per cent.

In the present study we use the conventional deduction method. Second column of table 7 has shown the Gross availability of paddy (Y_t^P) from production. 12.5% of paddy produced has been deducted for seed preservation and wastage due to transportation, pest, rodent and others. From the available paddy, on an average we obtained 65% rice. Hence net domestic production of rice is estimated as:

Production of rice in period t, (Y_t^R) = (1-0.125)*(0.65) Y_t^P ; Y_t^P = production of Paddy in period t. Net domestic rice production is given in column-4, in corresponding year.

3rd column of table 7 has presented gross wheat production in West Bengal. Similarly available wheat is the 87.5% of Gross wheat produced. There is negligible wastage during processing of wheat to flours. Net domestic production of flour is estimated as:

Flour production (Y_t^F)= (1- 0.125) Y_t^W ; Production of Wheat in period t= Y_t^W

The estimated flour (Y_t^F) produced from available paddy has shown in column 5.

Similarly available is the coarse cereal 87.5% of total coarse cereal produced. Net domestic available of coarse cereal is estimated as (1- 0.125)Y_t^{CC}. Seventh column has presented the production of net availability of Coarse Cereal (Y_t^{CC}) in West Bengal.

Hence total production of cereal in a given year (Y_t) is estimated as

Net domestic production of (Rice + Wheat + Coarse Cereal)

Net domestic production of cereal $Y_t^C = Y_t^R + Y_t^F + (1- 0.125)Y_t^{CC}$

Last column has presented the total cereal available from domestic production from rice, wheat and coarse cereal in West Bengal in each corresponding year.

TABLE: 7 PRODUCTION OF RICE, WHEAT, COARSE CEREAL IN WEST BENGAL ('000TONNE)

Year	Gross Paddy production Y_t^P	Gross Wheat production Y_t^W	Net Rice produced from paddy in col-2 Y_t^R	Net Flour produced from wheat in col-3 Y_t^F	Net (rice +flour) Col4+col5 $Y_t^{R+} Y_t^F$	Net Coarse cereal Y_t^{CC}	Total cereal Produced in W.B Col6+col7 Y_t^C
1	2	3	4	5	6	7	8
1990-91	10435.50	530.20	5935.75	463.92	6399.67	110.10	6509.77
2000-01	12428.00	1058.60	7068.42	926.28	6994.70	109.40	7104.10
2005-06	14510.80	773.50	8253.01	676.81	8929.82	229.92	9159.74
2006-07	14745.90	799.90	8386.73	699.91	9086.64	274.70	9361.34
2007-08	14719.50	917.30	8371.71	802.63	9174.34	265.80	9440.14
2008-09	15037.30	764.50	8552.46	668.93	9221.39	375.30	9596.69
2009-10	14606.80	901.00	8307.61	788.37	9095.98	354.70	9450.68
2010-11	12332.70	842.00	7014.22	736.75	7750.97	407.90	8158.87
2011-12	14853.00	884.00	8206.28	773.50	8979.78	364.90	9334.68

Source: computed from statistical abstract-2003-04, 2009-10 WB government, RBI hand Book of Economy 2011-12, pp74

VII. FOOD GAP

Food gap is defined as the excess requirement of cereal over net domestic production (thousand tonne) in a particular year in West Bengal.

Table-8 has represented the direct requirement of cereal for human consumption and net domestic production of cereal in West Bengal for post reform year the years 1991, 2001, 2006, and 2011 in column-2 and in column 3 respectively. The difference between the column 2 and column 3 determines the Food Gap which has presented in column 4. It shows that in the entire study years (post reform period) net domestic cereal requirement is higher compare to corresponding net cereal production. That means there was deficiency of cereal compare to requirement. The deficit was 3046.13, 4137.3, 2823.56, 4394.33 thousand tone in the year 1991,

2001, 2006, 2011 respectively. The figure in the last column i.e. column-5 indicate food gap as a percentage of total requirement of cereal in the study period.

This implies that, West Bengal's agricultural production has not ready to produce sufficient cereal to all people for their balance diet. As a result, a large section of people remains hungry day after day. Simply those who have capability in collecting cereal are getting their required food.

TABLE 8: TOTAL REQUIREMENT OF CEREAL, NET PRODUCTION OF CEREAL AND FOOD GAP (THOUSAND TONNE)

Year	Total cereal requirement in W.B	Total cereal Produced in W.B	food gap = requirement – domestic production	food gap as a percentage of requirement
1	2	3	4	5
1991	9555.9	6509.77	3046.13	31.9
2001	11241.4	7104.1	4137.3	36.8
2006	11983.3	9159.74	2823.56	23.6
2011	12553.2	8158.87	4394.33	35.0

Source: Calculated by author

VIII.0. CONCLUSION

In a simple exercise West Bengal's cereal requirement is far from the domestic production. In the sense of balance diet and adult consumption unit coefficient West Bengal did not achieve self-sufficiency in cereal production though it is highest rice producing state in India. Excess requirement of food grain over domestic production i.e Food Gap was 3046.13, 4137.3, 2823.56, 4394.33 thousand tone in the year 1991, 2001, 2006, 2011 respectively. Food gap as a percentage of total requirements of the respective year was 31.9%, 36.8%, 23.6%, 35.0 % in the above period. If we noticed food gap of the census years i.e 1991, 2001and 2011, it shows an increasing trend. In any age group the cereal requirement of female is less than compare to male. With increase in population the cereal requirement gradually increase. Study has projected that cereal requirement in West Bengal will be 13030.2, 13463.3, 13812.3 thousand tone in the years2016, 2021, 2026 respectively. Proceeding with same exercise we can easily judge macro level food security in each state of India at disaggregate level and aggregate level in India as whole.

VIII.I POLICY PRESCRIPTION

Proper implementation of recently passed food security act needs macro level self-sufficiency in food-grains to fulfill the requirement of balance diet of every citizen. So the supply side attracts much attention. To combat food security required multi dimensional program consisting environment friendly new technological progress in cultivation, reduction of wastage of food grains in the supply side, and efficiently disbursement of fresh cereal to the needy in the demand side.

REFERENCE

1. Bhalla, G.S., P. Hazell, and J. Kerr (2001). Prospects for India's Cereal Supply and Demand to 2020, Food, Agriculture and the Environment. Discussion paper 29, International Food Policy Research Institute (IFPRI), Washington, D.C.

2. Chakravarti ,N. and K. S. Bandophadhyay (1953). A note on the consumption of cereals per adult unit in Calcutta. Sankhya, Indian Statistical Institute Volume: 13,Part: 1, 2, Page No.: 215—218 Year: 1953

3. Chand, R. (2009). Demand for Foodgrains During 11th Plan and Towards 2020 Government of India.

4. Dev, S. M. (2003). Right to Food in India. Working Paper no. 50, Centre for Economic and Social Studies, Hyderabad.

5. Dyson, T. and A. Hanchate (2000). India's Demographic and Food Prospects: State Level Analysis. Economic and Political Weekly, November 11, Vol.35

6. FAO (2006), "State of Food Insecurity in the World, Food and Agriculture Organisation', United Nations.

7. Giri, A.K. (2006). Cereal Consumption over Time in the Country and Across the States. Indian Journal of Agricultural economics, volume 61, N0.3. July-Sept 2006

8. Global Hunger Index (GHI):

Online:http://www.ifpri.org/sites/default/files/publications/ghi09.pdf retrived 14 feb 2014

9. GOI: Census of India, 2011, 2001,1991.

10. Golait, R. and N.C.Pradhan (2006). Changing Food Consumption Pattern in Rural India: Implication on Food and Nutrition Security. Indian Journal of Agricultural economics. volume 61, N0.3. July-Sept 2006

11. Government of India (2002). Report of the High Level Committee on Long Term Grain Policy. Department of Food and Public Distribution System, Government of India

12. Government of India (2007). Economic Survey 2006-07. Ministry of Finance, New Delhi.

13. Government of India (2009-10). Household consumer Expenditure Across Socio-Economic Groups. NSS 66th Round (July 2009-jun2010). Ministry of Statistics and programme Implement.

14. Government of West Bengal. Statistical abstract-2003-04, 2009-10, 2011-12

15. http://indiabudget.nic.in retrived 12.april,2013

16. http://planningcommission.nic.in/news/press_pov1903.pdf) retrieved on 23 oct 2013

17. James Seale, Jr., Anita Regmi, and Jason Bernstein (2003). International Evidence on Food Consumption Patterns. Electronic Report from the Economic Research Service :USDA

18. Kumar, P. (1998). Food Demand and Supply Projections for India, Agricultural Economics Policy Paper 98-01, New Delhi, India: Indian Agricultural Research Institute.

19. Kumara, P., P. Shinoj., S.S.Raju., Anjani Kumar., K.M .Rich., Siwa Msangi (2010). Factor Demand, Output Supply Elasticities and Supply Projections for Major Crops of India. Agricultural Economics Research Review, Vol. 23 January-June 2010 pp 1-14

20. Nasurudden, P. and A. Kuruvila (2006). The Dynamic and inequality of nutrient consumption in India. Indian Journal of Agricultural economics. volume 61, N0.3. July-Sept 2006

21. Park, K. (2002). Parks Text Book of preventive and social medicine, seventh edition 2002 pp 456.

22. Radhakrishna, R. (2002). Food and Nutrition Security. in K.Parikh and R Radhakrishna (eds), India Development Report 2002, Oxford University Press., New Delhi.

23. Radhakrishna, R. and Reddy, K. V. (2004),"Food security and Nutrition: Vision 2020", viewed on 13.5.13 http://planningcommission.nic.in/reports/genrep/bkpap2020/16_bg2020.pdf

24. RBI(2012). Hand Book of Economy. 2011-12, pp74

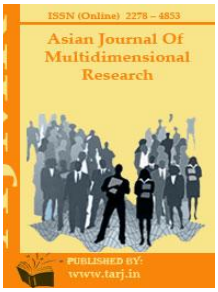
25. Rosegrant, M.W., Agcaoili-Sombilla, M. and N.D. Perez (1995), "Global Food Projections to 2020: Implications for Investment", 2020 Discussion Paper No. 5, Washington, D.C.: International Food Policy Research Institute.

26. Swaminathan, M (2011). "Food and Nutrition" Vol-2, 2011, Bappco.

27. Thamarajakshi, R (2001). "Demand and Supply of foodgrains in 2020" in the book Towards Hunger Free India edited by M.D. Asthana and Pedro Medrano. New Delhi, Manohar.

28. WHO 2003. Diet Nutrition and the Prevention of Chronic diseases. Technical report series 916, Geneva

29. Worako,T. K. (2009). Analysis of Changes in Food Consumption pattern in Urban Ethiopia, Submitted for the Seventh International Conference on the Ethiopian Economy, June 2009.



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A STUDY OF THE MOST INFLUENTIAL FACTORS OF STRESS MANAGEMENT AMONG PHYSICAL EDUCATION TEACHERS

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ABSTRACT

In the present times of global competition, stress has become one of the most significant factors affecting individual efficacy and performance. The instabilities in the present work systems pose a threat to the employees leading to high levels of stress.Stress is an adaptive response to an external situation that results in physical, psychological and / or behavior deviations for organizational. Stress can present itself in both positive and negative way. In any organization the level of work stress can contribute a lot in increasing/decreasing the job satisfaction level of the employees. Thus, Proper stress management can definitely improve the efficiency and effectiveness of work performance.This study endeavors to focus on the employees (Physical education teachers) main causes of stress as well as the stress management techniques that can be fruitful in this respect. The studyfocuses on the different-2 factors that determine the composition of stress management among physical education teachers in colleges.

KEYWORDS: *Stress management; work performance, Physical education, Job satisfaction.*

INTRODUCTION

In the era of global competition, one of the most important factors affecting individual efficacy and performance is Stress. The instabilities in the present work systems pose a threat to the employees leading to high levels of stress. Stress is mainly related to the position or therole occupied by a person in a given job. Coleman (1976) named the modern age as the 'age of anxiety and stress". It has become a major problem for employer particularly in developing nations where the employer doesn't realize the impact of stress on employee performance. This study unveils the impact of stress on employees(Physical education teachers). (Bashir,Asad 2007) expressed his views on stress as it is basically is a mental strain from the internal or external stimulus that refrains a person to respond towards its environment in a normal manner. Stress as a positive force motivate a person towards action and results in new awareness and new

perspective and is good and necessary for an individual for achieving excellence in work. such stress is known as eustress.

As a negative influence, stress results in the feelings of depression, distrust, anger, and rejection, which in turn can lead to health problems such as, stroke ,upset stomach, insomnia, rashes, ulcers, high blood pressure, headaches ,heart disease, and such stress is known as distress (Pareek, 2002).Work-related stress is additive in nature because the more the existence of stress factors in the working environment, the higher is the proximity of work-related stress the employees suffer from. Mismanaged stress may lead to any type of behavioral, physical and psychological, problems with job dissatisfaction among employees (Larson, 2004). Managing people at work is an integral part of the management process and by understanding the critical importance of people in the organization it is recognized that the human element and the organization are synonymous. The potential for stress increase has increased with the complexity of the organizations.

LITERATURE REVIEW

Amat Taap Manshor, Rodrigue Fontaine, Chong Siong Choy, (2003), "Studied the sources of occupational stress among Malaysian managers working in multinational companies (MNCs). It was found that workloads, working conditions and relationship at work were the main concern of the managers that lead to stress at the work place. It was also indicated by the results that certain demographic variables do influence the level of stress among managers."

Richard S. DeFrank, Cary L. Cooper, (1987), provided a framework for understanding the different types of stress management interventions and their possible outcomes.

P.S. Swaminathan and S. Rajkumar (2010), studied stress level in organizations and their impact on employees behavior among the employees of banks, educational institute and own establishment. In their study, an attempt was made to identify the stress level across the age, profession, types of jobs and duration of work with respect to work environment in various occupational categories and its impact on employees' behavior. In their study they found that the major factors which cause stress to them are self-distance, overload, and stagnation of the role played by them .

Newman and Beehr (in Burke,1993) categorizes interventions at the individual level in those aimed at changing one's behavior & those aimed at changing one's work environment. They divided interventions aimed at changing the characteristics of the roles by redefining roles, reducing role conflicts, increasing participation in decision making &reducing role overload.

OBJECTIVES OF THE STUDY

1) To determine the most influential factors of stress management among Physical education teachers in colleges.

2) To identify the attitude and behavior of Physical educators in colleges.

RESEARCH METHODOLOGY

RESEARCH DESIGN: The main aim of this survey is to determine the most influential factors of stress management. Therefore descriptive research is being adopted.

AREA OF THE STUDY: The survey is conducted among Physical Education teachers of Haryana and Chandigarh.

RESEARCH APPROACH: Survey method and questionnaires method. Primary data is collected through survey method. The respondents were asked to fill in the questionnaire by themselves. Both open ended and closed ended questions are contained in the questionnaire and it is in a structured format which is clear and simple to the respondents.

SAMPLE SIZE: Sample size taken in this study is 75 respondents.

SAMPLING TECHNIQUE: Convenience sampling technique is being used for conducting the research.

RESEARCH INSTRUMENT: A standard questionnaire is prepared for the collection of data from various respondents.

SPSS 20.0 is used.

ANALYSIS AND INTERPRETATION

GENERAL PROFILE OF THE RESPONDENTS

Particulars	Classification	No. of Respondents	Percentage
Age	Age 25 and Below	18	24
	Age from 26-35	24	32
	Age from 36-45	19	25
	Age above 45 years	14	19
Gender	Male	45	60
	Female	30	40
Educational Qualification	Post-Graduation	53	71
	Phd	22	29
Monthly Income	Below Rs.10,000	5	7
	Rs.10,000-Rs.20,000	15	20
	Rs.20,000-Rs.30.000	34	45
	Above Rs.30,000	21	28
Work Experience	Below 10 years	58	77
	11-20 years	11	15
	21-30 years	3	4
	Above-35 years	3	4
Marital Status	Married	35	47
	Unmarried	40	53

Table: 1 General Profile of the Respondents

INTERPRETATION: From the above table, it is clear that 60% of the respondents are male and 40% of the respondents are female. The respondents are divided on the basis of gender; and then they are further divided according to their age. Accordingly, it is found that out of total respondents 24% are 25 years old and below, 32% age between 26-35, 25% belongs to the age group of 36-45 and 19% are above 45 years. 71% of respondents are post graduates and 29% are doctorates . 45% of respondents are in the income level of Rs 20,000-Rs 30, 000, 28% of respondents are in the income level of Rs 30,000-and above. Majority of the respondents are

having less than 10 years of work experience. As far as marital status is concerned 47% are married.

FACTORS CONSIDERED AT

Table 2 presents the most important factors of educators which are likely to have the greatest impact on stress management. The factors presented in the table are significant factors which generally influence the Physical educators in managing stress in colleges.

TABLE: 2 FACTORS OF STRESS MANAGEMENT

FACTORS OF STRESS MANAGEMENT
Satisfaction with job decreases stress
Job security is the most important factor to manage stress
Good Gender Relationship may be factor of stress management
Effective Performance Appraisal System can play important role in management of stress
Compatibility between the personal goals with institutional goals can be helpful in managing stress.
Good communication channel with management can reduce stress among employees
Good relationship with superiors and subordinates can reduce stress
Salary and other monetary benefits according to the potential of employees helps in reducing stress
Comfortability with job can reduce stress
Adequate appreciation of work and performance feedback
Grievance Handling System within job can be a factor of stress management
Good working environment can decrease stress
Promotional and growth opportunities prevent job related stress
Faculty Training and Development Programmes

FACTOR ANALYSIS TO ASCERTAIN THE MOST INFLUENTIAL FACTORS OF STRESS MANAGEMENT AMONG PHYSICAL EDUCATION TEACHERS IN COLLEGES

Factor Analysis is a Multi-variate technique which trims a large number of variables to reach a few factors to explain the original data efficiently. Adequacy of data is tested on the basis of KMO measures of Sampling adequacy and Bartlett's test of sphericity. High values (close to 1.0) generally indicate that factor analysis may be useful with the given data.

FACTOR ANALYSIS TO RECOGNIZE THE INFLUENTIAL FACTORS OF STRESS MANAGEMENT

TABLE 3: KMO AND BARTLETT'S TEST FOR FACTORS OF STRESS MANAGEMENT		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.508
Bartlett's Test of Sphericity	Approx. Chi-Square	263.656
	Df	170
	Sig.	.000
Source: Primary Data		

Table 3 shows that the KMO value is .508, thus, confirms the appropriateness of Factor Analysis. Since the significance value of Bartlett's Test of Significance shows the value 0.000, which shows that the variables are highly correlated. Table 4 shows the factors which are rotated with varimax with Kaiser Normalization rotation Method. Here, the researchers used Principal Component Analysis (PCA) method for factor extraction, taking into account the values which are greater than 0.5 for interpretation.

TABLE 4: ROTATED COMPONENT MATRIX FOR FACTORS INFLUENCING STRESS MANAGEMENT IN PRIVATE PROFESSIONAL EDUCATORS

Variables							
	1	**2**	**3**	**4**	**5**	**6**	**7**
Good relationship with superiors and subordinates'	0.625						
Good Gender relationship	0.685						
Good communication channel with management		0.795					
Comfort ability with job		0.885					
Job security			0.786				
Satisfaction with job			0.737				
Salary and other monetary benefits according to potential			0.746				
Grievance handling procedure within institution				0.782			
Faculty Training and Development Programmes					0.942		
Promotional and Growth Opportunities					0.726		
Effective Performance Appraisal System						0.552	
Adequate appreciation of work and performance feedback						0.971	
Compatibility between the personal goals of Staff with institutional goals							.0552
Good working environment							0.763

Table 4 (Rotated Compound Matrix) shows the prime seven components which played a great role in managing stress. Here, seven (7) parameters are being identified.

Factor 1 is a combination of two variables namely 'Good relationship with superiors and subordinates' and 'Good Gender relationship', and can be interpreted as "Inter-Personnel Relationship among peers".

Factor 2 is a combination of two variables, namely, 'Good communication channel with management', and 'Comfort ability with job' and can be interpreted as "Proper communication channel".

Factor 3 is a combination of three variables, namely, 'Job security', 'Satisfaction with job and 'Salary and other monetary benefits, according to potential' and can be interpreted as "Job Security and Satisfaction".

Factor 4 consists of only one variable, namely, 'Grievance handling procedure within institution' and can be interpreted as "Satisfactory Grievance handling mechanism".

Factor 5 is a combination of two variables namely 'Faculty Training and Development Programme' and 'Promotional and Growth Opportunities.', and can be interpreted as "Proper career Planning and Development".

Factor 6 is a combination of two variables namely 'Effective Performance Appraisal System 'and 'Adequate appreciation of work and performance feedback', and can be interpreted as "Effective Performance Appraisal and feedback system".

Factor 7 consists of two variables, namely 'Compatibility between the personal goals of staff with institutional goals' and 'Good working environment', and can be interpreted as "Conducive Working environment".

FINDINGS

FACTORS OF STRESS MANAGEMENT

- Good Communication Channel with management can reduce stress among employees
- Good relationship with superiors and subordinates can reduce stress
- Comfort ability with job can reduce your stress
- . Good Gender Relationship is a factor of stress management
- Grievances Handling System within job is a factor of stress management
- Good Working environment can decrease your stress
- Promotional and growth Opportunities prevent job related stress
- Effective Performance Appraisal System can play important role in management of stress
- Adequate appreciation of work and performance feedback proves helpful in managing stress.
- Compatibility between the personal goals of staff members with institutional goals can be helpful in managing stress

CONCLUSIONS

The Education sector is one of the key sectors in Indian economy as well the Indian Society. This study is mainly focused on finding out the most influential factors which help in the management of stress among the Physical education teachers in colleges. Apparently, the performance of the educators depends on how they manage stress and as these people have impact on so many other people, so they must manage stress for their well-being and that of societal wellbeing.

REFERENCES

1. Coleman J.C. (1976) Abnormal Psychology and Modern Life (Indian reprint), Iniaporewalla, Bombay

2. Larson, L.L. 2004, "Internal auditors and job stress", Managerial Auditing Journal, vol. 19, pp. 1119 –1130.

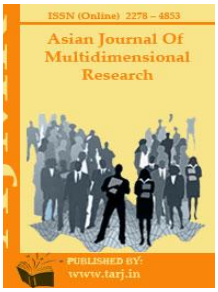
3. Pareek, U., (1993), Motivating Organisational Roles: Role Efficacy Approach, Jaipur, Rawat Publication.

4. Amat Taap Manshor, Rodrigue Fontaine, Chong Siong Choy, (2003) "Occupational stress among managers: a Malaysian survey", Journal of Managerial Psychology, Vol. 18 Iss: 6, pp.622 – 628

5. P.S.Swaminathan & S. Rajkumar "Stress Levels in Organizations and their Impact on Employees' Behaviour" BVMIR Management Edge, Jan-Jun2013, Vol. 6 Issue 1, p79-88. 10p.

6. Richard S. DeFrank, Cary L. Cooper, (1987) "Worksite Stress Management Interventions: Their Effectiveness and Conceptualisation", Journal of Managerial Psychology, Vol. 2 Iss: 1, pp.4 – 10

7. Burke, R. (1993), "Organizational level interventions to reduce occupational stressors", Work and Stress, 7, 77-87.



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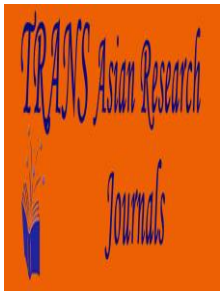

EFFECT OF SEX AND AGE ON SELF-CONCEPT OF INTER UNIVERSITY HANDBALL PLAYERS'

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INTRODUCTION

Self-concept (also called self-construction or self-perspective) is a multi-dimensional construct that refers to an individual's perception of "self" in relation to any number of characteristics, such as academics (and nonacademic's), gender roles and sexuality, racial identity, and many others. While closely related with self-concept clarity (which "refers to the extent to which self-knowledge is clearly and confidently defined, internally consistent, and temporally stable"), it presupposes but is distinguishable from self-awareness which is simply an individual's awareness of their self. It is also more general than self-esteem, which is the purely evaluative element of the self-concept. The self- concept is composed of relatively permanent self-assessments, such as personality attributes, knowledge of one's skills and abilities, one's occupation and hobbies, and awareness of one's physical attributes. For example, the statement, "I am lazy" is a self-assessment that contributes to the self-concept. In contrast, the statement "I am tired" would not normally be considered part of someone's self-concept, since being tired is a temporary state. Nevertheless, a person's self- concept may change with time, possibly going through turbulent periods of identity crisis and reassessment. The self-concept is not restricted to the present. It includes past selves and future selves. Future selves or "possible selves" represent individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming. They correspond to hopes, fears, standards, goals, and threats. Possible selves may function as incentives for future behavior and they also provide an evaluative and interpretive context for the current view of self. Volleyball is an Olympic team sport in which two teams of six players are separated by a net. Each team tries to score points by grounding a ball on the other team's court under organized rules. The complete rules are extensive. But simply, play proceeds as follows: A player on one of the teams begins a 'rally' by serving the ball (tossing or releasing it and then hitting it with a hand or arm), from behind the back boundary line of the court, over the net, and into the receiving team's court. The receiving team must not let the ball be grounded within their court. They may touch the ball as many as three times. Typically, the first two touches are to set up for an attack, an attempt to direct the ball back over the net in such a way that the serving team is unable to prevent it from being grounded in their court. The rally

continues, with each team allowed as many as three consecutive touches, until either (1): a team makes a kill, grounding the ball on the opponent's court and winning the rally; or (2): a team commits a fault and loses the rally. The team that wins the rally is awarded a point, and serves the ball to start the next rally. The ball is usually played with the hands or arms, but players can legally strike or push (short contact) the ball with any part of the body. A number of consistent techniques have evolved in volleyball, including spiking and blocking (because these plays are made above the top of the net the vertical jump is an athletic skill emphasized in the sport) as well as passing, setting, and specialized player positions and offensive and defensive structures. Carly B. Slutzky, Sandra D. Simpkins (May 2009) The link between children sport participation and self-esteem: Exploring the mediating role of sport self-concept. Sport participation is positively associated with indices of adjustment, such as self-esteem, among adolescent participants.Less is known about the processes through which younger children benefit from their sport participation. The purpose of this investigation was to test whether children's sport self-concept mediated the longitudinal associations between time spent in individual- and team-oriented organized sport activities and later self-esteem. We used four waves of data from the Childhood and Beyond Study collected from three cohorts of elementary school-aged children (N = 987), their parents, and their teachers. Findings indicated that children who spent more time in team sports, but not time in individual sports, reported higher.

Sport self-concept, which, in turn, was associated with higher self-esteem than their peers. Multi-group analyses suggested that these relations did not vary across gender, sport ability, sport importance beliefs, or peer acceptance. Study results suggested that the relations between time spent in sports and children's sport self-concept depends, in part, on whether the time was spent in team or individual sports. This investigation highlighted the value of examining mediating processes so as to better explicate the association between time in sports and self-esteem. Rod K. Dishman, Derek P. Hales, Karin A. Pfeiffer, Gwen Felton, Ruth Saunders, Dianne S. Ward, Marsha Dowda, Russell R. Pate (May 2006) Physical Self-Concept and Self-Esteem Mediate Cross-Sectional Relations of Physical Activity and Sport Participation With Depression Symptoms Among Adolescent Girls. The authors tested whether physical self-concept and self-esteem would mediate cross-sectional relations of physical activity and sport participation with depression symptoms among 1,250 girls in 12th grade. There was a strong positive relation between global physical self-concept and self-esteem and a moderate inverse relation between self-esteem and depression symptoms. Physical activity and sport participation each had an indirect, positive relation with global physical self-concept that was independent of objective measures of cardiorespiratory fitness and body fatness. These correlational findings provide initial evidence suggesting that physical activity and sport participation might reduce depression risk among adolescent girls by unique, positive influences on physical self-concept that operate independently of fitness, body mass index, and perceptions of sports competence, body fat, and appearance.

METHODOLOGY

AIM AND OBJECTIVE OF THE STUDY

To Examine the Self-concept of Male and Female Interuniversity Handball Players.

To Examine the Self-concept of 18-21years and 22-25years Interuniversity Handball Players.

HYPOTHESIS

- Male Interuniversity handball Players have Significantly Better Self-concept than the Female Interuniversity Handball Players.
- 22-25years Interuniversity handball Players have Significantly Better Self-concept than the 18-21years Interuniversity Hnadball Players.

SAMPLE

For the present study 100 players were selected from Haryana. The effective sample consisted of 100 subjects, out of which 50 subjects were male and 50 subjects were female. The age range of subjects where 18 to 25 years.

TOOLS

SELF-CONCEPT SCALE

This test is developed and standardized by C.G.Deshpande. The test consisted of 60 Items. The subjects were required to respond to each item in terms of 'YES' OR 'NO'. The reliability coefficient of the test was found 0.86 with Spearman Brown formula. The validity coefficient was found 0.84.

PROCEDURES OF DATA COLLECTION

Each of the three instruments could be administered individuals as well as a small group. While collecting the data for the study the later approaches was Adopted. The subjects were called in a small group of 20 to 25 subjects and there seating arrangements was made in a classroom. Prior to administration of test, through informal talk appropriate rapport form. Following the instructions and procedure suggested by the author of the tests. The test was administered and a field copy of each test was collected. Following the same procedure, the whole data were collected.

VARIABLE

Independent variable – Gender	a) Male	b) Female	
	Age	a) 18-21 y	b) 22-25 y
Dependent variable	1. Self – concept		

STATISTICAL TREATMENT OF DATA

MALE AND FEMALE INTERUNIVERSITY HANDBALL PLAYERS SHOWS THE MEAN S.D. AND 'T' VALUE OF FACTORS 'SELF CONCEPT'

Factor	Group	A1B1	A2B1	A2B1	A2B2
	Mean	42.27	39.45	43.34	38.76
Self-concept	S.D.	2.51	2.86	2.06	2.19

A= Gender B= Age

A1= Male, A2= Female B= 22-25 y B2 = 18-21y

SUMMARY OF TWO WAY ANOVA

Ss	Source	Df	MS	F	P
990.13	A	1	990.13	378.75	<0.01
465.13	B	1	465.13	177.93	<0.01
1.12	AxB	1	1.12	0.43	NS
512.38	Within	196	2.61		
1968.76	Total	199			

From the Summary and graph it is seen that main effect A is highly significant main effect A refer to the factor Gender. It was varied at two levels i.e. Male and Female it was assumed Male & female differ significantly with regards to Self-concept. Since the main effect A is highly Singificant ($F = 378.75$, $df = 1$and 192, $P < 0.01$) It is Clear that Male and Female Subjects Differ Significantly From each other from the mean scores and graph it was found that the males had significantly Better Self-Concept than the Females this Result Support the Hypothesis.

The Second Independent Variable the Factor of Age It was also varied at two levels. The effective sample was divided in to two groups, 22-25years and 18-21years.Main effect has yielded highly significantly result and F Values of 177.93 for 1 and 192 df is significant beyond 0.01 level. And Support the Hypothesis 22-25years Interuniversity handball Players has Significantly Better Self-concept than the 18-21years Interuniversity Handball Players.

RESULTS

Male Interuniversity Handball Players have Significantly Better Self-concept than the Female Interuniversity Handball Players.22-25years Interuniversity Handball Players have Significantly Better Self-concept than the 18-21years Interuniversity Handball Players.

REFERENCES

- Aries, Elizabeth, et al. "Race and gender as components of the working self-concept." The Journal of Social Psychology 138.3 (1998): 277+.
- Ayduk, Ozlem, Anett Gyurak, and Anna Luerssen. "Rejection sensitivity moderates the impact of rejection on self-concept clarity." Personality & Social Psychology Bulletin 35.11 (2009): 1467+.
- Bong, M., & Clark, R. E. (1999). Comparison between self-concept and self-efficacy in academic motivation research. Educational Psychologist, 34(3), 139-153.
- Byrne, B. M. (1984). The general/academic self-concept nomological network: A review of construct validation research Review of Educational Research, 54, 427-456.
- Byrne, B. M., & Worth Gavin, D. A. (1996). The Shavelson model revisited: Testing for the structure of academic self-concept across pre-, early, and late adolescents. Journal of Educational Psychology, 88, 215-228.
- Fleming, J. S.; Courtney, B. E. (1984). "The dimensionality of self-esteem: II Hierarchical facet model for revised measurement scales". Journal of Personality and Social Psychology 46: 404–421.

- Hoffman, Rose Marie, John A. Hattie, and L. DiAnne Borders. "Personal definitions of masculinity and femininity as an aspect of gender self-concept." Journal of Humanistic Counseling, Education and Development 44.1 (2005): 66+.
- Hoffman, Rose Marie. "Conceptualizing heterosexual identity development: issues and challenges." Journal of Counseling and Development 82.3 (2004): 375+.
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. Review of Educational Research, 46, 407-441.